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S. HRG. 112–80, PT. 1

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

ON

S. 1253

TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEAR 2012 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE AND FOR MILITARY CONSTRUCTION, TO PRESCRIBE MILITARY PERSONNEL STRENGTHS FOR FISCAL YEAR 2012, AND FOR OTHER PURPOSES

PART 1

MILITARY POSTURE
U.S. SPECIAL OPERATIONS COMMAND AND U.S. CENTRAL COMMAND
DEPARTMENT OF THE NAVY
DEPARTMENT OF THE AIR FORCE
U.S. EUROPEAN COMMAND AND U.S. STRATEGIC COMMAND
DEPARTMENT OF THE ARMY
U.S. NORTHERN COMMAND AND U.S. SOUTHERN COMMAND
U.S. TRANSPORTATION COMMAND AND U.S. AFRICA COMMAND
U.S. PACIFIC COMMAND AND U.S. FORCES KOREA
THE F–35 JOINT STRIKE FIGHTER PROGRAM

FEBRUARY 17; MARCH 1, 8, 17, 29, 31; APRIL 5, 7, 12; MAY 19, 2011

Printed for the use of the Committee on Armed Services

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM—Part 1

MILITARY POSTURE ● U.S. SPECIAL OPERATIONS COMMAND AND U.S. CENTRAL COMMAND ● DEPARTMENT OF THE NAVY ● DEPARTMENT OF THE AIR FORCE ● U.S. EUROPEAN COMMAND AND U.S. STRATEGIC COMMAND ● DEPARTMENT OF THE ARMY ● U.S. NORTHERN COMMAND AND U.S. SOUTHERN COMMAND ● U.S. TRANSPORTATION COMMAND AND U.S. AFRICA COMMAND ● U.S. PACIFIC COMMAND AND U.S. FORCES KOREA ● THE F–35 JOINT STRIKE FIGHTER PROGRAM

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Available via the World Wide Web: http://www.fdsys.gov/

U.S. GOVERNMENT PRINTING OFFICE

68–084 PDF WASHINGTON : 2012

For sale by the Superintendent of Documents, U.S. Government Printing Office
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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, FEBRUARY 17, 2011

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

MILITARY POSTURE

The committee met, pursuant to notice, at 9:30 a.m. in room SH–216, Hart Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Reed, Akaka, Nelson, Webb, McCaskill, Udall, Hagan, Begich, Manchin, Shaheen, Gillibrand, Blumenthal, McCain, Inhofe, Chambliss, Wicker, Brown, Portman, Ayotte, Collins, and Graham.

Committee staff members present: Richard D. DeBobes, staff director; Christine E. Cowart, chief clerk; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Jonathan D. Clark, counsel; Madelyn R. Creedon, counsel; Gabriella E. Fahrer, counsel; Richard W. Fieldhouse, professional staff member; Creighton Greene, professional staff member; Jessica L. Kingston, research assistant; Michael J. Kuiken, professional staff member; Gerald J. Leeling, counsel; Jason W. Maroney, counsel; William G.P. Monahan, counsel; Michael J. Noblet, professional staff member; Roy F. Phillips, professional staff member; John H. Quirk V, professional staff member; Russell L. Shaffer, counsel; and William K. Sutey, professional staff member.

Minority staff members present: David M. Morriss, minority staff director; Adam J. Barker, professional staff member; Pablo E. Carrillo, minority investigative counsel; Daniel A. Lerner, professional staff member; Lucian L. Niemeyer, professional staff member; Christopher J. Paul, professional staff member; Diana G. Tabler, professional staff member; and Richard F. Walsh, minority counsel.

Staff assistants present: Kathleen A. Kulenkampff, Christine G. Lang, Brian F. Sebold, Bradley S. Watson, and Breon N. Wells.

Committee members' assistants present: Christopher Griffin, assistant to Senator Lieberman; Carolyn Chuhta, assistant to Senator Reed; Nick Ikeda, assistant to Senator Akaka; Ann Premer, assistant to Senator Nelson; Gordon Peterson, assistant to Senator

Webb; Tressa Guenov, assistant to Senator McCaskill; Jennifer Barrett, assistant to Senator Udall; Anthony Lazarski, assistant to Senator Inhofe; Lenwood Landrum, assistant to Senator Sessions; Clyde Taylor IV, assistant to Senator Chambliss; and Ryan Kaldahl, assistant to Senator Collins.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody.

The committee welcomes this morning Secretary of Defense Robert Gates and Chairman of the Joint Chiefs of Staff Admiral Michael Mullen for our hearing on the Department of Defense's (DOD) fiscal year 2012 budget request, the associated Future Years Defense Program (FYDP), and the posture of the U.S. Armed Forces. We also recognize Secretary Hale and welcome him here this morning as well.

We are thankful to all of you and your families for your dedicated service to this Nation and to the soldiers, sailors, airmen, and marines at home and in harm's way around the globe, and to their families. Your personal commitment to the welfare of our troops and their families shines through all that you do. The American people are grateful for that and we are grateful and eager to help wherever we can.

DOD, like all Federal agencies, is currently operating under a continuing resolution (CR) that expires on March 4, 2011. If the current CR is extended for the whole year, then DOD's base funding of $526 billion for fiscal year 2011 would be $23 billion below the original fiscal year 2011 request of $549 billion. Secretary Gates will describe to us this morning this situation as a crisis on his doorstep. I hope that we will soon, as a committee, be in a position to enact a full year appropriation at an appropriate level and that the full Senate will adopt such an appropriation.

At a time when we face a budget deficit in excess of $1 trillion and many in Congress are convinced that we need steep spending cuts to put our fiscal house in order, no part of the Government, including DOD, can be exempt from close examination. The Secretary of Defense has subjected DOD's budget to close examination. He has insisted on efficiencies, streamlining, cuts, and cancellations that we are told add up to $178 billion over the course of the next 5 years. The fiscal year 2012 base budget request of $553 billion is $4 billion higher than last year's request but is a reduction in inflation-adjusted terms. We will be closely scrutinizing the Secretary's efficiencies initiative and will be looking for additional efficiencies as we move through the legislative process.

The total defense budget, which includes base funding for DOD and additional funding for overseas contingency operations (OCO)—that total defense budget declines from $708 billion in fiscal year 2011 to $671 billion in fiscal year 2012. That decline is due largely from our continued withdrawal from Iraq which results in the budget for the OCOs falling from $159 billion in 2011 to $118 billion in fiscal year 2012.

Even as the defense budget request reflects difficult choices, it rightly requests increased funding for military personnel and health care, including funding sufficient to continue initiatives supporting wounded and sick servicemembers, continued research into

traumatic brain injury (TBI), post-traumatic stress disorder (PTSD), and psychological health, and fully funds a variety of family support programs. Notably, the budget request would reduce Active Duty Army and Navy end strength by 7,400 soldiers and 3,000 sailors, respectively. The Army has announced its plan to reduce its so-called temporary end strength by 22,000 soldiers over the next 3 years, followed by an additional reduction of 27,000 soldiers between 2015 and 2017. As the Services resize their forces according to anticipated demand, we must ensure that any reductions avoid unnecessary increased risk or stress on our servicemembers.

The budget request also prioritizes funding for ongoing major operations in Afghanistan and Iraq. As Senators Reed, Tester, and I heard during our visit to Afghanistan and Iraq last month, both of these conflicts are entering critical transition periods.

In Iraq, our forces are implementing the decision by President Bush and Prime Minister Maliki, as set forth in the 2008 security agreement, to withdraw all U.S. forces from Iraq by December 31, 2011. As we draw down, our goal is to leave behind an Iraq that is stable. Because Iraq will continue to need support in meeting its security needs, the budget request includes significant funds for starting up the Office of Security Cooperation within the U.S. Embassy in Baghdad to make our security assistance available to Iraq. The transition from a DOD lead to a State Department lead for numerous bilateral activities in Iraq can only be successful if the Department of State (DOS) and our other civilian agencies receive the resources that they need to take on these missions.

In Afghanistan, July 2011 will mark the date set by President Obama a little over a year ago for the Government of Afghanistan to take more and more responsibility for Afghan security and governance and by July 2011 for the beginning of reductions in U.S. forces in Afghanistan. The President's decision to set the July 2011 date has increased the urgency, as General Caldwell put it, of the efforts of Afghan leaders to prepare for this transition. General David Petraeus told us that the North Atlantic Treaty Organization (NATO) and Afghan officials are preparing to provide President Karzai by the end of the month with a recommendation on which provinces and districts should be transferred to an Afghan security lead in the coming months.

During our visit to Afghanistan, we saw significant signs of progress over the last 6 months, although great challenges remain. The Afghan army and police have surged by an additional 70,000 over the last year and are on track to meet the current target of 305,000 Afghan security forces by October of this year. President Obama's budget request for fiscal year 2012 includes substantial resources to continue supporting those Afghan forces which will bring closer the day when Afghan troops will bear the major responsibility for their nation's security, which in my judgment is and always has been key to success in Afghanistan.

On February 15, 2011, in an op-ed that appeared in the Chicago Tribune, General Caldwell said that while the international community has expended tremendous blood and treasure for this just cause, the remarkable story of the surge of Afghans, of a people committing themselves to the defense of their country, is a reason to hope for a successful long-term outcome.

In an e-mail message to me, General Caldwell, who is in charge of training of Afghan forces, followed up that op-ed by saying: "It has become truly the untold story of the last 15 months. In that time, Afghan men and women have swelled the ranks of the Afghan National Security Force (ANSF) to levels more than double the U.S. and NATO surge." He continued, "While the enormous increase in quantity is significant to the security of Afghanistan, our focus on the improvement of quality is even more important."

The op-ed and the e-mail message to me from General Caldwell will be made part of the record.

[The information referred to follows:]

chicagotribune.com

The unnoticed surge in Afghan security

By William B. Caldwell IV

February 15, 2011

A little known but potentially decisive story developing in Afghanistan is the "surge of Afghans," that is, how Afghan men and women have swelled the ranks of the Afghan National Security Forces to levels more than double the U.S. surge.

Since Dec. 1, 2009, when President Barack Obama announced the surge of 30,000 U.S. troops, more than 79,000 Afghans have committed to serve their country. Over the past year, these young Afghans have put their lives at risk volunteering to serve their country. In a little over a year, the Afghan National Security Forces has grown to more than 270,000 from 191,000, a 42 percent expansion. The Afghan National Army increased by 57 percent to more than 152,000 from 97,000.

This story comes at a decisive point in the decade-long struggle to secure Afghanistan against the existence of transnational terrorists. While the international community has expended tremendous blood and treasure for this just cause, the remarkable story of the surge of Afghans, of a people committing themselves to defend their country, is a reason to hope for a successful long-term outcome.

Plagued by the lack of international funding and focus since the Taliban's fall, Afghanistan's security situation began spiraling downward in 2005. Meanwhile, the Afghan National Security Force's numbers were insufficient to secure the population against anti-government forces and transnational terrorists; consequently, the Afghan army and police force levels actually declined in the months preceding the renewed U.S. commitment. When Obama fully committed to the war with additional troops and increased funding, the foundations were laid for growth in the Afghan National Security Force. In the time that it took U.S. forces to reach the committed 30,000 in Afghanistan, the ranks of the Afghan army and police swelled by more than 79,000 men and women.

A key facilitator of growth and quality has been the NATO Training Mission-Afghanistan. Activated by NATO in November 2009, NTM-A was built upon the existing framework of the U.S. Combined Security Transition Command-Afghanistan. The U.S. transition command was responsible for training and building the Afghan National Security Forces. However, the transition command in Afghanistan was undermanned and under-resourced. NTM-A brought with it the necessary inputs: sufficient resources ($1 billion per month in funding); the right people (an infusion of more experienced personnel in greater numbers including the upgrade of the commander to a three-star general experienced in training armies); and an effective training strategy. NTM-A was able to build the foundation of a professional security force, to include the necessary facilities, increased trainers, proper pay scales, and systems and processes for the

Afghans to grow their security forces. However, there can be no progress toward growing and building Afghan security forces without the Afghan people themselves.

Volunteering by the thousands, Afghans continue to answer the call to serve their nation. Like the American "Greatest Generation," this group of more than 79,000 (and growing) Afghans will be changed by their experience in the Afghan army and police, which will, in turn, allow them to become leaders of their communities. With only a 14 percent literacy rate among new recruits, every Afghan soldier and police recruit now undertakes mandatory literacy education. By October 2011, a projected 128,000 Afghans troops will be literate to at least the first-grade level, further enabling the Afghan security force to professionalize and become self-sustaining and enduring. While army, air force and police training provides invaluable life lessons for all who enlist, a good percentage of others will also receive specialty training (vocational skills) in logistics, maintenance, human resources, engineering, finance, and other fields. The literacy combined with the vocational skills will change these young Afghans, who, after their service to their country, will return to their towns and villages as leaders. What was once a matter of darkness and despair is now a matter of hope and opportunity for members of the Afghan National Security Force.

The surge of Afghans is the remarkable story of the tremendous growth of the Afghan National Security Force, a story will only continue as the army and police grow by an additional 35,000 by the end of October.

Lt. Gen. William B. Caldwell IV is the commanding general for the NATO Training Mission-Afghanistan.

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From: Caldwell, William B LTG MIL USA NTM-A/CSTC-A CMD GRP

Sent: Wednesday, February 16, 2011 10:18 PM

Subject: Surge of Afghans (UNCLASSIFIED)
Attachments: The Unnoticed Surge in Afghan Security.pdf

Chairman Levin -- as you may recall from your visit, we shared with you the story of the "Surge of Afghans." It truly has become the "Untold Story" of the last 15 months. In that time, Afghan men and women have swelled the ranks of the Afghan National Security Force to levels more than double the U.S. and NATO surge. During the same period it took U.S. forces to reach the committed 30,000 in Afghanistan, the ranks of the Afghan army and police swelled by more than 79,000 men and women. This growth was recently captured in the Chicago Tribune, a copy of the opinion piece is attached.

While the enormous increase in quantity is significant to the security of Afghanistan, our focus on the improvement of quality is even more important. At the same time the Afghan National Security Force has grown, the quality of training - and therefore the quality of soldier and policeman produced - has also increased.

Such significant progress could not have occurred without your help. Thank you again for all you have done for NTM-A and the Afghan National Security Force.

Warmest Regards -- Bill Caldwell

William B. Caldwell, IV
LTG, USA
Commander, NATO Training Mission-Afghanistan and CG, CSTC-A

Chairman LEVIN. The administration is also considering a proposal to grow the Afghan army by 35,000 men and the Afghan police by a similar number, which would bring total Afghan security force levels of 378,000 by the end of 2012. These additional forces would add important enablers, logistics, engineering, and intelligence and others, that would reinforce and sustain the transition of responsibility for Afghanistan's security to the Afghan security forces. I support this proposed increase. I know from our conversations that Secretary Gates and Admiral Mullen support it as well. I have urged President Obama, as recently as last Friday, to approve that request.

In the field, Afghan security forces are partnered with coalition forces and deployed in the key regions of Helmand and Kandahar in equal or greater numbers than coalition forces. U.S., Afghan, and coalition forces are taking the momentum from the insurgency, particularly in former Taliban strongholds in the south. The Afghan army is increasingly in the lead in planning and executing operations. That is what the Taliban fear the most: Afghan security forces, as opposed to foreign forces, out in front providing security for the Afghan people. As support for the Afghan army and police grows, lower-level insurgent fighters are slowly beginning to reintegrate into Afghan society.

Improving Afghan governance remains a major challenge to success. The government in Kabul is largely absent from Afghans' daily lives and corruption and mismanagement remain major obstacles.

We must ensure that our forces are prepared to address other threats in other places besides Iraq and Afghan. We obviously must remain attentive to those threats around that region and throughout the world. I outline those threats in some detail in the balance of my opening statement, but I will put that in the record rather than reading it at this time.

[The prepared statement of Chairman Levin follows:]

PREPARED STATEMENT BY SENATOR CARL LEVIN

This morning, the committee welcomes Secretary of Defense Robert Gates and Chairman of the Joint Chiefs of Staff, Admiral Michael Mullen, for our hearing on the Department of Defenses' fiscal year 2012 budget request, the associated future years defense program, and the posture of the U.S. Armed Forces.

We are thankful to you and your families for your dedicated service to the Nation and to the soldiers, sailors, airmen, and marines at home and in harm's way around the globe and to their families. Your personal commitment to the welfare of our troops and their families shines through all that you do. The American people are grateful for that and we are grateful and eager to help wherever we can.

The Department of Defense, as are all Federal agencies, is currently operating under a continuing resolution (CR) that expires on March 4, 2011. If the current CR is extended for the whole year, then the Departments base funding of $526 billion for fiscal year 2011 would be $23 billion below the original fiscal year 2011 request of $549 billion. Secretary Gates will describe to us this morning this as a crisis on his doorstep. I hope that we will soon be in a position to enact a full year appropriation at an appropriate level.

At a time when we face a budget deficit in excess of a trillion dollars and many in Congress are convinced that we need steep spending cuts to put our fiscal house in order, no part of the government, including the Department of Defense, can be exempt from close examination. The Secretary has subjected the Departments budget to close examination and insisted on efficiencies, streamlining, cuts and cancellations that, we are told, add up to $178 billion over the course of the next 5 years. The fiscal year 2012 base budget request of $553 billion is $4 billion higher than last years request but is a reduction in inflation-adjusted terms. We will be closely

scrutinizing the Secretary's efficiencies initiative and will be looking for additional efficiencies as we move through the legislative process.

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Even as the Defense budget request reflects difficult choices, it rightly requests increased funding for military personnel and health care, including funding sufficient to continue initiatives supporting wounded and sick service members, continue research into traumatic brain injury, post-traumatic stress disorder, and psychological health, and fully fund a variety of family support programs. Notably, the budget request would reduce active duty Army and Navy end strengths by 7,400 soldiers and 3,000 sailors, respectively. The Army has announced its plan to reduce its so-called temporary end strength by 22,000 soldiers over the next three years, followed by an additional reduction of 27,000 soldiers between 2015 and 2017. As the Services for re-size their forces according to anticipated demand, we must ensure that any reductions avoid unnecessary increased risk or stress on our servicemembers.

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During our visit to Afghanistan last month, we saw significant signs of progress over the last several months, though great challenges remain. The Afghan Army and police have surged by an additional 70,000 over the last year, and are on track to meet the current target of 305,000 Afghan security forces by October of this year. The Presidents budget request for fiscal year 2012 includes substantial resources to continue supporting these forces, which will bring closer the day when Afghan troops will bear the major responsibility for their nations security, which is key to success in Afghanistan.

On February 15, 2011, in an op-ed that appeared in the Chicago Tribune, General Caldwell said, While the international community has expended tremendous blood and treasure for this just cause, the remarkable story of the surge of Afghans, of a people committing themselves to defense their country, is a reason to hope for a successful long-term outcome. In an email message to me he followed up by saying, It truly has become the Untold Story of the last 15 months. In that time, Afghan men and women have swelled the ranks of the Afghan National Security Force to levels more than double the U.S. and NATO surge. He continued, While the enormous increase in quantity is significant to the security of Afghanistan, our focus on the improvement of quality is even more important. Without objection, the op-ed and General Caldwell's email message to me shall be made a part of the record.

The administration is also considering a proposal to grow the Afghan Army by 35,000 and the Afghan police by a similar number, which would bring total Afghan security force levels to 378,000 by the end of 2012. These additional forces will add important enablers logistics, engineering and intelligence and others that will reinforce and sustain the transition of responsibility for Afghanistans security to the Afghan security forces. I support this proposed increase, and I know from our con-

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Improving Afghan governance remains a major challenge to success. The Government in Kabul is largely absent from Afghans daily lives and corruption and mismanagement remain major obstacles.

We must ensure our forces are prepared to address other threats in other places besides Iraq and Afghanistan. We must remain attentive to the threats burgeoning from al Qaeda and its affiliates in places like Somalia, Yemen, the Horn of Africa, and West Africa. Al Qaeda in the Arabian Peninsula (AQAP) has narrowly failed to strike the U.S. Homeland on two occasions these narrow misses, which were planned and executed by AQAP operatives in Yemen, have inspired them to develop new and creative ways to attack the United States and our interests. It is critical that we continue to work with our partners in the region to increase the pressure on AQAP and its associated forces. As protests in the Middle East continue to unfold, it is also critical that we urge our partners to as President Obama said earlier this week get out ahead of change. If countries like Yemen fail to do this, transitions could create a less favorable outcome for their people, for the region, and for the United States.

Earlier this week, the President spoke of the hunger for freedoms among the peoples of the Middle East. The committee looks forward to hearing from Secretary Gates and Admiral Mullen on: the current situation in Egypt and the broader Middle East; our communications with Egyptian military leadership and their confidence in their commitment to truly democratic elections; and the future of U.S.-Egyptian military relations. The Egyptian people have been denied their democratic rights for too long and over the few plus weeks the Egyptian people demanded those fundamental rights. It is critical that the United States supports transition to democratic governance in the Middle East and the world.

Across the Gulf of Aden, in Somalia and the Horn of Africa more broadly commerce continues to be impacted by threat of increasingly aggressive pirates, as well as certain elements of al Shabab that have expanded their violent attacks to include regional targets, most recently in July 2010 in Uganda.

Iran clearly provides a challenge for the United States and the international community. While continuing to profess that its nuclear activities are for peaceful purposes, all of Irans actions indicate otherwise. Iran continues to violate the directives of the International Atomic Energy Agency and the United Nations, and refuses to enter into meaningful negotiations with the P–5 plus 1 group of nations. The sanctions that have been imposed by the United States and most of the international community under the U.N. sanctions resolutions, as well as domestic laws, have had an effect.

In recent days, domestically, Iran has demonstrated yet again its total disregard for the fundamental rights of its people when it once more violently oppressed the political opposition to its tyrannical rule. The Iranian people are demanding that their voices be heard, we should stand with them.

I also wanted to highlight Admiral Mullens Guidance for 2011, which states that DOD would continue to plan for a broad range of military options should the President decide to use force to prevent Iran from acquiring nuclear arms. While not the preferred option, it is important that Iran understands that military actions remain on the table.

The Asia-Pacific region also requires increasing attention from the administration, Congress, and the U.S. military. Among the challenges we face are the unprovoked aggression from North Korea, questions raised by the continuing growth and modernization of Chinas military capabilities, and the destabilizing influences of violent extremism in South and Southeast Asia. As we confront these challenges, we must work closely with partners and allies, and make smart decisions about the U.S. military's posture, presence, and capabilities throughout the region.

In the area of missile defense, the budget request is $10.7 billion, an increase of $450 million from last years request, including funds for the Missile Defense Agency and the missile defense programs of the Army. There are likely to be two major focal points for missile defense this year: implementing the Phased Adaptive Ap-

proach (PAA) to missile defense in Europe, and taking the steps necessary to make sure the Ground-based Midcourse Defense system is on a path to being effective, reliable, and sustainable.

On implementation of the European PAA, the key objective this year is to deploy Phase 1, which includes deployment of an Aegis Ballistic Missile Defense ship to the Mediterranean, and a forward-based radar in southeastern NATO Europe. These deployments will provide near-term protection against existing and future Iranian missile threats to NATO. Numerous capabilities for future phases of the European PAA are under development, particularly the enhanced Aegis missile defense elements for deployment on land and at sea.

It is particularly noteworthy that last November at the Lisbon Summit, the NATO alliance agreed unanimously to adopt missile defense of its territory and population as a core mission, and NATO fully supports the European PAA as the U.S. contribution to NATOs missile defense mission.

One of NATOs key objectives in this decision is to seek cooperation with Russia on missile defense, through the NATO-Russia Council. As President Obama described in his December 18 letter to the Senate on missile defense, such cooperation will not in any way limit United States or NATO's missile defense capabilities. I hope our witnesses today will describe the types of cooperation they believe would be both useful and possible.

As for the GMD system, I would note that the last two flight tests have failed to result in intercepts, and we want to make sure that the Department is taking the necessary steps to understand and fix the problem, and to ensure that the system will work effectively and reliably. It remains essential to test our missile defense programs in a realistic manner, and to demonstrate that those systems work properly before we deploy them.

Turning to the readiness of our Armed Forces, the fiscal year 2012 budget request provides adequate levels of funding and an overall increase from fiscal year 2011 levels, including support for ongoing operations in Iraq and Afghanistan. However, the war funding request to reset and reconstitute equipment has decreased from $21.4 billion in fiscal year 2011 to $11.9 billion in fiscal year 2012. We must recognize that long term reset requirements must be supported with sustained funding for several years after forces have withdrawn from Iraq and Afghanistan. As operational tempo increases in Afghanistan, it is imperative that the vital readiness accounts are protected and fully funded.

Lastly, I applaud the Department for recognizing the need to maintain robust funding for science and technology programs that will provide the underpinning for the technological superiority of our future military capabilities. These efforts, along with supporting a capable acquisition workforce and maintaining a vibrant national defense industrial base, will be crucial for the successful and timely development and fielding of the next generation of cost-effective and reliable weapons systems.

Secretary Gates, Admiral Mullen, we look forward to your testimony. Now I will turn to Senator McCain for any opening remarks he may have.

Chairman LEVIN. I will turn now to Senator McCain.

STATEMENT OF SENATOR JOHN MCCAIN

Senator MCCAIN. Thank you, Mr. Chairman. I want to join you in welcoming Secretary Gates and Chairman Mullen and Secretary Hale to discuss the President's budget request for fiscal year 2012 and its impact on the FYDP for DOD.

Secretary Gates, you were asked to return to public service at a time when this country was embroiled in the turmoil of an unpopular war and another deteriorating war, and Pentagon critics were abounding. Your historic tenure has been marked by a surge to victory in Iraq, a new strategy to defeat our enemies in Afghanistan, and DOD's lead on humanitarian responses around the world. Your service will also be noted for the substantial reforms for the defense acquisition process and your decisive actions to stop wasting taxpayers' funds on unneeded and outdated systems. On behalf of my fellow citizens, I want to thank you for your outstanding service. I view you as one of the greatest public servants that I have ever had the opportunity of serving with.

Today we are faced again with a demand for change. We are facing a harsh reality that runaway Federal spending has put this country on an unsustainable path. I agree with Admiral Mullen who observes in his written statement "our debt is our greatest national security threat." The competing demands for our resources and the imperative we face to reduce our debt requires Congress to provide more leadership than it has shown in the past to restore fiscal responsibility.

I believe we took a step in the right direction in last year's National Defense Authorization Act (NDAA) by stripping the earmarks from the bill. Since then, both House and Senate have imposed moratoriums on earmarks for 2011 and 2012. I commend my colleagues in advance for restraining themselves from using earmarks, and I know it is tough for some. Mr. Secretary, I hope you will reinforce the President's commitment made during the State of the Union Address and recommend a veto of any 2012 defense bill that contains earmarks.

I am concerned about the Joint Strike Fighter (JSF). I know that you are. We have had many briefings, many discussions, but it has been a source of great frustration to you, to me, and to members of this committee, but most of all, it has been an incredible waste of the taxpayers' dollars. It hurts the credibility of our acquisition process and our defense industry. It reinforces the view of some of us that the military industrial congressional complex that President Eisenhower warned us about is alive and well. I hope that you can make your position absolutely clear to the Senate today to prevent further wasteful action by Congress that will deny DOD the resources it really needs but, at the same time, give us the kind of assurance that the F–35 can be put on the right track. I believe that as we move to try to reduce the deficit and the debt, almost everything is going to be on the table.

Overall the base budget request of $553 billion is $13 billion less than the amount projected last year. I commend your efforts to get out ahead of the cuts by finding ways to improve the efficiency of DOD. Your decisions to reduce the number of senior military and civilian officials, freeze civilian pay, and halt with some exceptions the process of expanding the civilian workforce are sound decisions. I worry that we might, however, do some things that might cause us to see what we saw in the 1970s and the 1980s. Reducing flying hours, deferring aircraft maintenance, and postponing needed facility repairs are not true savings, and I fear the possibility of a return to what we once knew as a hollow Army.

I have long said DOD does not deserve a special pass from spending the American taxpayers' dollars efficiently. But I have also said that the savings we identify must be reinvested in critical defense priorities. One example of this reinvestment is the increased efforts to combat the trafficking of drugs and illicit materials through Mexico. This has become an issue of national security. I look forward to working with you and our allies in Mexico to combat this scourge.

Yesterday you stated, regarding the U.S. presence in Iraq "there is certainly on our part an interest in having an additional presence, and the truth of the matter is the Iraqis are going to have some problems that they are going to have to deal with if we are

not there in some numbers." I agree. We are now scheduled to be completely out by the end of this year. I think it is time we engage in active discussions with the Iraqis as to their future needs as well as any threats there might be to our national security if there is a complete withdrawal by the end of this year.

In addition to Iraq, we will still have 98,000 U.S. forces in Afghanistan. I expect our troops will remain there until they are no longer needed.

A couple of weekends ago, I was at Munich and our allies came up to me and said, you say you are beginning to withdraw in the middle of 2011. Why should we not go to our constituents and say we are beginning to withdraw? I think one of the worst announcements ever made, as far as the conflict in Afghanistan, was the statement that we would be beginning withdrawal in 2011. I am glad to see that 2014 is now the operative year, but it still is very unsettling to our allies and encouraging to our enemies.

Success of our mission in Afghanistan must be assured to honor the sacrifices of our brave men and women, as well as coalition partners who have fought, died, and been injured there.

Mr. Secretary, Admiral Mullen, Secretary Hale, we face many challenges in the year ahead which will require your continued skill and tenacity.

I thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator McCain.

We have a quorum here and in a moment I will ask approval of a number of nominations and the committee budget. Before I do that, though, I just want to say, Mr. Secretary, I join and concur with Senator McCain and his comments about you and your tenure here as Secretary of Defense. It has been an extraordinary number of years. You have brought great capability, objectivity, and thoughtfulness to the job and great strength, independence, and courage, and I very much commend you for it. I look forward to many more times when you will be before this committee, and I am sure that you do too. I do not want this to sound kind of like it is anywhere near the end of your tenure here. [Laughter.]

I discussed the matter of the committee budget with Senator McCain, and I now would ask the committee to consider and approve a Senate resolution authorizing funding for our committee from March 1 of this year through February 28, 2013. The funding resolution is consistent with the joint majority leader and Republican leader's February 3 agreement on committee funding and with the funding guidance provided to us by the Senate Rules Committee on February 7. This matter is time-sensitive. All committees have been asked to report their budgets to the Senate by no later than today. So I would now entertain a motion to favorably report this resolution.

Senator MCCAIN. So moved.

Chairman LEVIN. Second?

Senator LIEBERMAN. Second.

Chairman LEVIN. All those in favor, say aye. [A chorus of ayes.]

Opposed, nay. [No response.]

The ayes have it.

Now, we have some discussion that lies ahead of us on our committee rules. I would ask everybody to read those rules during the

next week, and we will take up the matter of our rules on Monday or Tuesday after we return from the recess.

We also have in front of us 670 pending military nominations. All of these nominations have been before the committee the required length of time. Is there a motion to favorably report those nominations?

Senator MCCAIN. So moved.

Chairman LEVIN. Is there a second?

Senator LIEBERMAN. Second.

Chairman LEVIN. All in favor, say aye. [A chorus of ayes.]

Chairman LEVIN. Opposed, nay. [No response.]

Chairman LEVIN. The motion carries. Thank you all.

[The list of nominations considered and approved by the committee follows:]

MILITARY NOMINATIONS PENDING WITH THE SENATE ARMED SERVICES COMMITTEE WHICH ARE PROPOSED FOR THE COMMITTEE'S CONSIDERATION ON FEBRUARY 17, 2011.

1. LTG Eric E. Fiel, USAF, to be lieutenant general and Commander, Air Force Special Operations Command (Reference No. 138).
2. Col. Howard D. Stendahl, USAF to be brigadier general (Reference No. 139).
3. LTG Dennis L. Via, USA to be lieutenant general and Deputy Commanding General/Chief of Staff, US Army Materiel Command (Reference No. 141).
4. LTG Mark P. Hertling, USA to be lieutenant general and Commanding General, U.S. Army Europe and Seventh Army (Reference No. 142).
5. MG Susan S. Lawrence, USA to be lieutenant general and Chief Information Officer/G-6, Office of the Secretary of the Army (Reference No. 143).
6. MG John M. Bednarek, USA to be lieutenant general and Commanding General, First US Army (Reference No. 144).
7. MG Francis J. Wiercinski, USA to be lieutenant general and Commanding General, US Army Pacific (Reference No. 145).
8. BG Renaldo Rivera, ARNG to be major general (Reference No. 147).
9. BG William M. Buckler, Jr., USAR to be major general (Reference No. 148).
10. BG Mark J. MacCarley, USAR to be major general (Reference No. 149).
11. In the Army Reserve, there are eight appointments to the grade of colonel (list begins with Marc T. Arellano) (Reference No. 150).
12. In the Army Reserve, there are six appointments to the grade of colonel (list begins with Gregrey C. Bacon) (Reference No. 151).
13. In the Navy, there are two appointments to the grade of commander and below (list begins with John G. Brown) (Reference No. 153).
14. Col. Arlen R. Royalty, USAR to be brigadier general (Reference No. 167).
15. In the Marine Corps, there are 11 appointments to the grade of major general (list begins with Juan G. Ayala) (Reference No. 168).
16. In the Air Force Reserve, there are three appointments to the grade of colonel (list begins with Erwin Rader Bender, Jr.) (Reference No. 171).
17. In the Air Force, there are six appointments to the grade of lieutenant colonel and below (list begins with David M. Crawford) (Reference No. 172).
18. In the Air Force Reserve, there are 175 appointments to the grade of colonel (list begins with Richard T. Aldridge) (Reference No. 173).
19. In the Army, there is one appointment to the grade of lieutenant colonel (Sebastian A. Edwards) (Reference No. 174).
20. In the Army, there is one appointment to the grade of colonel (Gregory R. Ebner) (Reference No. 175).
21. In the Army Reserve there are 10 appointments to the grade of colonel (list begins with Curtis O. Bohlman, Jr.) (Reference No. 176).
22. In the Marine Corps, there is one appointment to the grade of major (Timothy E. Lemaster) (Reference No. 178).
23. In the Marine Corps, there are two appointments to the grade of major (list begins with Dax Hammers) (Reference No. 180).
24. In the Marine Corps, there are two appointments to the grade of major (list begins with Richard Martinez) (Reference No. 181).
25. In the Marine Corps, there are four appointments to the grade of major (list begins with William Frazier, Jr.) (Reference No. 182).
26. In the Marine Corps, there are four appointments to the grade of major (list begins with Douglas R. Cunningham) (Reference No. 183).

27. In the Marine Corps, there are four appointments to the grade of major (list begins with James E. Hardy, Jr.) (Reference No. 184).
28. In the Marine Corps, there are five appointments to the grade of major (list begins with Conrad G. Alston) (Reference No. 185).
29. In the Marine Corps, there are five appointments to the grade of major (list begins with David M. Adams) (Reference No. 186).
30. In the Marine Corps, there are six appointments to the grade of major (list begins with Stefan R. Browning) (Reference No. 187).
31. In the Marine Corps, there are seven appointment to the grade of major (list begins with Joel T. Carpenter) (Reference No. 188).
32. In the Marine Corps, there is one appointment to the grade of lieutenant colonel (Roger N. Rudd) (Reference No. 189).
33. In the Marine Corps, there is one appointment to the grade of lieutenant colonel (Lowell W. Schweickart, Jr.) (Reference No. 190).
34. In the Marine Corps, there is one appointment to the grade of lieutenant colonel (Katrina Gaskill) (Reference No. 191).
35. In the Marine Corps, there are two appointments to the grade of lieutenant colonel (list begins with Sean J. Collins) (Reference No. 193).
36. In the Marine Corps, there are three appointments to the grade of lieutenant colonel (list begins with William H. Barlow) (Reference No. 195).
37. In the Marine Corps, there is one appointment to the grade of major (James H. Glass) (Reference No. 197).
38. In the Navy, there is one appointment to the grade of captain (Richelle L. Kay) (Reference No. 198).
39. In the Navy, there are two appointments to the grade of lieutenant commander (list begins with Chris W. Czaplak) (Reference No. 201).
40. In the Navy, there is one appointment to the grade of lieutenant commander (Scott D. Scherer) (Reference No. 202).
41. In the Navy, there are two appointments to the grade of commander and below (list begins with Carlos E. Moreyra) (Reference No. 203).
42. In the Navy, there are 30 appointments to the grade of lieutenant commander (list begins with David Q. Baughier) (Reference No. 204).
43. In the Marine Corps, there are three appointments to the grade of major (list begins with Timothy M. Callahan) (Reference No. 206).
44. MG Ellen M. Pawlikowski, USAF, to be lieutenant general and Commander, Space and Missile Systems Center, Air Force Space Command (Reference No. 210).
45. MG Michael J. Basla, USAF, to be lieutenant general and Vice Commander, Air Force Space Command (Reference No. 211).
46. MG Rhett A. Hernandez, USA, to be lieutenant general and Commanding General, U.S. Army Forces Cyberspace Command (Reference No. 212).
47. Col. Johnny M. Sellers, ARNG, to be brigadier general (Reference No. 214).
48. Col. Janson D. Boyles, ARNG, to be brigadier general (Reference No. 215).
49. In the Air Force, there are three appointments to the grade of major (list begins with Stephen L. Buse) (Reference No. 216).
50. In the Air Force Reserve, there are three appointments to the grade of colonel (list begins with Thomas J. Collins) (Reference No. 217).
51. In the Air Force Reserve, there are four appointments to the grade of colonel (list begins with Phillip M. Armstrong) (Reference No. 218).
52. In the Air Force Reserve, there are five appointments to the grade of colonel (list begins with Lloyd H. Anseth) (Reference No. 219).
53. In the Air Force Reserve, there are seven appointments to the grade of major (list begins with Kathleen M. Flarity) (Reference No. 220).
54. In the Air Force, there are seven appointments to the grade of major (list begins with Melina T. Doan) (Reference No. 221).
55. In the Air Force, there are 12 appointments to the grade of colonel (list begins with Villa L. Guillory) (Reference No. 223).
56. In the Air Force Reserve, there are 14 appointments to the grade of colonel (list begins with Alfred P. Bowles II) (Reference No. 224).
57. In the Air Force, there are 49 appointments to the grade of colonel (list begins with Brian F. Agee) (Reference No. 225).
58. In the Air Force Reserve, there are 100 appointments to the grade of colonel (list begins with Earl R. Alameida, Jr.) (Reference No. 226).
59. In the Army, there is one appointment to the grade of lieutenant colonel (Edward J. Benz III) (Reference No. 227).
60. In the Army Reserve, there is one appointment to the grade of colonel (Charles E. Lynde) (Reference No. 228).
61. In the Army, there are four appointments to the grade of major (list begins with Ozren T. Buntak) (Reference No. 229).

62. In the Army, there are three appointments to the grade of major (list begins with Marcia A. Brimm) (Reference No. 230).
63. In the Army there are 3 appointments to the grade of lieutenant colonel and below (list begins with Dustin C. Frazier) (Reference No. 231).
64. In the Army Reserve, there are eight appointments to the grade of colonel (list begins with Robert L. Bierenga) (Reference No. 232).
65. In the Army Reserve, there are 12 appointments to the grade of colonel (list begins with Don A. Campbell) (Reference No. 233).
66. In the Marine Corps Reserve, there are seven appointments to the grade of colonel (list begins with Ernest L. Ackiss III) (Reference No. 234).
67. In the Marine Corps Reserve, there are 74 appointments to the grade of colonel (list begins with Philip Q. Applegate) (Reference No. 235).
68. In the Navy, there is one appointment to the grade of captain (Jeffrey K. Hayhurst) (Reference No. 238).
69. In the Navy, there is one appointment to the grade of lieutenant commander (Steven D. Elias) (Reference No. 239).
70. In the Navy, there are two appointments to the grade of commander and below (list begins with Amy R. Gavril) (Reference No. 241).
71. In the Air Force Reserve, there are seven appointments to the grade of colonel (list begins with Steven L. Argiriou) (Reference No. 242).
72. In the Air Force, there are two appointments to the grade of major (list begins with Richard C. Ales) (Reference No. 243).
73. MG Vincent K. Brooks, USA, to be lieutenant general and Commanding General, U.S. Army Central Command/Third U.S. Army (Reference No. 248).
Total: 670.

Chairman LEVIN. We will now call on you, Mr. Secretary.

STATEMENT OF HON. ROBERT M. GATES, SECRETARY OF DEFENSE; ACCOMPANIED BY ROBERT F. HALE, UNDER SECRETARY OF DEFENSE, COMPTROLLER

Secretary GATES. Chairman Levin, Senator McCain, members of the committee, I appreciate the opportunity to appear before you to discuss the President's budget request for fiscal year 2012.

But first I want to thank the members of this committee for your outstanding support of DOD, but especially your support of the men and women in uniform serving in a time of war. I know you will join me in doing everything to ensure they have all they need to accomplish their mission and come home safely.

The budget request for DOD being presented today includes a base budget request of $553 billion and an OCO request of $117.8 billion. These budget decisions took place in the context of a nearly 2-year effort by DOD to reduce overhead, cull troubled and excess programs, and rein in personnel and contractor costs, all for the purpose of preserving the global reach and fighting strength of America's military at a time of fiscal stress for our country.

In all, these budget requests, if enacted by Congress, will continue our efforts to reform the way DOD does business, funds modernization programs needed to prepare for future conflicts, reaffirms and strengthens our Nation's commitment to care for the All-Volunteer Force, and ensure that our troops and commanders on the front lines have the resources and support they need to accomplish their mission.

My submitted statement includes more details of this request.

Now I want to take this opportunity to address several issues that I know have been a subject of debate and concern since I announced the outlines of our budget proposal last month: first, the serious damage our military will suffer by operating under a CR or receiving a significant funding cut during fiscal year 2011; second, the projected slowing and eventual flattening of the growth of

the defense budget over the next 5 years; third, the plan for future reductions in the size of the ground forces; and fourth, the proposed reforms and savings to the TRICARE program for working age retirees.

I also would express the hope that the Senate will continue to reject the unnecessary extra engine for the F–35 as it did the last time the Senate spoke to this issue in 2009.

I want to start by making it clear that DOD will face a crisis if we end up with a year-long CR or a significant funding cut for fiscal year 2011. The President's defense budget request for 2011 was $549 billion. A full-year CR would fund DOD at about $526 billion. That is a cut of $23 billion. The damage done across the force from such reductions would be further magnified as they would come halfway through the fiscal year.

Let me be clear, operating under a year-long CR or significantly reduced funding, with the severe shortfalls that entails, would damage procurement and research programs causing delays, rising costs, no new program starts, and serious disruptions in the production of some of our most high-demand assets, such as unmanned aerial vehicles (UAV). Cuts in maintenance could force parts of our aircraft fleet to be grounded and delay needed facilities improvements. Cuts in operations would mean fewer flying hours, fewer steaming days, and cutbacks in training for home station forces, all of which directly impact readiness.

Similarly, some of the appropriations proposals under debate in Congress contemplate reductions of up to $15 billion from the President's original fiscal year 2011 request. I recognize that given the current fiscal and political environment, it is unlikely that DOD will receive the full fiscal year 2011 amount. Based on a number of factors, including policy changes that led to lower personnel costs and reduced activity forced by the CR, I believe DOD can get by with a lower number. However, it is my judgment that DOD needs an appropriation of at least $540 billion for fiscal year 2011 for the U.S. military to properly carry out its mission, maintain readiness, and prepare for the future, which brings me to the proposed $78 billion reduction in the defense budget top line over the next 5 years.

To begin with, this so-called cut is to the rate of predicted growth. The size of the base defense budget is still projected to increase in real inflation-adjusted dollars before eventually flattening out over this time period.

More significantly, as a result of the efficiencies and reforms undertaken over the past year, we have protected programs that support servicemembers, readiness, and modernization. These efforts have made it possible for DOD to absorb lower projected growth in the defense budget without sacrificing real military capabilities. In fact, the savings identified by the Services have allowed our military to add some $70 billion beyond the program of record toward priority needs and new capabilities. Of the $78 billion in proposed reductions to the 5-year defense plan, about $68 billion comes from a combination of shedding excess overhead, improved business practices, reducing personnel costs, and from changes to economic assumptions. Only $10 billion of that 5-year total is directly related to military combat capability. $4 billion comes from restructuring

the JSF program, a step driven by the program's development and testing schedule that would have taken place irrespective of the budget top line. The rest, about $6 billion, results from the proposed decrease in end strength of the Army and Marine Corps starting in 2015, a decision I will address now.

Just over 4 years ago, one of my first acts as Defense Secretary was to increase the permanent end strength of our ground forces, the Army by 65,000 to a total of 547,000 and the Marine Corps by 27,000 to 202,000. At the time the increase was needed to relieve the severe stress on the force from the Iraq war as the surge was getting underway. To support the later plus-up of troops in Afghanistan, I subsequently authorized a further temporary increase in the Army of 22,000, an increase always planned to end in 2013. The objective was to reduce stress on the force, limit and eventually end the practice of stop-loss and to increase troops' home station dwell time.

As we end the U.S. troop presence in Iraq this year, according to our agreement with the Iraqi Government, the overall deployment demands on our force are decreasing significantly. Just 3 years ago, we had some 190,000 troops combined in Iraq and Afghanistan. By the end of this calendar year, we expect there to be less than 100,000 troops deployed in both of the major post-September 11 combat theaters, virtually all of those forces in Afghanistan.

This is why we believe that beginning in fiscal year 2015, the United States can, with minimal risk, begin reducing Army Active Duty end strength by 27,000 and the Marine Corps by somewhere between 15,000 and 20,000. These projections assume that the number of troops in Afghanistan will be significantly reduced by the end of 2014 in accordance with both the President's and NATO's strategy. If our assumptions prove incorrect, there is plenty of time to adjust the size and schedule of this change.

It is important to remember that even after the planned reductions, the Active Army end strength would continue to be larger by nearly 40,000 soldiers than it was when I became Secretary of Defense 4 years ago.

I should also note that these reductions are supported by both the Army and Marine Corps leadership.

Finally, sharply rising health care costs are consuming an even-larger share of DOD's budget, growing from $19 billion in 2001 to $52.5 billion in this request. Among other reforms, this fiscal year 2012 budget includes modest increases to TRICARE enrollment fees, later indexed to Medicare premium increases for working age retirees, most of whom are employed while receiving full pensions. All six members of the Joint Chiefs of Staff have strongly endorsed these and other cost-saving TRICARE reforms in a letter to Congress.

I understand that any kind of change to these benefits prompts vigorous political opposition, but let us be clear. The current TRICARE arrangement, one in which fees have not increased for 15 years, is simply unsustainable, and if allowed to continue, DOD risks the fate of other corporate and government bureaucracies that were ultimately crippled by personnel costs, in particular, their retiree benefit packages.

All told, the cumulative effect of DOD's savings and reforms, combined with a host of new investments, will make it possible to protect the U.S. military's combat power despite the declining rate of growth and eventual flattening of the defense budget over the next 5 years. As a result of the savings identified and reinvested by the Services, our military will be able to meet unforeseen expenses, refurbish war-worn equipment, buy new ships and fighters, begin development of a new long-range bomber, boost our cyber warfare capability, strengthen missile defense, and buy more of the most advanced UAVs. But I should note this will only be possible if the efficiencies, reforms, and savings are followed through to completion.

In closing, I want to address the calls from some quarters for deeper cuts in defense spending to address this country's fiscal challenges. I would remind them that over the last two defense budgets submitted by President Obama, we have curtailed or canceled troubled or excess programs that would have cost more than $300 billion if seen through to completion. Additionally, total defense spending, including war costs, will decline further as the U.S. military withdraws from Iraq.

We still live in a very dangerous and often unstable world. Our military must remain strong enough and agile enough to face a diverse range of threats from non-state actors attempting to acquire and use weapons of mass destruction and sophisticated missiles to the more traditional threats of other states building up their conventional forces and developing new capabilities that target our traditional strengths.

We shrink from our global security responsibilities at our peril. Retrenchment brought about by short-sighted cuts could well lead to costlier and more tragic consequences later, indeed, as they always have in the past. Surely we should learn from our national experience since World War I that drastic reductions in the size and strength of the U.S. military make armed conflict all the more likely with an unacceptably high cost in American blood and treasure.

Mr. Chairman, I look forward to working through this next phase of the President's defense reform effort with you and your colleagues in the weeks and months ahead to do what is right for our Armed Forces and what is right for our country. Thank you.

[The prepared statement of Secretary Gates follows:]

PREPARED STATEMENT BY HON. ROBERT M. GATES

Mr. Chairman, members of the committee.

I appreciate the opportunity to appear before you to discuss the President's budget request for fiscal year 2012. I first want to thank the members of this committee for your support of the men and women in uniform who have answered the call in a time of war. I know you will join me in doing everything to ensure they have all they need to accomplish their mission and come home safely.

The budget request for the Department of Defense (DOD) being presented today includes a base budget request of $553 billion and an Overseas Contingency Operations (OCO) request for $117.8 billion. These budget decisions took place in the context of a nearly 2-year effort by DOD to reduce overhead, cull troubled and excess programs, and rein in personnel and contractor costs—all for the purpose of preserving the fighting strength of America's military at a time of fiscal stress for our country. The goal was not only to generate savings that could be applied to new capabilities and programs, but for our defense institutions to become more agile and effective organizations as a result.

In all, these budget requests, if enacted by Congress, will:

- Continue our efforts to reform the way the department does business;
- Fund modernization programs needed to prepare for future conflicts;
- Reaffirm and strengthen the Nation's commitment to care for the All-Volunteer Force; and
- Ensure that our troops and commanders on the front lines have the resources and support they need to accomplish their mission.

Before I further summarize the elements of the President's budget request, I want to address three issues that I know have been a subject of debate and concern since I announced the outlines of our budget proposal on January 6:

- First, the serious damage caused to our military by operating under a continuing resolution or receiving a significant funding cut during fiscal year 2011;
- Second, the projected slowing and eventual flattening of growth of the defense budget over the next 5 years; and
- Third, the planned future reductions in the size of the ground forces.

I want to make clear that we face a crisis on our doorstep if DOD ends up with a year-long continuing resolution or a significant funding cut for fiscal year 2011. The President's defense budget request for fiscal year 2011 was $549 billion. A full-year continuing resolution would fund the department at about $526 billion. That's a cut of $23 billion. Similarly, some of the appropriations proposals under debate in Congress contemplate reductions of $15 billion and more from what the President requested for defense in fiscal year 2011. The damage done across the force from such reductions would be magnified as they would come halfway through the fiscal year.

Let me be clear, operating under a year-long continuing resolution or substantially reduced funding—with the severe shortfalls that entails—would damage procurement and research programs causing delays, rising costs, no new program starts and serious disruptions in the production of some our most high demand assets, such as Unmanned Aerial Vehicles. The reductions would likely fall most heavily on our operations and maintenance accounts. Cuts in maintenance could force parts of our aircraft fleet to be grounded and delay needed facilities improvements. Cuts in operations would mean fewer flying hours, fewer steaming days, and cutbacks in training for home-stationed forces—all of which directly impacts readiness. That is how you hollow out a military—when your best people, your veterans of multiple combat deployments, become frustrated and demoralized and, as a result, begin leaving military service.

Consider also that throughout this past decade of conflict, the Service Chiefs and Members of Congress have repeatedly voiced concerns about the lack of training opportunities for conventional high-end combat resulting from the operational demands of Iraq and Afghanistan. We are just now beginning to get the kind of dwell-time for our home stationed forces to allow that kind of training. If forced to operate under a continuing resolution or reduced funding, some of that full-spectrum training will not happen in fiscal year 2011.

Mr. Chairman, I recognize that given the current fiscal and political environment, it is unlikely that DOD will receive the full amount originally requested for fiscal year 2011. Based on a number of factors—including policy changes that led to lower personnel costs and reduced activity forced by the continuing resolution—I believe the department can get by with a lower number. However, it is my judgment that DOD needs an appropriation of at least $540 billion for fiscal year 2011 for the U.S. military to properly carry out its mission, maintain readiness, and prepare for the future.

Which brings me to the second issue—the proposed $78 billion reduction in the defense budget topline over the next 5 years. To begin with, this so-called "cut" is to the rate of predicted growth. The size of the base defense budget is still projected to increase in real, inflation-adjusted dollars, before eventually flattening out over this time period.

More significantly, as a result of the efficiencies and reforms undertaken over the past year, we have protected programs that support military people, readiness, and modernization. These efforts have made it possible for DOD to absorb lower projected growth in the defense budget without, as Chairman McKeon warned last month, "leav[ing] our military less capable and less able to fight." In fact, the savings identified by the Services have allowed our military to add some $70 billion towards priority needs and new capabilities.

Of the $78 billion in proposed reductions to the 5-year defense budget plan, about $68 billion comes from a combination of shedding excess overhead, improving business practices, reducing personnel costs, and from changes to economic assumptions.

Only $10 billion of that 5-year total is related directly to military combat capability. $4 billion comes from restructuring the Joint Strike Fighter (JSF) program, a step driven by the program's development and testing schedule that would have taken place irrespective of the budget top-line.

The rest, about $6 billion, results from the proposed decrease in end strength of the Army and Marine Corps starting in fiscal year 2015, a decision that I will address now. Just over four years ago, one of my first acts as Defense Secretary was to increase the permanent end strength of our ground forces—the Army by 65,000 to a total of 547,000 and the Marine Corps by 27,000 to 202,000. At the time, the increase was needed to relieve the severe stress on the force from the Iraq war as the surge was getting underway. To support the later plus up of troops in Afghanistan, I subsequently authorized a temporary further increase in the Army of some 22,000. The objective was to reduce stress on the force, limit and eventually end the practice of stop-loss, and to increase troops' home station dwell time.

As we end the U.S. troop presence in Iraq this year, according to the agreement with the Iraqi Government, the overall deployment demands on our force are decreasing significantly. Just 3 years ago, we had some 190,000 troops combined in Iraq and Afghanistan. By the end of this calendar year we expect less than 100,000 troops to be deployed in both of the major post-September 11 combat theaters, virtually all of those forces being in Afghanistan.

That is why we believe that, beginning in fiscal year 2015, the United States can, with minimal risk, begin reducing Army active duty end strength by 27,000 and the Marine Corps by somewhere between 15,000 and 20,000. These projections assume that the number of troops in Afghanistan would be significantly reduced by the end of 2014, in accordance with the President's strategy. If our assumptions prove incorrect, there's plenty of time to adjust the size and schedule of this change.

It is important to remember that even after the planned reductions, the active Army end strength would continue to be larger, by nearly 40,000 soldiers, than it was when I became defense secretary four years ago. I should also note that these reductions are supported by both the Army and Marine Corps leadership.

I would note that prior to these budget decisions, the last Marine Commandant stated that he believed the Marine Corps was larger than it should be for the long term. The current Commandant, General Amos, has just completed a comprehensive force structure review for the post-Afghanistan security environment that is consistent with the out-year reductions projected in the President's budget plan.

REFORM—EFFICIENCIES

These budget decisions took place in the context of a nearly 2 year effort by DOD to reform the way the Pentagon does business—to change how and what we buy, to replace a culture of endless money with one of savings and restraint. To not only make every defense dollar count, but also become a more agile and effective organization in the process.

Last spring, we launched a comprehensive effort to reduce DOD's overhead expenditures. The goal was—and is—to sustain the U.S. military's size and strength over the long-term by reinvesting those efficiency savings in force structure and other key combat capabilities. This process culminated in my announcement last month that summarized the impact of these reforms on the fiscal year 2012 budget.

The Military Services conducted a thorough scrub of their bureaucratic structures, business practices, modernization programs, civilian and military personnel levels, and associated overhead costs. They identified potential savings that totaled approximately $100 billion over 5 years. More than $70 billion is being reinvested in high priority needs and capabilities, while about $28 billion is going to higher than expected operating costs—"must pay" bills that would otherwise be paid from investment accounts.

We then looked at reducing costs and deriving savings across the department as a whole—with special attention to the substantial headquarters and support bureaucracies outside the four Military Services—savings that added up to $78 billion over 5 years.

As I mentioned earlier, $10 billion of that total came from restructuring the JSF program and reducing Army and Marine Corps end strength starting in fiscal year 2015.

The rest of the DOD-wide savings came primarily from shedding excess overhead, improving business practices, and reducing personnel costs. Key examples include:

- $13 billion from holding the civilian workforce at fiscal year 2010 levels for 3 years, with limited exceptions such as growth in the acquisition workforce;
- $12 billion through the government-wide freeze on civilian salaries;

- $8 billion by reforming military health programs to maintain high quality care while slowing cost growth;
- $11 billion from resetting missions, priorities, functions for the defense agencies and the Office of the Secretary of Defense.
- $6 billion by reducing staff augmentation and service support contracts by 10 percent annually for 3 years;
- $2.3 billion by disestablishing Joint Forces Command and the Business Transformation Agency;
- $1 billion by eliminating unnecessary studies and internal reports;
- $4 billion in changed economic assumptions, such as a lower than expected inflation rate;
- $100 million by reducing more than 100 flag officer and about 200 civilian senior executive positions; and
- $11 billion in a variety of smaller initiatives across the department.

To better track how and where taxpayer dollars are spent, the department is also reforming its financial management systems and practices—with the goal of having auditable financial statements by the congressionally mandated date of 2017. We are pursuing a streamlined approach that focuses first on the information we most use to manage the department.

FISCAL YEAR 2012 BASE BUDGET REQUEST

The President's request for the base defense budget is for $553 billion, which represents a 3.6 percent real increase over continuing resolution levels—and about 1.5 percent real growth over the omnibus defense bill marked up by Congress last year. The four major components are:

- $207.1 billion for operations, maintenance, logistics and training;
- $142.8 billion for military pay and benefits;
- $188.3 billion for modernization; and
- $14.8 billion for military construction and family housing.

MODERNIZATION

In all, the fiscal year 2012 budget request includes $188.3 billion for modernization in the form of Procurement, Research, Development, Testing and Evaluation. Key modernization initiatives include:

- $4.8 billion to enhance intelligence, surveillance, and reconnaissance capabilities and buy more high demand assets, including the MC–12 surveillance aircraft, Predator, Reaper and Global Hawk UAVs—with the aim of achieving 65 Predator-class Combat Air Patrols by the end of fiscal year 2013;
- More than $10 billion to modernize our heavily used rotary wing fleet;
- $3.9 billion to upgrade the Army's combat vehicles and communications systems;
- $4.8 billion to buy new equipment for the Reserves;
- $14.9 billion to buy new fighters and ground attack aircraft;
- $24.6 billion to support a realistic, executable shipbuilding and investment portfolio that buys 11 ships in fiscal year 2012 and modernizes existing fleet assets;
- $10.5 billion to advance the modernization portion of the administration's approach to ballistic missile defense (BMD)—including $8.4 billion for the Missile Defense Agency; and
- $2.3 billion to improve the military's cyber capabilities.

Questions have been raised about whether we are too focused on current conflicts and are devoting too few resources to future possible high-end conflicts. This budget should put those questions to rest. The fiscal year 2012 base request provides for significant investments at the high end of the conflict spectrum, including:

- $1 billion ($4.5 billion over the Future Years Defense Program (FYDP)) for a tactical air modernization program that would ensure that the F–22 will continue to be the world's preeminent air-to-air fighter. This effort will leverage radar and electronic protection technologies from the JSF program;
- $204 million ($1.6 billion over the FYDP) to modernize the radars of F–15s to keep this key fighter viable well into the future;
- $30 million ($491 million over the FYDP) for a follow-on to the Advanced Medium-Range Air-to-Air Missile, that would provide greater range, lethality and protection against electronic jamming;
- $200 million ($800 million over the FYDP) to invest in technologies to disrupt an opponent's ability to attack our surface ships;

- $1.1 billion ($2.2 billion over the FYDP) to buy more EA–18 Growlers than originally planned, plus $1.6 billion over the FYDP to develop a new jamming system, expanding our electronic warfare capabilities;
- $2.1 billion ($14 billion over the FYDP) to fund Aegis-equipped ships to further defend the fleet from aircraft and missile attack and provide theater-wide tactical BMD; and
- To improve anti-submarine capabilities, $2.4 billion for P–8 Poseidon aircraft ($19.6 billion over the FYDP) and $4.8 billion for procurement of Virginia-class attack submarines ($27.6 billion over the FYDP).

The fiscal year 2012 budget also supports a long-range strike family of systems, which must be a high priority for future defense investment given the anti-access challenges our military faces. A key component of this joint portfolio will be a new long-range, nuclear-capable, penetrating Air Force bomber, designed and developed using proven technologies and with an option for remote piloting. It is important that we begin this project now to ensure that a new bomber can be ready before the current aging fleet goes out of service.

The budget request includes $10.6 billion to maintain U.S. supremacy in space, in keeping with the recently released National Security Space Strategy. This new strategy will help bring order to the congested space domain, strengthen international partnerships, increase resiliency so our troops can fight in a degraded space environment, and improve our acquisition processes and reform export controls to energize the space industrial base.

As the Military Services were digging deep for excess overhead, they were also taking a hard look at their modernization portfolio for weapons that were having major development problems, unsustainable cost growth, or had grown less relevant to real world needs.

The JSF program received special scrutiny given its substantial cost and its central place in ensuring that we have a large inventory of the most advanced fifth generation stealth fighters to sustain U.S. air superiority well into the future. The fiscal year 2012 budget reflects the proposed restructuring of the F–35 JSF program to stabilize its schedule and cost. The department has adjusted F–35 procurement quantities based on new data on costs, on likely orders from our foreign nation partners, and on realigned development and test schedules.

The proposed restructuring adds over $4 billion for additional testing through 2016. It holds F–35 procurement in fiscal year 2012 at 32 aircraft and reduces buys by 124 aircraft compared with last year's plans. Even after these changes, procurement ramps up sharply to 108 aircraft by fiscal year 2016. This is the fastest that future procurement can prudently be increased.

The F–35 restructuring places the Marine's short takeoff and vertical landing variant on the equivalent of a two year probation. If we cannot fix this variant during this timeframe and get it back on track in terms of performance, cost and schedule, then I believe it should be canceled. To compensate for any delays in F–35 deliveries, we propose buying 41 more F/A–18s between fiscal year 2012 to 2014.

I also want to reiterate the President's and my firm opposition to buying an extra engine for the F–35—a position echoed by the Air Force, Navy, and Marine Corps leadership. We consider it an unnecessary and extravagant expense, particularly during this period of fiscal contraction. The Congress has not spoken with one voice on this matter and DOD has been operating this fiscal year under ambiguous guidance at best. Given the situation, I decided to continue to fund the JSF extra engine effort during this interim period to give Congress the opportunity to resolve this matter as part of its ongoing debate on the budget.

However, this also means that the American taxpayers are spending $28 million a month for an excess and unjustified program that is slated for termination. The President, the military services and I continue to oppose this extra engine and, when the current CR expires, I will look at all available legal options to close down this program. It would be a waste of nearly $3 billion in a time of economic distress and the money is needed for higher priority defense efforts.

This budget proposes cancelling the Expeditionary Fighting Vehicle (EFV) and reallocating funds to existing Marine ground combat requirements, a decision based on the recommendation of the Secretary of the Navy and the Commandant of the Marine Corps.

Ultimately, the Navy and Marine Corps leadership based their recommendations on two main principles: affordability and balance. The EFV, a program originally conceived in the 1980s, has already consumed more than $3 billion to develop and will cost another $12 billion to build. The EFV as designed would have cost many times more than the system it would replace, with much higher maintenance and service costs. If continued over the next two decades, the EFV program would consume fully half of all Marine Corps procurement dollars while swallowing virtually

the Corps' entire ground vehicle budget—procurement, operations, and maintenance—with all the risk to readiness that entails.

To be sure, the EFV would, if pursued to completion without regard to time or cost, be an enormously capable vehicle. But as with several other high end programs completed or cancelled in recent years—the F–22, the Army Future Combat Systems, or the Navy's DDG–1000 destroyer—the mounting cost of acquiring this specialized capability must be judged against other priorities and needs.

Let there be no doubt—we are committed to sustaining the Marine Corps amphibious mission. This fiscal year 2012 request proposes that the $2.8 billion previously budgeted to the EFV for the next 5 years instead be reinvested towards an integrated new vehicle program for the Marine Corps, including:

- New armor, weaponry and engines, plus a life-extension program for the existing amphibious assault vehicles:
- The development of a new, more affordable, sustainable and survivable amphibious vehicle;
- Accelerated procurement of new personnel carriers; and
- Enhancement of existing Marine vehicles such as the Abrams tank and Light Armored Vehicle.

Throughout this process, we will harness the lessons learned—in terms of engineering, design, and testing—from the development of the EFV.

PERSONNEL

The fiscal year 2012 budget request includes $142.8 billion for military pay and benefits and continues our strong support for troops and their families. This includes funding for wounded, ill and injured care, enhancing the military health care system and supporting military families under stress. Examples in this request include:

- $2.3 billion to provide care for our Wounded Warriors and their families; and
- $8.3 billion for supporting families, including child care and school programs; and

While the department continues to insist on and pay for the highest quality health care, we are also mindful of sharply rising health costs—which have risen over the last decade from $19 billion in 2001 to $52.5 billion in this budget request. The department has taken a comprehensive look at all facets of the military health care model—emphasizing the need to balance the number one priority of continuing to provide the highest care and service, while ensuring fiscally responsible management.

One area we have identified are benefits provided to working-age retirees under the TRICARE program. Many of these beneficiaries are employed full time while receiving full pensions, often forgoing their employer's health plan to remain with TRICARE. This should come as no surprise, given that the current TRICARE enrollment fee was set in 1995 at $460 a year for the basic family plan and has not been raised since. By comparison, the fees for a comparable health insurance program for Federal workers total roughly $5,000 per year.

Accordingly, we propose a modest increase to TRICARE Prime enrollment fees for working age retirees: $2.50 per month for individuals and $5.00 per month for families in fiscal year 2012, and then indexed to Medicare premium increases in future years.

We are proposing other health care initiatives such as efficiencies in pharmacy co-pays designed to provide incentives to make greater use of generic prescriptions and those ordered by mail. We also seek to phase out, over several years, special subsidies offered to a small group of hospitals that treat military families and retirees. Additionally, we are proposing providing TRICARE-for-Life to all Medicare-eligible retirees aged 65 and over, including future enrollees in the Uniformed Services Family Health Plan. It is important to note that none of these changes would affect health care benefits for active-duty personnel.

SECURITY ASSISTANCE REFORM

The fiscal year 2012 request includes funding and authorization for a key step forward in a critical policy area: helping other countries to protect and defend themselves. The Pentagon and the State Department have agreed to a 3-year pilot pooled fund—called the Global Security Contingency Fund—that will be used to build partner capacity, prevent conflicts, and prepare for emerging threats. The proposed fund would incentivize interagency collaboration through a new business model. It would provide a more agile and cost effective way to reduce the risk of future conflicts by

allowing our government to respond to unforeseen needs and take advantage of emerging opportunities to help partners secure their own territories and regions.

The request is modest, an initial $50 million State Department appropriation, along with a request for authority to transfer an additional $450 million into the fund from either department if needed. DOD intends to make significant contributions from its own resources into this pooled fund. We will be requesting in parallel an authorization for this initiative in the National Defense Authorization Act for Fiscal Year 2012.

OVERSEAS CONTINGENCY OPERATIONS

Finally, this budget request includes $117.8 billion in fiscal year 2012 to support OCOs, primarily in Afghanistan, and to wind down our operations in Iraq—this is a significant reduction from the $159 billion request for OCO in fiscal year 2011. The request, which fully funds our wartime requirements, includes:

- $86.4 billion for wartime operations and related costs;
- $425 million for the Commander's Emergency Response Fund;
- $475 million for the Afghan Infrastructure Fund;
- $2.6 billion to support counter-IED efforts;
- $3.2 billion for mine-resistant ambush protected (MRAP) vehicles, including the MRAP All Terrain Vehicles developed for Afghanistan; and
- $11.9 billion to replace and restore worn, damaged, or destroyed equipment.
- $12.8 billion for training and equipping of the Afghan security forces.

CONCLUSION

All told, the cumulative effect of the department's savings and reforms, combined with a host of new investments, will make it possible to protect the U.S. military's global reach and fighting strength despite the declining rate of growth, and eventual flattening, of the defense budget over the next 5 years. As a result of the savings identified by the Services and reinvested, our military will be able to meet unforeseen expenses, refurbish war worn equipment, buy new ships and fighters, begin development of a new long-range bomber, boost our cyber-warfare capability, missile defense, and buy more of the most advanced UAVs. But, I should note, this will only be possible if the efficiencies reforms and savings are followed through to completion.

Before closing, I want to address the calls from some quarters for deeper cuts in defense spending to address this country's fiscal challenges. I would remind them that over the last two defense budgets submitted by President Obama, we have reformed and rebalanced the department's spending habits and priorities, curtailing or canceling troubled or excess programs that would have cost more than $300 billion if seen through to completion. Additionally, total defense spending—including war costs—will decline further as the U.S. military withdraws from Iraq.

We still live in a very dangerous and often unstable world. Our military must remain strong and agile enough to face a diverse range of threats—from non-state actors attempting to acquire and use weapons of mass destruction and sophisticated missiles, to the more traditional threats of other states both building up their conventional forces and developing new capabilities that target our traditional strengths.

We shrink from our global security responsibilities at our peril. Retrenchment brought about by short-sighted cuts could well lead to costlier and more tragic consequences later—indeed as they always have in the past. Surely we should learn from our national experience, since World War I, that drastic reductions in the size and strength of the U.S. military make armed conflict all the more likely—with an unacceptably high cost in American blood and treasure.

Today, I ask your support for a leaner, more efficient Pentagon and continued sustainable, robust investments in our troops and future capabilities. Our troops have done more than their part, now it is time for us in Washington to do ours.

Mr. Chairman, I look forward to working through this next phase of the President's defense reform effort with you in the weeks and months ahead—to do what's right for our Armed Forces and what's right for our country.

Chairman LEVIN. Thank you very much, Mr. Secretary.

Admiral Mullen.

STATEMENT OF ADM MICHAEL G. MULLEN, USN, CHAIRMAN, JOINT CHIEFS OF STAFF

Admiral MULLEN. Thank you, Mr. Chairman, Senator McCain, and distinguished members of this committee, I am honored to appear before you today to discuss the President's fiscal year 2012 defense budget.

Before I do, however, let me just echo Secretary Gates' comments about the very real dangers inherent in failing to pass this year's budget. The fiscal year 2011 CR, if carried forward, would not only reduce our account by $23 billion, it would deprive us of the flexibility we need to support our troops and their families.

The Services have already taken disruptive and, in some cases, irreversible steps to live within the confines of the current CR. Steps that ultimately make us less effective at what we are supposed to do for the Nation. The Navy did not procure Government-furnished equipment for another *Arleigh Burke* class destroyer. The Army and the Marine Corps have curtailed or altogether frozen civilian hiring. All the Services are now prevented from issuing contracts for new major military construction projects. Some programs may take years to recover if the CR is extended through the end of September.

So I urge you to pass the fiscal year 2011 defense bill immediately. Even at a reduced top line, it will provide us the tools we need to accomplish the bulk of the missions we have been assigned.

Accomplishing those missions into the future demands as well support for the President's fiscal year 2012 proposal. As the Secretary has laid out, this budget, combined with the efficiency effort he led, provides for the wellbeing of our troops and families, fully funds current operations in Afghanistan and Iraq, and helps balance global risk through streamlined organization, smarter acquisition, and prudent modernization.

The Army, for instance, will cancel procurement of a surface-to-air missile and the non-line-of-sight launch system, but it will continue production of the joint light tactical vehicle and spearhead the development of a whole new family of armored vehicles. The Navy will give up its second fleet headquarters, reduce its manpower ashore, and increase its use of multiyear procurement for ships and aircraft, allowing it to continue development of the next generation of ballistic missile submarine, purchase 40 new F/A–18s, and 4 littoral combat ships and another LPD–17. The Marines will cancel the Expeditionary Fighting Vehicle and like the Army, reduce their end strength starting in 2015. But they will reinvest these savings to sustain and modernize the amphibious assault vehicle and the light armored vehicle, even as they advance a new concept of operations and restore much of their naval expeditionary skills. The Air Force will be able to continue development of the next tanker, a new bomber, and modernize its aging fleet of F–15 fighters, all the while finding savings of more than $33 billion through reorganization, consolidation, and reduced facilities requirements.

None of this balancing will come on the backs of our deployed troops. We are asking for more than $84 billion for readiness and training, nearly $5 billion for increased intelligence, surveillance, and reconnaissance (ISR) capabilities, and more than $10 billion to

recapitalize our rotary aircraft fleet. These funds plus those we are requesting to help build partner capacity in places like Afghanistan, Pakistan, Iraq, and Yemen all speak to the emphasis we are placing on giving our troops and their partners in the field everything they need to do the difficult jobs we have asked of them.

We must also give them and their families everything they need to cope with the stress and the strain of 10 years at war. That is why I am so pleased with the funds devoted in this proposal, almost three-quarters as much as the $200 billion budgeted for operations and maintenance (O&M), to personnel housing and health care issues. The chiefs and I penned a rare 24-star letter to Congress this week expressing our unqualified support for the military health care program changes included in this budget. We sought equity across all health care programs with beneficiaries and health care delivery providers having the same benefits and equivalent payment systems regardless of where they live or work.

That, in turn, led us to propose increases in TRICARE enrollment fees for working age retirees. These increases are modest and manageable and leave fees well below the inflation-adjusted, out-of-pocket costs set in 1995 when the current fees were established. We sincerely hope you will see fit to pass these increases.

Please know that we will continue to invest wisely in critical care areas to include research, diagnosis and treatment of mental health issues and TBI, enhanced access to health services, and new battlefield technologies. We understand that changes to health care benefits cause concern among the people we serve and the communities from which we receive care, but we also understand and hold sacred our obligation to care completely for those who have born the brunt of these wars, as well as those for whom the war never ends.

I am convinced that we have not begun to understand the toll in dollars and in dreams that war extracts from our people. As the grandsons and granddaughters of World War II vets still struggle to comprehend the full scope of the horror those men yet conceal, so too will our grandchildren have to come to grips with the wounds unseen and the grief unspoken unless, of course, we get it right. I believe the investments we are making in wounded care and family readiness will pay off in that regard, but it will take time and patience and money, three things we seem so rarely to possess in this town.

That brings me back to this particular budget request. With limited resources and two wars in progress, we should be prudent in defining our priorities in controlling costs and in slaking our thirst for more and better systems.

We should also be clear about what the joint force can and cannot do, just as we should be clear about what we expect from our interagency and international partners. Our global commitments have not shrunk. If anything, they continue to grow, and the world is a lot less predictable now than we could have ever imagined. You need look no further than Tahrir Square to see the truth in that. Foolhardy would it be for us to make hasty judgments about the benefits, tangible and intangible, that are to be derived from forging strong military relationships overseas such as the one we enjoy with Egypt. Changes to those relationships in either aid or assistance ought to be considered only with an abundance of caution and

a thorough appreciation for the long view, rather than the flush of public passion and the urgency to save a buck. The $1.3 billion we provide the Egyptian military each year has helped them become the capable professional force they are and, in that regard, has been of incalculable value.

Of equal or greater value is increased appropriations for DOS and our request in this budget for the Global Security Contingency Fund, a 3-year pooled fund between DOD and DOS, that will be used to build partner capacity, prevent conflicts, and prepare for emerging threats. The request is modest, an initial $50 million appropriation, along with a request for authority to reprogram an additional $450 million if needed. But what it will buy us is an agile and cost effective way to better respond to unforeseen needs and take advantage of emerging opportunities for partners to secure their own territories and regions.

We must get more efficient, yes, but we must also get more pragmatic about the world we live in. We can no longer afford bloated programs or unnecessary organizations without sacrificing fighting power, and we can no longer afford to put off investments in future capabilities or relationships that preserve that power across a spectrum of conflict. I have long said we must not be exempt in DOD from belt-tightening, but in truth, there is little discretionary about the security we provide our fellow citizens. Cuts can reasonably only go so far without hollowing the force. In my view then, this proposed budget builds on the balance we started to achieve last year and represents the best of both fiscal responsibility and sound national security.

I would be remiss, indeed, if I did not close by lauding the incredible effort of our troops overseas and their families as they finish one war in Iraq and begin to turn corners in Afghanistan. I know you share my pride in them and their families and your support has been superb. I know you will keep them foremost in mind as you consider the elements of this proposal. I thank you for your continued longstanding support of our men and women in uniform and their families, and I look forward to your questions.

[The prepared statement of Admiral Mullen follows:]

PREPARED STATEMENT BY ADM MICHAEL G. MULLEN, USN

Chairman Levin, Senator McCain, and distinguished members of the committee, it is my privilege to report on the posture of the U.S. Armed Forces.

We remain a military at war. Yet, in the face of daunting challenges, our Armed Forces have successfully carried out their far-ranging missions over the past year. They have disrupted al Qaeda, improved security in Afghanistan, continued on a path to soon end the war in Iraq, promoted stability in the Pacific Rim, and provided humanitarian assistance when disasters struck. However, the cumulative stress of 9 years of war is growing and substantial. We will need your sustained support, even in the midst of fiscal difficulties, to reset the Joint Force needed to protect the American people.

Our country is fortunate to be served by the best Armed Forces I have seen in over 42 years of wearing the uniform. Despite continuous deployments and combat operations, our men and women in uniform and their families have been resilient beyond all expectations. They are patriots who care deeply for this country and serve under very trying conditions. They are the most combat experienced and capable force we have ever had, and they continue to learn and adapt in ways that are truly remarkable. I am continuously humbled as I visit them around the country and the world. Time and again, these men and women and their families have proven that our All-Volunteer Force is the Nation's greatest strategic asset.

This Force cannot thrive without the support of the American people. Everything we are and everything we do comes from them. I am grateful for Congress' and the American people's constant reminders that the service, heroism, and sacrifices of our servicemembers and their families are valued. However, I am concerned that because our military hails from a shrinking percentage of the population, some day the American people may no longer know us. We cannot allow this to happen. We will endeavor to stay connected and to maintain a strong and open relationship.

As we look to our military's posture and budget, we recognize that our country is still reeling from a grave and global economic downturn and is maintaining nearly historic fiscal deficits and national debt. Indeed, I believe that our debt is the greatest threat to our national security. If we as a country do not address our fiscal imbalances in the near-term, our national power will erode, and the costs to our ability to maintain and sustain influence could be great. To do its part, the Department of Defense (DOD) must and will become more efficient and disciplined, while improving our effectiveness. We must carefully and deliberately balance the imperatives of a constrained budget environment with the requirements we place on our military in sustaining and enhancing our security.

Going forward our fundamental resourcing problem will be identifying where we can reduce spending while minimizing the additional risk we will have to take on. For too much of the past decade we have not been forced to be disciplined with our choices. This must change, and it already has. We have identified a number of efficiencies in our budget and have reduced spending, while also retaining the combat readiness, force structure, essential modernization, and personnel programs we need. We are proud of what we have done so far, identifying $100 billion in efficiency savings over the next 5 years. But we need to do more.

Under the Secretary's leadership, DOD has conducted two comprehensive reviews of our requirements. First, the Quadrennial Defense Review surveyed the strategic environment, identified the strategy for the Joint Force, and determined what we need to execute that strategy. Second, we reviewed our spending to ensure we can achieve the maximum security benefit for every defense dollar. We must be careful to not cut defense beyond prudent levels, below which U.S. Armed Forces would be unable to execute our defense strategy at acceptable risk. Given the challenges and complexity of the security environment and the breadth of our national security interest, the defense strategy is necessarily global, wide-ranging, and highly responsive. This is why it is expensive.

At about 4.5 percent of GDP, the return on U.S. defense spending has been immense and historic: preventing world war between great powers, securing the global commons and the free flow of international trade and natural resources, combating terrorism across the globe, and protecting the American people and our allies. However, our operations have come with stresses and strains as well as costs to our readiness. For this reason, if we are to continue to execute the missions set out by our strategy, we must recognize that returning from war and resetting the force is costly and will require several years of continued investment. Congressional support is required for our forces, their families, their equipment and training, and our military infrastructure to ensure the success of our ongoing efforts and for us to be ready to respond to new and emerging security challenges.

The President's National Security Strategy, the recently released National Military Strategy, and the President's Strategy for Afghanistan and Pakistan describe our military approaches and ongoing operations in great detail. This posture statement will focus on the strategic priorities for the military and the Congressional support we need. My priorities remain defending our vital interests in the broader Middle East and South Central Asia, improving the Health-of-the-Force, and balancing global strategic risk.

DEFENDING OUR VITAL NATIONAL INTERESTS IN THE BROADER MIDDLE EAST AND SOUTH CENTRAL ASIA

Over the past year, our Armed Forces have continued to shoulder a heavy burden, particularly in the Middle East and South Central Asia. The balance of this burden and our wartime focus has shifted, however, from Iraq to Afghanistan. This was made possible by drawing down military forces in Iraq and transitioning security responsibilities to the Iraqis. Meanwhile, we committed additional forces and resources to Afghanistan and Pakistan. We have made steady, albeit uneven, progress toward disrupting, dismantling, and ultimately defeating al Qaeda in the region, while remaining ready to address other challenges around the world.

As a result of our operations with our Coalition, Afghan, and Pakistani partners, and extensive cooperation with other partners, al Qaeda's senior leadership in Pakistan is weaker and under greater pressure than at any other time since being forced

out of Afghanistan in late 2001. They have suffered the losses of numerous senior leaders and face significant challenges to coordinating operations, maintaining safe havens, and acquiring funding. Despite this operational progress, al Qaeda retains the intent and capability to attack the United States and other Western countries. The movement's leaders continue to operate in the Afghanistan-Pakistan border region, planning operations and guiding the efforts of al Qaeda networks operating out of the Arabian Peninsula, Africa, and even Europe. We, in turn, remain committed to our deepening and broadening partnerships in the region and to our goal of ultimately defeating al Qaeda and creating the conditions to prevent their return to Afghanistan and Pakistan.

We continue to implement our national strategy for Afghanistan and Pakistan with great urgency. This past November, we completed the deployment of the 30,000 additional U.S. forces, and we are beginning to see signs of improvements on the ground. These forces have allowed us to go on the offensive with our Afghan partners, force the Taliban out of safe havens in its heartland of Kandahar and Helmand, protect the Afghan population, and reduce civilian casualties. Our counterinsurgency operations, conducted in close partnership with Afghan forces, have reduced the Taliban's influence, reversed the insurgency's momentum in key areas of the country, and forced many Taliban leaders to flee across the border. Our forces will consolidate recent gains in Helmand and Kandahar Provinces and further expand security in other critical parts of the country.

This success against the Taliban and other insurgent groups is essential to prevent the return of al Qaeda, gain time to build the Afghan National Security Forces (ANSF), and force insurgents to reconcile with the Afghan Government on acceptable terms. We expect the violence coming in 2011 to be greater than last year. The fighting will be tough and often costly, but it is necessary to sustain and even increase the pressure we have been placing on the insurgent groups. We cannot allow the Taliban to reorganize and reconstitute as they did in 2004 and 2005, regain their oppressive influence over the Afghan people, and once again provide safe haven to al Qaeda.

For the success of our military operations to be enduring, it is critical that the ANSF be able to provide security for the Afghan people. Our greatest success story this past year has been the growth and development of the ANSF. With the help of additional NATO trainers, the ANSF added 49,000 soldiers and 21,000 policemen to their ranks—an astonishing growth of 36 percent. The ANSF also continue to improve on the battlefield and increasingly contribute to the war effort. They are fighting beside us and have grown in their ability to plan and conduct complex operations. In fact, their expanding capabilities and presence have already allowed ISAF forces to "thin out" in some parts of central Helmand and Kabul Province. We are on track to begin the transition of security responsibilities and drawdown of our forces in July 2011. In the coming year, while continuing to grow the ANSF in size, we will place greater emphasis on improving its quality, professionalism, and self-sufficiency, to ensure that they remain on track to assume the overall lead for security in 2014. To this end, the Afghan Security Forces Fund remains critical to the building of the ANSF's capabilities and to the ANSF's eventual assumption of security responsibilities.

Despite our successes, numerous other challenges remain. Achieving sustainable security requires developing Afghan governing capacity, cultivating the conditions needed for conflict resolution, neutralizing insurgent sanctuaries in Pakistan, and countering corruption. Absent these conditions, we will not succeed. Despite a dramatic increase in our civilian presence in Afghanistan this past year, improvements in subnational governance and reconstruction have not kept pace with progress in improving security. This has impeded our ability to "hold," "build," and "transfer." For this reason, the Commander's Emergency Response Program remains the most responsive means for addressing a local community's needs and is often the only tool our commanders have to address pressing requirements in areas where security is challenged. Along with development projects, we believe that new transparency and anti-corruption efforts may counter the deleterious effects of Afghanistan's criminal patronage networks, mitigate the distortive effects of international aid and development programs, and ultimately improve the confidence the Afghan people have in their government and their governing officials. To complement this "bottom-up" development, we will support the Afghan Government's reconciliation and reintegration efforts in order to achieve the political solution that is an imperative to sustainable peace. Successful military and security gains cannot be sustained unless we meet this challenge.

Though our operational efforts are focused on Afghanistan, our diplomatic efforts have increasingly focused on Pakistan, a country critical to our strategy in the region. We must overcome years of mistrust and continue to lay the foundation for

a true partnership with Pakistan. We made progress this past year by holding a third, productive round of Strategic Dialogues in October and by improving high- and mid-level coordination on security operations in the vicinity of the Afghanistan-Pakistan border. Equally important, we responded to last summer's devastating floods with timely aid and humanitarian relief. Our assistance eased some of the burden of the Pakistani military and demonstrated our enduring commitment to the Pakistani people.

A key component of our partnership is to help enable the Pakistani Military's counterterror and counterinsurgency operations. The series of offensive operations undertaken by the Pakistani Military in the tribal areas expanded dramatically in 2009. Since then, the Pakistanis have fought bravely and sacrificed much—losing thousands of soldiers in the process. We have faithfully supported them in a variety of ways, primarily in the development of the counterinsurgency capabilities of Pakistan's security forces. This development and the military's operations have kept pressure on al Qaeda's senior leadership and the militant groups threatening Pakistan and Afghanistan. However, insurgent groups such as the Quetta Shura and the Haqqani network operate unhindered from sanctuaries in Pakistan, posing a significant threat to NATO and Afghan forces. The aftermath of devastating flooding continues to place a high demand on the military. Our efforts to enable the Pakistani Military depend on several critical programs, such as the Pakistan Counterinsurgency Fund and Pakistan Counterinsurgency Capability Fund and the Multi-Year Security Assistance Commitment announced by Secretary Clinton last fall. It is also important that through exchange programs, such as the International Military Education and Training (IMET) program, we establish relationships with the generation of Pakistani officers with whom we had cut ties. In addition, because we so heavily depend on Pakistan as a supply route supporting our efforts in Afghanistan, Coalition Support Funds remain critical to reimbursing the Pakistanis for their assistance.

In terms of our broader engagement with Pakistan and the region, reducing some of the long-standing enmity and mistrust between India and Pakistan would greatly contribute to our efforts. As neighbors, it is in both India and Pakistan's interests to reduce the tension between them and strengthen their political, security, and economic ties. While we acknowledge the sovereign right of India and Pakistan to pursue their own foreign policies, we must demonstrate our desire for continued and long-term partnership with each, and offer our help to improve confidence and understanding between them in a manner that builds long-term stability across the wider region of South Asia.

Another increasingly important aspect of our engagement in South Central Asia is the development of the Northern Distribution Network. This line of communication has proven critical to maintaining flexibility in our logistical support to our efforts in Afghanistan. We will continue to work with our partners to ensure access and sustain the viability of redundant supply routes for our forces.

We have ended our combat mission in Iraq, Operation Iraqi Freedom, and started a new chapter in our partnership, Operation New Dawn. We successfully transferred lead for security responsibilities to the Iraqi security forces (ISF) on August 31, 2010. Iraq's military and political leaders are responding vigorously and professionally to the residual, but still lethal, threat from al Qaeda. As a result, and despite a drawn-out government formation process, the security situation there continues to improve, and the Iraqi people are increasingly able to focus on jobs and development. Beyond this security transition, the State Department has taken the lead for U.S. efforts in Iraq, and our diplomats and other civilians are increasingly the face of our partnership with the Iraqi people and their government. Sustained funding for our civilian efforts, commensurate with the State Department's growing responsibilities—particularly our development assistance and police training programs—is needed to ensure we are able to successfully turn our military accomplishments into political ones.

However, the end of the war in Iraq will not mean the end of our commitment to the Iraqi people or to our strategic partnership. We must focus on the future to help Iraq defend itself against external threats and consolidate a successful, inclusive democracy in the heart of the Middle East. As we continue to draw down forces through December 31, 2011, in accordance with the U.S.-Iraqi Security Agreement, we will transition to a more typical military-to-military relationship. We will shift the focus of our assistance from Iraq's internal domestic security to its external national defense, keeping in consideration the interests and sensitivities of all Iraqis as well as Iraq's neighbors. While ISFs have made great improvements, they will require external assistance for years to come. The cornerstone of our future security partnership with the Iraqis will be a robust Office of Security Cooperation as part of the U.S. Embassy in Iraq. Key to our assistance and not squandering our hard

won gains will be continued support to the ISF fund through fiscal year 2011, equipment transfer provisions, IMET and other traditional security assistance programs, as well as section 1234 authority to transfer equipment from DOD stocks.

Despite the energy we commit to defeating al Qaeda and to stabilizing the situations in Afghanistan, Pakistan, and Iraq, we remain vigilant against other security challenges and sources of aggression and proliferation throughout this critical region. The Iranian regime continues to be the region's greatest state-level threat to stability. Despite growing isolation from the international community and a fourth round of increasingly costly U.N. sanctions, the regime has neither ceased providing arms and other support to Hezbollah, Hamas, and other terrorist groups nor accepted a verifiable end to its pursuit of nuclear weapons. Many of the potential flashpoints in the Levant and the Gulf region bear Iran's signature, commanding the region's and the world's attention. That said, strong social, economic, and political tensions pull on the region and its people—as evidenced by the turmoil we have recently witnessed in Egypt, Tunisia, and elsewhere. Volatility in regional affairs can often follow volatility in domestic affairs. However, strong military-to-military relationships can help reduce and mitigate the risks of instability.

We will continue to help counter terrorist threats, deter Iranian aggression, and protect our partners from coercive influence. To do this we will continue to build the capabilities of our partners. More important, we will nurture the development of a regional security architecture based on multi-lateral partnerships that address a wide range of security issues including counter-proliferation, maritime security, counter-terrorism, air and missile defense, and emergency response. As with our other partnerships across the globe, our security assistance programs form the keystone of our relationships. In particular, our section 1206 and 1208 programs provide a unique and necessary flexibility and responsiveness to combatant commander requirements that we cannot currently get with our Foreign Military Funding (FMF) programs.

IMPROVING THE HEALTH-OF-THE-FORCE

The back end of war—the continued care of our veterans and their families and the resetting of our force—cannot be an afterthought, and getting it right will be expensive. Moreover, because of the duration of these conflicts, we have begun to reset our units even in the midst of conflict. The stress of nine years of constant warfare has come at a great cost to the Force and its ability to continue to conduct operations and respond to other emergent crises. We must care for our people and their families and reset and reconstitute our weapon systems to restore our readiness, capabilities, and wartime effectiveness. This will require a sustained commitment of at least 3 to 5 years, and could continue well beyond the end of our involvement in Iraq and Afghanistan.

Care for our People

Our foremost focus is on our service men and women, their families, and their supporting communities—the bedrock of our Armed Forces. They each play unique and growing roles in our national security fabric, but they have been under great, often unrecognized, stress for the past 9 years. Hundreds of thousands of our servicemembers have deployed to fight overseas. Some have served multiple grueling tours, a great number have suffered significant injuries, and thousands have sacrificed their lives. Even those serving stateside enjoy only short respites between deployments. We have asked a great deal from our people, and we must invest in them and their families—through appropriate pay, health care, family care, education, and employment opportunities—as they are the single greatest guarantee of a strong military. And they become our best recruiters.

The many accomplishments of our All-Volunteer Force over the past 9 years of continuous combat operations have been unprecedented. That we remain competitive in attracting the country's best talent during this period is simply extraordinary. All of our Services in the active Duty, Reserve, and National Guard components continue to have exceptional recruiting and retention rates. Ninety-six percent of our accessions have earned at least a high school diploma, which helps explain why this is one of the finest forces we have ever fielded. Competitive compensation and selective bonuses are critical to our ability to recruit and retain talent, as are other "people programs," such as the new GI Bill, improvements in housing, access to quality schooling for military children, mental health counseling, adequate child care, and attractive family support centers. All of these programs make the harsh burdens of military life easier to bear. I ask for Congress' continued support for them in order to sustain the Force while our overseas operations continue.

I also urge Congress to continue funding the programs that will create a continuum of health care for our veterans and their families that seamlessly spans ac-

tive duty and veteran status. With a focus on our enduring commitment, we must continue to improve our active and veteran care services, with special emphasis on Wounded Warrior Support. We will expand our public and private partnerships and tap into the "sea of goodwill" towards our veterans found in our Nation's communities and civic organizations. That will be important, but it is not sufficient. Long term fiscal support for the Department of Veterans Affairs will serve the growing number of veterans requiring care.

One issue that demands acute national attention is the challenge of Traumatic Brain Injury (TBI). The Improvised Explosive Device (IED) is the signature weapon of the conflicts in Iraq and Afghanistan and is directly responsible for many of these injuries. Many of our heroes suffer from severe TBI and have had their lives dramatically changed in ways we do not yet fully understand, and over 150,000 others have been exposed to events that may have caused moderate TBI. As such, we need to aggressively identify the victims of TBI, both within the serving force and among our veterans, and the treatment and rehabilitation they need and deserve. The effects of these efforts will pay dividends for some time, because we can expect to face IEDs in future conflicts as well.

In addition, suicides and the many other stresses and social health costs that lag behind war—divorce, domestic violence, post-traumatic stress, depression, and even homelessness—are becoming alarmingly evident. Suicide rates remain unacceptably high, although programs such as the Department's Suicide Prevention Task Force and our improved leadership efforts have helped to lower the rates this past year in three of our four Services. Leaders must remain focused on this issue, as we work to improve our systematic understanding of the problem's scope, warning signs, and at-risk populations. As a society we must work to end the stigma that prevents our servicemembers, veterans, and families from seeking early help.

By more effectively leveraging public-private partnerships, we can pursue solutions and treatment for all of these health issues afflicting the Force with great urgency and compassion and honor the sacred trust our Nation has with all of our combat veterans.

Reset and Reconstitute

The grueling pace of deployments has not allowed for the training needed to keep our forces ready along the entire spectrum of military operations and, as a result, our readiness in some mission areas has atrophied over the past decade. There are some modest reasons for hope, though. The Army now has fewer soldiers deployed than it has had at any time since the invasion of Iraq. In addition, this past year we completed the increases in the Army and Marine Corps end strengths authorized in 2007. As a result, we are beginning to see some stabilizing deployment rates and modestly improving dwell times. We appreciate the Congressional support to our wartime manning needs that has enabled this. However, our overseas contingency operations do continue to demand significant numbers of ground and special operations forces and low-density, high-demand specialties. For our Army combat units, we do not expect to begin to reach our interim goal of 1:2 deploy-to-dwell ratios until 2012. After reset and reconstitution activities and as demand decreases, we expect to begin off-ramping some of our recent force level increases.

However, my concerns about the health of our force go beyond our people and training—we must also restore the readiness of our combat systems and capabilities, which have similarly been under extraordinary stress. In the back end of previous conflicts, we were able to contract our equipment inventory by shedding our oldest capital assets, thereby reducing the average age of our systems. We cannot do this today, because the high pace and duration of combat operations have consumed the equipment of all our Services much faster than our peacetime programs can recapitalize them. We must actually recapitalize our systems to restore our readiness and avoid becoming a hollow force. All of this will force us to be more efficient and disciplined in our choices.

We must focus resources where they matter most, and we will reset and reconstitute by prioritizing people, readiness, capabilities, and essential modernization to maintain a technological edge. In the short-term, we will continue previous efforts to reconstitute and expand our rotary wing and tilt-rotor capacity in our Combat Aviation units and to convert one heavy Brigade Combat Team to a Stryker Brigade. However, over a period of years, we will modernize our battle fleet of ground combat vehicles, including replacing the Bradley Fighting Vehicle. We require enhancements to our manned and unmanned Intelligence, Surveillance, and Reconnaissance (ISR) assets, a new bomber program, extending the service life of a portion of our F–16 fleet, and continuing improvements in our missile defense and electronic warfare systems. We hope to modernize and extend the service life of our F/A–18 fleet and invest in additional P–8A aircraft and tankers. Lastly, we ask for

full resourcing of the Air and Missile Defense Radar, the Next-Generation Jammer, and communications and integrated fire control systems designed for operating in contested environments. These investments are, without question, costly, but they are critically demanded by our current and likely future challenges. Your support is particularly important this year as we adjust to the impact of recent Continuing Resolutions on program starts and growth rates and to the $17.9 billion difference between the amount authorized by the resolutions and our fiscal year 2011 budget request—$23 billion if this becomes a year-long resolution.

Just as important as the reconstitution of these combat systems are the acquisition processes and production capacities underlying them. Our procurement systems remain complex and in need of streamlining to help us acquire needed capabilities faster and more affordably. Last year we committed to adding 20,000 experts to our acquisition corps by 2015. In doing so, we seek to improve stability in our programs, conduct more comprehensive design reviews, improve cost estimates, utilize more mature technology, and increase competition in order to make the entire process more responsive.

In addition, as I stated last year, I am concerned about the capabilities of our defense industrial base, particularly in ship building and space. Our ability to produce and support advanced technology systems for future weapon systems may be degraded by decreasing modernization budgets as well as mergers and acquisitions. Left unchecked, this trend will impact our future warfighting readiness. Although we are properly focusing on near-term reset requirements, DOD, our industry leaders, and Congress need to begin considering how to equip and sustain the military we require after our contemporary wars come to an end.

BALANCING GLOBAL STRATEGIC RISK

Balancing global risk requires maintaining a ready and forward presence with available forces that, overall, can meet the full scope of our security commitments. To meet these requirements, we must reset, sustain, and properly posture a force that includes both our Active Force and our National Guard and Reserve components. But we must also make prudent investments and continuously evolve the force so as a whole it can meet the challenges of an increasingly complex global security environment.

For many decades, our overmatch in our general purpose forces has underwritten our National security and our prosperity, as well as that of our many allies and partners. This credible strength has deterred aggression and reduced the likelihood of interstate conflict like those of the 19th and early 20th centuries. With these capabilities, we have stood side by side with our allies in the face of belligerent aggression, helped secure access and responsible use of increasingly contested domains, and provided timely humanitarian assistance in response to natural disasters across the globe. However, our recent experience reminds us that we must continue to adapt some of our systems and tactics to counter anti-access and area-denial strategies, which may involve both the most advanced and simplest technologies.

This year I will publish my "Joint Force 2030," which will lay out the operating concepts and capabilities of our future force. But we already know some of the contours of what that force will need to do. We know that, in addition to the current array of aggressive states and transnational terrorists we face, we must adjust to a changing global environment impacted by the rise of China and other emerging powers as well as the growing worldwide use and capabilities of cyber space. Such a world requires an agile, adaptive, and expeditionary force. It must ensure access, protect freedom of maneuver, and project power globally. It should retain decisive overmatch with air, land, sea, and special operations forces and be able to operate in degraded space and cyber environments. As such, transitioning to this future force will likely involve a greater emphasis on ISR, command and control, long range strike, area denial, undersea warfare, missile defense, and cyber capabilities. This transition will also involve further developing flexible leaders, operators, and technicians who are highly proficient and able to fully integrate our efforts with our partners from other agencies and other countries.

Beyond maintaining our regular and irregular warfare capabilities, we will also continue to rely on secure and stable nuclear deterrence. It is also important that we maintain the safety and surety of our nuclear forces, even as we seek to reduce them in accordance with the Nuclear Posture Review and implement the recently ratified New Strategic Arms Reduction Treaty. We need to modernize our nuclear force and its supporting infrastructure to ensure that a smaller force is nonetheless safe, secure, and effective. Lastly, our missile defense systems should support the stability of our deterrence architectures.

And while we work to reduce, safeguard, and provide confidence in our nuclear force and those of treaty signatories, we acknowledge that the proliferation of nuclear technology and other weapons of mass destruction by state and non-state actors remains one of the most significant and urgent worldwide threats. Effectively countering proliferation requires strong international partnerships, new surveillance technologies, and layered defenses. These are supported by ongoing expansion of the Cooperative Threat Reduction Program, establishment of a standing joint headquarters for weapons of mass destruction elimination, and investments in nuclear forensics technology and programs. These relatively small programs can have a disproportionately large positive impact on our security.

Balancing global strategic risk also requires improving our capabilities in cyberspace. Today we face a range of threats to our computer systems from other states, mercenaries, and even civilian hackers, and their ability to wreak havoc cannot be understated. Lower grade cyber threats conducted by organized criminals and talented individuals do not necessarily put the Nation at serious risk. But the effects of a well-coordinated, state-sponsored cyber attack against our financial, transportation, communications, and energy systems would be catastrophic. We have made headway by standing up U.S. Cyber Command (CYBERCOM) and by developing constructs for cyberspace operations, but more work is needed. Critical to CYBERCOM's future success will be our ability to recruit, train, and most importantly, retain the right people. We must devote the same time and attention to cultivating this nation's cadre of future cyber warriors as we do to our combat specialists. We must also empower CYBERCOM and the combatant commands by working with the Executive Office of the President and other agencies to develop appropriate cyber authorities and by refining our cyber doctrine, tactics, and procedures. Lastly, we need to actively foster public discussion about international observance of cyber space norms.

Balancing global strategic risk requires strong military-to-military engagement programs. These collaborative efforts engender mutual responsibility and include ongoing combined operations, multi-lateral training exercises, individual exchanges, and security assistance. They help demonstrate the United States' responsible military leadership in critical regions, reassure our allies, and strengthen the international norms that serve the interests of all nations. They also foster connections with other governments that reinforce our diplomatic channels and have proven critical during times of crisis.

We currently benefit from numerous strong and well appreciated military partnerships. For example, at the November NATO Summit in Lisbon, we and our allies recommitted to our alliance, ongoing operations, and a new Strategic Concept for the next decade. NATO is also poised to release its Alliance Maritime Strategy. In Asia, though still underpinned by U.S. bilateral alliances, the region's security architecture is becoming a more complex mixture of multi-level multilateralism and expanded bilateral security ties among states. As the region's military capability and capacity increases, we seek new ways to catalyze greater regional security cooperation.

Unfortunately, the global economic downturn is placing pressure on the resources of partner nations' security forces. We foresee no decrease in the commitment of our partners to us or to any of our mutual security efforts, but we must face the reality of less spending by our partners on our combined security and stability efforts. Any measures we take to strengthen our partnerships, such as the administration's Export Control Reform effort, can only improve our collective security.

We should not engage only with like-minded allies. Military-to-military engagement, in coordination with other diplomatic efforts, can help foster cooperation in areas of mutual interest between nations with varying levels of amity. We have seen the fruits of our engagement programs in strengthening cooperation in the Middle East, countering piracy in the Red Sea and the Straits of Malacca, and countering proliferation across the globe. We will seek out military-to-military relations even where they have not existed before because sound relations can prevent miscommunication and miscalculation that could lead to crisis or conflict. In particular, increased engagement with China could increase understanding and cooperation on a multitude of issues, including encouraging North Korea to refrain from further provocation and ensuring access to and equitable use of the global commons.

A significant component of our engagement program is the security sector assistance we provide to build the capabilities of our partner nations' security forces. These cost-effective programs properly place security responsibilities in the hands of other sovereign governments and reduce the tactical strain on our own forces by helping to prevent conflicts and instability. In many places, across the range of U.S. interests, investments in capacity building result in strong foundations for the fu-

ture. These investments are often small but, if persistent, can yield a high return. I urge your continued support for Theater Security Cooperation programs, Global Train and Equip initiatives (under 1206 authorities), funding for special operations to combat terrorism (under 1208 authorities), as well as the many security assistance programs managed by the Department of State (DOS), including FMF and IMET programs.

However, just as these programs require full funding, they also need wholesale reform. Our security assistance structures are designed for another era—our authorities are inflexible, and our processes are too cumbersome to effectively address today's security challenges in a timely manner. I urge your assistance in modifying the laws and regulations surrounding security cooperation and assistance to create a better coordinated, pooled-resource approach that make resources more fungible across departments and programs and better integrates our defense, diplomacy, development, and intelligence efforts. We should not allow bureaucratic resistance to trump operational effectiveness when security sector assistance is essential to our national strategy of helping others secure and defend themselves.

On this last point of interagency cooperation, I want to reiterate our commitment to comprehensive approaches to our security challenges that employ all elements of national, and international, power in coordination. Our future security concerns require a whole-of-government effort, not just a military one, and we serve best when we serve hand-in-hand with all of our partners and support, rather than lead, foreign policy. As such, we will work closely with DOS and the U.S. Agency for International Development (USAID) to support their implementation of the Quadrennial Diplomacy and Development Review, particularly in the areas of conflict prevention and response. To this end, I reiterate my unequivocal support to Secretary Clinton and her efforts to fully resource DOS's and USAID's activities and an expansion of its diplomacy and development capabilities, particularly in Iraq to support the transition from a military to a civilian-led mission. In addition, I support interagency cooperation programs and work to expand the number of exchanges between DOD and other executive agencies.

CONCLUSION

In the upcoming year, our Armed Forces will build on the past year's achievements and continue to provide the common defense our Constitution directs with distinct honor and effectiveness. We will advance our ongoing efforts and maintain the credibility of our forces while learning, adapting, and preparing for new security challenges. We know that the military's role in national security will remain substantial, and the demands on our service men and women will be high. However, we also know that we can never let our actions move us away from the American people, and that the quality of our work and our personal conduct will say far more about who we are and what we stand for than anything else we do. In all of our efforts, we will maintain a strength of character and professionalism, at the individual and institutional levels, that is beyond reproach and continues to be a source of pride for our Nation.

As we move forward, I remain thankful to Congress for doing its part this year to better guarantee our Nations' security. You have reminded us of your important role as a steward of our Armed Forces and of our mutual respect for our Nation's security, values, and servicemembers by approving the Strategic Arms Reduction Treaty and repealing the Don't Ask, Don't Tell policy. I am encouraged that the repeal of Don't Ask, Don't Tell will enhance the connection between the military and the American public, particularly in our relationships with some of America's premier universities. We look forward to working with you as we implement these initiatives and as you consider other pending security agreements, such as the Comprehensive Test Ban Treaty and the United Nations Convention on the Law of the Sea. Ratification of these two agreements would greatly benefit our national security.

Again, on behalf of all our men and women under arms, I thank this committee, and the entire Congress, for your unwavering support for our troops in the field and their families at home during this time of war and for our efforts to maintain a strong, agile, well-trained, and well-equipped military that can prevail in our current conflicts and remain poised to deter or respond to new challenges.

Chairman LEVIN. Thank you so much, Admiral Mullen, for your eloquent statement and for your great service. Secretary Hale, do you have anything to add before we begin?

Mr. HALE. No, thank you.

Chairman LEVIN. We will have a 7-minute first round. Mr. Secretary, you indicated that we are on track to end the presence of our combat troops in Iraq by the end of this year as decided upon by President Bush. Do you continue to support that decision?

Secretary GATES. Yes, I do.

Chairman LEVIN. Are you planning to begin reductions of our troops in Afghanistan by July of this year as ordered by President Obama with the pace to be determined by conditions on the ground? Do you support that decision?

Secretary GATES. Yes, sir.

Chairman LEVIN. Can you tell us why?

Secretary GATES. Frankly, this was the most difficult part of the Afghan strategy, going forward, for me to support. I steadfastly, as some on this committee will remember—steadfastly—opposed any deadlines in Iraq and so came to this with a certain skepticism.

But I also realized that there is a difference between Iraq and Afghanistan in this respect. The truth of the matter is the Iraqis want us out of the country as quickly as possible. On the other hand, the Afghans, at least a certain number of them, would like us to stay forever. They live in a very dangerous neighborhood and having U.S. forces there to support them and help them often in the place of their own troops is something that they would like to see.

So it seemed to me that we needed to do something that would grab the attention of the Afghan leadership and bring a sense of urgency to them of the need for them to step up to the plate to take ownership of the war and to recruit their own young men to fight. I think that the comments that you quoted earlier from General Caldwell has illustrated that over the last year or so the Afghans have, in fact, done this to a considerable degree, particularly in terms of their own troops.

I must say I was very pleased to have—and I recognize the risk of the message we were also sending to our adversaries, to the Taliban. However, it seemed to me that if the Taliban was messaging to all of their people that we were all leaving, that our troops were all leaving in July, that they would be in for a very big surprise come August, September, and October when we are still hunting them down in very large numbers.

So on balance—and I will say it was a close call for me, but I came to believe that it was the right thing to do.

I must say I very much support and applaud NATO's decision to accept the idea of a full turnover of security responsibilities to the Afghans by 2014 because I think that bookends the July 11th statement and lets everybody know that we are not leaving precipitously. We are going to do this based on conditions on the ground, and we will continue to carry the fight to the Taliban.

Chairman LEVIN. Thank you.

Admiral Mullen, do you want to add anything to that? Do you agree basically with what the Secretary said, or do you have a different view?

Admiral MULLEN. No, no. I agree with that. I would say again a very tough part of the whole decision process. Certainly not the signal that we are not staying is one that is of great concern in that part of the region for a long time, and at the same time send-

ing the message that we, in fact, are going to get to a point where we turn this over to them I think was very important. I have seen the effects of that in their leadership in the military and the police. It has given them a sense of urgency that they did not have before the decision was made.

I also think, with respect to the Taliban specifically, with where we are right now, they have a lot more things to worry about in terms of just how well they are doing because they are not doing very well, and they know we are going to be there beyond July. They had a really bad year. That does not mean this year will not be tough. It will. It will be very difficult on both sides. But we have made a lot of progress because we have committed the resources to get this right.

Chairman LEVIN. Relative to the size of the Afghan security forces, there is a proposal currently under consideration within the administration to increase the size of the ANSF by around 70,000 personnel. That would raise the target end strength for the security personnel of the Afghans to about 378,000. Now, those forces, as I indicated, would include some key enablers, including intelligence and logistics.

As I also indicated, I spoke to the President now twice on this subject and very strongly support the increase that is being considered for the reasons which you have just talked about and which I talked about in my opening statement in terms of the importance of the Afghan security forces taking responsibility for security. They are very much supported by the Afghan people and they are targeting an enemy that is detested by the Afghan people, to wit, the Taliban.

Our partnering with the security forces has really improved many more partnerships between our forces. The training is intense and very successful. The operations are joint. We witnessed that when we were down in Kandahar.

So my question to both of you, Secretary Gates and Admiral Mullen, is do you support the proposal to increase the size of the ANSFs as is being considered?

Secretary GATES. First of all, I would say that we have all recognized from the beginning that being able to turn security over to Afghan forces to deal with a degraded Taliban was our ticket out of Afghanistan and to accomplish our goal of making sure we are not attacked out of there again.

I think the issue is under discussion within the administration. We do have a request from the commander. The issue is under discussion in no small part because of the question of sustainability. How big an army can we afford? Let us not kid ourselves. Nobody else is contributing to this in any significant way. We have in our OCO budget for fiscal year 2012 $12.8 billion to pay for the ANSFs. So the question is how long can we afford to do that, and you cannot do that indefinitely. So then can you look at an increased number of Afghan forces in the same terms as you look at our surge as something that is temporary until this problem gets solved, and then those numbers begin to go back down again. So this is one of the big issues that we are discussing and I expect a decision in the fairly near future. But this is really the core issue that I think is under discussion.

Chairman LEVIN. Admiral Mullen, do you support that?

Admiral MULLEN. I think, Mr. Chairman, you know that the recommendation was teed up from somewhere between 352,000 to 378,000. That is the range. I certainly share the concern the Secretary has spoken of in terms of the sustainability of this.

You also characterized in your opening statement a specific recommendation from me. We are still very much in discussion inside the administration on where this comes out. As the Secretary said, I think in the near future we will have that. There are a lot of issues at play here.

None of us disagree with your assertion or your statement about the importance of this part of the mission, training them and turning it over to them. It has gone incredibly well over the course of the last year. So how fast we can move, how much more there should be is still very much in discussion and the comprehensiveness of the issues that are associated with this are being reviewed as we speak, and I think it will be resolved here in the near future.

Chairman LEVIN. The bottom part of that range you mentioned would represent an increase from the current goal. Is that correct?

Admiral MULLEN. Right. We are at 305,000 at the end of this year, and 352,000 would be a range from 352,000 to 378,000.

Chairman LEVIN. So even if the approval were at the bottom of the range, that would represent about a 45,000 increase. Is that correct?

Admiral MULLEN. Yes, sir.

Chairman LEVIN. So we save a lot of money having their forces there trained and equipped rather than our forces in terms of relative costs. I think you both would agree to that.

Admiral MULLEN. Yes, sir.

Secretary GATES. Absolutely.

Chairman LEVIN. Thank you.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman. Secretary Gates, did you recommend to the President the date of July 2011 as a date to begin withdrawal?

Secretary GATES. No, sir, I did not.

Senator MCCAIN. Did you, Admiral Mullen?

Admiral MULLEN. No, sir, I did not.

Senator MCCAIN. On the issue of our continued presence in Iraq, obviously the casualties have been reduced dramatically, but I think it is also obvious that the Iraqi military does not have a lot of the technological capability that they need to combat this kind of insurgency that is still out there. But also, if they want to have an air force, it seems to me they need that kind of technical assistance, a number of other areas of modernization of their forces. It is necessary. We are not talking about continued combat operations on the part of the United States, but they do need the kind of technical assistance that they will need to maintain their security. Do you agree with that?

Admiral MULLEN. Yes, sir.

Secretary GATES. Yes, sir.

Senator MCCAIN. So is there any discussion that you know of going on with the Iraqi Government concerning the future role of

the United States in Iraq besides the fact that we are now scheduled to leave by the end of the year?

Secretary GATES. There have been a number of informal conversations with the Iraqis about this.

Our concern, as I indicated yesterday, is principally in three areas: intelligence fusion, logistics and maintenance, and in air cover in providing the ability to protect their own air space. Right now, under current circumstances, as of the 1st of January, we will have 157 DOD military and civilians, along with several hundred contractors, basically processing foreign military sales, and that would be it.

As I have indicated, I think this government is very open to a continuing presence that would be larger where we could help the Iraqis for a period of time. I am not actually concerned about the stability of the country, but I am concerned about their ability to address these three issues in particular.

But the fact is we have a signed agreement that President Bush signed with the Iraqi Government, and the initiative for this needs to come from the Iraqis. My hope is that once they sort out who their new defense minister is going to be, which has been a problem in putting together their government, that then we will be able to move forward with this dialogue with the Iraqis. I think it is little bit, frankly, in Iraq like the strategic agreement itself in the sense that our presence is not popular in Iraq. So the politicians, I think, the leaders understand the need for this kind of help, but no one wants to be the first one out there supporting it, very much like the security agreement itself. So we will continue that dialogue, but at the end of the day, the initiative has to come from the Iraqis. They have to ask for it.

Senator MCCAIN. I take it you were pleased with the House's decision yesterday on the—what did you call it—the additional engine?

Secretary GATES. The extra engine.

Senator MCCAIN. Extra. Excuse me. Yes, extra engine. I take it you would support efforts over here to do the same.

Secretary GATES. Absolutely.

Senator MCCAIN. I share your optimism about our success in Afghanistan, which has confounded many of the critics. I also share your view that there is a long way to go.

But do you share that same optimism about Pakistan? There have been some very serious disruptions, obviously, with this American citizen who is now being held in prison, the whole role of private contractors, the continued allegations of relationships between Interservices Intelligence (ISI) and the Taliban. I am deeply concerned about the situation in Pakistan, which obviously is vital to the sustained and long-term success in Afghanistan.

Secretary GATES. Let me just say a word or two and then turn to the chairman because he has spent a lot more time in Pakistan in the last few years than I have.

I worry a lot about Pakistan. It has huge economic problems. Those problems were significantly aggravated by the terrible flooding last year. They have a serious internal terrorism threat that is seeking to destabilize Pakistan itself. I worry that some of those terrorists might try and provoke a conflict between Pakistan and

India. So I think that there is a lot to be concerned about with Pakistan.

Senator MCCAIN. There are still sanctuaries in Pakistan.

Secretary GATES. That said, there are still the sanctuaries.

But I will say the Pakistanis have 140,000 troops on that border. These things improve step by step, but not as quickly as we would like, but we get to a better place over time. If you had asked me 2 years ago if the Pakistanis would withdraw six divisions from the Indian border and put them in the west, I would have said, impossible. If you would have asked me if we would begin coordinating operations on both sides of the border with Afghan and ISAF forces on the one side and the Pakistanis on the other, I would have said, that is very unlikely.

They are chipping away at some of these sanctuaries. It is very important what they have done in south Waziristan and SWAT, but it is a mixed picture, and it is something we just need to keep working at. The chairman has worked at it about as hard as anybody.

Admiral MULLEN. On the military side, Senator McCain, I am more optimistic than I have been. I mean, the Secretary talked about the cross-border coordination, the work that we have done with them. But on the political side, the economic side, at least from my perspective, it looks worse than it has in a long time.

So I share your concern. The vector is going in the wrong direction overall for the country. We are very unpopular there. You have seen that. It gets highlighted in each crisis. We provided extraordinary support for the floods last year—we, the military. Then that registers in a popular way shortly. You have an incident like the one we are going through right now, and our popularity is back down in very small numbers.

So I do think we have to stay at it. It is where lots of terrorist organizations head, not just al Qaeda. They are more combined in their efforts than they have ever been. So I do think we have to continue to work at it, but I am concerned as I have ever been.

Senator MCCAIN. Thank you.

Mr. Chairman, just briefly. Anything more on the Wikileaks investigation?

Secretary GATES. Sir, after our last hearing, I went back and I had been told that I had to keep my hands off of it because of the criminal investigation. But I have been able to narrow an area that I have asked the Secretary of the Army to investigate in terms of procedures and the command climate and so on that has nothing to do with the accused individual, but to see what lapses there were where somebody perhaps should be held accountable.

Senator MCCAIN. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain.

Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman. Thanks, Secretary and Chairman, for your service, for your leadership, for your testimony today.

I believe that the President's budget for DOD is a budget that recognizes the times of economic stress we are going through particularly with regard to our national deficits and debt but also

meets our defense needs. I appreciate, Mr. Secretary, your advocacy of the budget but also your warning that we have to be very careful about cutting too deeply into our defense budget.

I have noticed some change of terminology around here which concerns me, which traditionally, as we have discussed the various components of the Federal budget, when we get to discretionary spending, we distinguish between defense and non-defense spending. The defense spending had a more protected status, if you will, and I think it was for a good reason, which I believe I know you and all of us on the committee believe, which is that we have no greater responsibility in our national government than to protect our security. It is the underpinning of our freedom and our prosperity. So we have to be very cautious about cutting below a level that we can continue to fulfill that—well, it is really a constitutional responsibility to provide for the common defense.

I have noticed now the difference between defense and non-defense discretionary spending in terminology seems to be fading, and I think we do that at our peril. So it does not mean, obviously, that what everybody at the Pentagon wants we are going to say yes to or that we can tolerate wasteful spending. I know the two of you have been very aggressive about that in the programs you have set forward.

But I hope as we go forward in these very difficult economic times with a lot of stress politically on everybody here, that we keep that primary responsibility we have for the national security in mind.

Frankly, without going any further on it, I think for those of us who are committed to doing everything we can to continue to give you the resources and the men and women in uniform to protect our security, it compels us to look much more directly and act more boldly on the most expanding part of our national deficit and debt, which is the entitlement programs that are non-defense.

So with that invocation, I just want to pick up on what Senator McCain said earlier about the input we got at the Munich security conference this year. It was quite significant to me on Afghanistan.

The first was I thought there was a real change in opinion from our European colleagues, that we really are making progress in Afghanistan, and they feel good about it. Normally we have been concerned that they would leave the fight before we did. They turned the tables on us this time, and they said we are committed now through NATO to the 2014 exit date from Afghanistan. We are worried that you in America are going to begin to leave earlier, and they still have in mind, notwithstanding all the transition to 2014, this July 2011 date. So I would ask you if you would care to respond to that, and of course, part of that is just to urge that whatever we do in July 2011, be mindful of the effect it will have not only on the Afghans and the region but on our European allies.

Secretary GATES. I would just make two comments.

First, I had a NATO defense ministers meeting last December and it was really quite extraordinary because I do not think I have ever seen so many ministers so optimistic about how things were going in Afghanistan. I did not encounter a single one who was pessimistic or who felt that the effort was for naught and that we were not headed in the right direction. So there was a level not just

of sort of grudging support but a general feeling of cautious optimism that we finally had all the parts right in this thing, the civilian strategy, the military strategy, had the resources there.

When I took this job there were 12,000–13,000 Europeans or other partners in Afghanistan. There are now 50,000. They have really stepped up to the plate. Now, we are carrying the bulk of the burden, but they are doing a lot as well.

By the same token, one of my missions in next month's defense ministers meeting is to ensure that in fact whatever we do in July does not start a rush for the exits on the part of our allies, and I would say particularly those who have the largest contingents there. There are a lot of countries that are making a real contribution, but they have fairly limited numbers of people there. I think that our principal allies and those who are the principal contributors are probably okay, but I need to be able to reassure them that this is going to be conditions-based and that it will be gradual.

The other point I will make to them is it should not be mathematical. If we take out 1 percent or 2 percent of our troops, or whatever the number is, that does not mean everybody gets 2 percent because in some of them 2 percent—when you have only 10 guys there, you have a problem. So I think that we need to ensure that their forces are taken out on a conditions-based arrangement as well. I think this is the challenge for General Petraeus.

The way I think he is thinking about it is that when we turn over security responsibility, sort of three things will happen to the foreign troops that are there. A few will stay to continue to provide a strategic overwatch and safety net, if you will. Some will be reinvested in the neighboring district where the security is not as good yet, and then some portion would be allowed to come home. So I think that that is the approach that he is taking, and frankly I have not seen from the defense ministers, at least, signs of nervousness or a feeling that they would be compelled to make significant withdrawals themselves before the timing that they have already announced.

Senator LIEBERMAN. I appreciate that reassurance. What you found at the defense ministers meeting is exactly what we found in terms of the cautious optimism at the Munich conference.

I appreciate it. I think you are right on target in your focus for the next meeting coming up because it sounded to me as if they need that reassurance. I will just tell you that one of the people high up in one of our major NATO allies' foreign ministry said that they were worried that if we withdrew a small proportion of our troops in July, that there would be a tendency of their political community to take it in absolute mathematical numbers. So for us it is only 1 percent, but let us say it is 1,000. They are worried that at home their parliament is going to say, well, how about taking out 1,000 of our troops as a result.

Secretary GATES. The interesting thing about particularly the Europeans who are in Afghanistan—most of them are in coalition governments and most of their publics are opposed to their participation.

Senator LIEBERMAN. Right.

Secretary GATES. I think it needs to be said these governments have shown some real political courage in being willing to commit

to the alliance and to Afghanistan the forces that they have in the absence of political support at home.

Senator LIEBERMAN. I could not agree with you more.

Final word. My time is up. But the other thing that I found very heartening is that our NATO allies, particularly following the meetings you have referred to, have stepped back and understand not just that we are doing better in Afghanistan, but this is the first time NATO has gone to war. A failure in this first time at war, interestingly outside of the geographic area of NATO, would have terrible consequences for NATO's credibility, and NATO's credibility at this uncertain, dangerous time in the world is critically important to the stability and security of a lot of other places far from the United States, Europe, and Afghanistan. So I think we are at a point where the alliance is really moving together in a very positive way.

I thank you very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

I was glad to hear that statement, Secretary Gates, what you said about the 17,000 to 50,000. Somehow I had missed that. But I am glad to know that more are coming to the table.

Senator Hagan and I spent New Year's Eve with the troops in Afghanistan and had a chance to spend a little time to get out to the training area. When we talk about what is going to happen in reduction and so forth, a lot of that is going to be dependent on the success and the training of the Afghan National Army and how they are coming. I was very pleased.

Senator Hagan and I were both surprised at the Kabul military training center, the segregation of infantry and artillery and how they are doing that on two sides of the mountain. We are used to seeing how we do it in this country. I was most impressed with their training.

To accommodate some of these potential discussions on withdrawal, I would just like to know your opinion as to how we are coming with that training. Is it ahead of where you thought it would be, or are you as impressed as we were when we went over and witnessed it?

Secretary GATES. I think we both should address that briefly.

But I would say that what General Caldwell has done in the last year or so I would characterize as nearly a miracle. It is not just the numbers. A year ago 35 percent of the recruits or the new soldiers, Afghan soldiers, qualified on marksmanship. It is now in the 90s. They have a literacy program going for officers, for noncomissioned officers (NCO), and even for some junior enlisted that is going to make a huge long-term difference in Afghanistan. So I think that the quality of what they have been doing and the speed with which they have been doing it and the ability to accommodate the significant increase in the numbers being trained and getting quality training has just been really quite extraordinary and I think has played a big part in the progress that we have had over the last year.

Admiral MULLEN. I would say very briefly, sir, I think the number I saw the other day was 24,000 trainees in training right now. That number was minimal a year to 2 years ago, I mean, literally in the hundreds because all you did was you recruit and place a soldier or a policeman in the field.

What also gets lost here is that there has been an extraordinary jump on the police side as well behind the military, as it was in Iraq. So we are making a lot of progress there.

I would just commend General Caldwell and all his people because they put in the structure. You have seen for yourself the kind of training. It has really been an exceptional effort over a very short period of time.

Senator INHOFE. Yes. We even had an opportunity to talk to some of the ones who are being trained to be trainers. They are excited. They are looking at careers. I was very shocked and very pleased.

As you know from previous meetings, I always bring up the 1206, 1207, 1208, Commander's Emergency Response Program and Combatant Command Initiatives Fund. These are programs that I have been very enthusiastic about and I think have been very successful. I was pleased that the 1206 funding was increased in this budget request from $350 million to $500 million.

The thing that I am confused about, because I am not sure what it means, is this pooled funding. When I first read about this, I thought is this returning back to what we were trying to get away from, in other words, having more of the concentrated commanders in the field, having greater authority, and this type of thing. How does the pooled funding work? Would either one of you like to share that with me?

Admiral MULLEN. This is actually a $50 million appropriation, should it be approved, initially DOS money, with an opportunity to reprogram upwards of $450 million between us. So there is no specificity that says how much DOS would reprogram at this point or how much DOD would.

What is really critical here—and this goes back to your support of 1206, 1207, and 1208—is it gives us the flexibility and the ability to meet an emergent sort of this year maybe even this month need which, heretofore, we just have not been able to do. We see it year after year in country after country. So it actually is very consistent with what has happened in 1206, 1207, and 1208 in terms of the strategic thrust, although some of the mechanisms will be a little different.

Senator INHOFE. That is good. I am glad to hear that because I did not want to dilute that program that I think has been very, very successful.

Recently we have heard more and more about China and Russia and how much further advanced they are on the fifth generation of fighters, the T–50, J–20, or whatever that is over there. The decision that we had made to move backwards a little bit or move the 124 F–35s out of this 5-year period or delay them—was that decision made before we realized that they were perhaps a little further along in developing fifth generation fighters in other countries that might be sold eventually to people who could be our enemies?

Secretary GATES. I think that, first of all, the way I have characterized it, Senator, is that when I was in China, President Hu rolled out the red carpet and the People's Liberation Army rolled out the J–20.

They may have flight-tested it a half a year, a year or so before our intelligence estimated they would, but the truth is it will be quite a while before they have any numbers. The latest estimates on the Chinese side would be that by 2020 they might have 50 deployed and by 2025 maybe a couple hundred. We will have 325 F–35s by the end of 2016, even under the revised program, which with the F–22s gives us over 500 fifth generation aircraft. We will have 850 F–35s by 2020 or fifth generation aircraft by 2020 and about 1,500 by 2025. So there is still a huge disparity in terms of these aircraft.

Frankly—and I do not want to get into it too much in an open hearing—this is their first low-observable aircraft. Given the challenges that we have had—and we have been at this now better than 20 years, frankly, I think they have a long road in front of them before this becomes a serious operational aircraft in any numbers.

Senator INHOFE. I am glad to hear that.

My time is expired but I want to ask a question for the record, and it might be more appropriate to respond to it for the record. You commented about your visit to the Far East, and at that time you were saying North Korea will have developed an Intercontinental Ballistic Missile within 5 years. We hear about our intelligence estimate talking about Iran's capabilities in 2015. I would like to have an update on those estimates for the record, if you would do that.

Thank you, Mr. Chairman.

[The information referred to follows:]

The Defense Intelligence Agency (DIA) is coordinating with Senator Inhofe's staff to provide the Senate with a briefing on the latest DIA and National Air and Space Intelligence Center threat assessments.

Admiral MULLEN. Mr. Chairman, if I could. Back to just a specific on the F–35, the Secretary's decision to move those aircraft to the right—those are short takeoff and vertical landing aircraft. I actually think——

Senator INHOFE. Those are the Marine version?

Admiral MULLEN. Yes. That actually puts us in a better position to deliver the Navy and the Air Force version sooner because those two versions are actually doing pretty well in testing and development. So I thought it was a wise decision and to give the Marine Corps, give us—give the Navy an opportunity to work on this airplane for the next 2 years. It was at the front of the queue and actually it was holding up the development of the other two airplanes.

Secretary GATES. I would just say that the first Air Force variant of the F–35 will go to Eglin in May and others will flow through September to begin training, and the Navy variant will be at Eglin in fiscal year 2012.

Senator INHOFE. That is very helpful. Thank you.

Chairman LEVIN. Thank you, Senator Inhofe.

Senator Ben Nelson.

Senator NELSON. Thank you, Mr. Chairman, and thank you, gentlemen, for your service to our country.

Secretary Gates, for the past several years, the need for a new U.S. Strategic Command (STRATCOM) headquarters has been under consideration. It has been apparent and identified as a requirement. So I have been extremely pleased with the progress made toward addressing this vital need. The existing facility's shortcomings and problems have put STRATCOM's mission and its personnel at some risk. STRATCOM's existing headquarters was built in 1957 and it has weathered 5 decades with little renovation.

So for any combatant command, of course, these problems would be challenging if they continue to have electrical service and cooling water and other problems, but for STRATCOM, these facility maintenance matters are just untenable and they stand in the way of some of the most important national security missions.

General Chilton, the retiring commander of STRATCOM, said it best, that the STRATCOM headquarters is the nuclear command and control mode for the United States and that we must make the appropriate investments.

So I am very pleased that this budget represents that and wonder if you might have any comments on it and, as well, Admiral Mullen.

Secretary GATES. I just have one comment and that is Admiral Mullen and I were there a couple of weeks ago for the change of command at STRATCOM, and the building looks a lot like it did when I walked in as a 2nd lieutenant in 1967.

Senator NELSON. The electrical systems are probably the same as well. But thank you very, very much. In addition to the concerns that have been raised about continuing our relationships in the Middle East right now, the fiscal year 2012 budget presumes that the military, in terms of Iraq, will depart on December's plan. We have had a lot of discussions here about whether or not it is important to do that or appropriate to do that and what kind of assistance and advice will we continue to provide the Iraqis. But as we are looking at our budget and trying to find ways to economize in DOD, is there a plan to have the Iraqis pick up more of the costs of any retention that we might have of our personnel there to provide the advice and the training that will be required?

Secretary GATES. Not at this point, Senator. To tell you the truth, we have not really done much in the way of the budget looking beyond the 31st of December because we are assuming that we will come to December 31 and that will be it. So we would have to revisit that issue.

I think we would have to take a look at whether the Iraqis could do that. They are running about—even with the price of oil where it is, they are devoting about 14 percent of their gross domestic product (GDP) to security, and they are running, I think, a $15 billion or thereabouts—$10 billion to $15 billion deficit this year. We should be so lucky. But we really have not gone down that road yet.

Senator NELSON. But if we are in a position to where we are requested and we make the decision to continue some relationship there, would it be possible to look at that from the standpoint of the budget? It is not that I want to drive their budget into the

ditch any more than I want ours to continue to be there. We have to find a way to balance it for them and for ourselves as well.

Secretary GATES. I understand, and we will certainly take that into account.

Senator NELSON. I appreciate that.

In terms of ISR assets, DOD has put forth spending about $4.8 billion on procuring another 110 airframes for the budget. Can you speak about what the infrastructure and personnel will cost? Maybe this is for Admiral Mullen. The personnel costs and the infrastructure costs for adding these additional ISR assets.

Admiral MULLEN. I would have to get back to you with a detailed response.

Senator NELSON. Sure.

[The information referred to follows:]

Increasing our intelligence, surveillance, and reconnaissance (ISR) capabilities in support of combat operations continues to be one of our highest priorities. The fiscal year 2012 budget continues development, integration, and expansion of ISR enhancements to unmanned platforms to deliver critical command/control, persistent ISR, and firepower to U.S. and coalition forces. These systems cover the full spectrum of capabilities from high-altitude, long-endurance capabilities to hand-launched, tactical systems.

The fiscal year 2012 budget requests $4.8 billion to invest in the following ISR capabilities:

- Procure additional Global Hawks (RQ–4)
  - Three aircraft/$1.7 billion
- Maximum Reaper (MQ–9) production
  - 48 aircraft/$1.4 billion
- Maximum Gray Eagle (MQ–1) production
  - 36 aircraft/$1.0 billion
- Accelerate unmanned maritime unmanned aerial vehicle (UAV) (MQ–8 Fire Scout)
  - 12 aircraft/$0.3 billion
- Other UAVs: Shadow, Raven, Small Tactical Unmanned Air System
  - $0.3 billion
- Procure/sustain MC–12
  - 12 aircraft/$0.3 billion

Each of these investments apply to current programs of record and are either in-line with current acquisition strategies or an acceleration of existing plans. Each system fits into a planned architecture to meet commitments to our warfighters and the Services have incorporated the necessary infrastructure and personnel costs to support their integration into operations.

Based on contracting and production schedules, the fiscal year 2012 investments listed above will deliver and field approximately 1 to 2 years after receipt of funding. The personnel and infrastructure costs will be incurred over several fiscal years as soldiers, sailors, airmen, and marines are trained and assigned to maintain and operate these systems.

To match the growth in capacity, balanced investments in operations and support (O&S) include:

- An increase in RQ–4 Global Hawk personnel and O&S funds by 21 percent in fiscal year 2014 from the fiscal year 2012 level.
- An increase in MQ–9 Reaper personnel and O&S funds by 55 percent in fiscal year 2014 from the fiscal year 2012 level.
- An increase in MQ–8 Fire Scout O&S funds by 101 percent in fiscal year 2014 from the fiscal year 2012 level. These funds include contractors operating in conjunction with on-board military personnel.
- An increase in "Other" UAV personnel and O&S funds by 15 percent in fiscal year 2014 from the fiscal year 2012 level.
- The MQ–1C Gray Eagle is integrated into the Army Force Generation Equipping Strategy. Overall, the Military Construction costs to field the entire complement of systems (not only the fiscal year 2012 systems) totals $522 million.

Admiral MULLEN. Certainly the infrastructure and personnel costs are incorporated into the budget and that is how the services actually bring it forward. It has become more and more significant.

But I would also say, Senator Nelson, it has just become such a critical part not of just what we are doing now but what we are going to do in the future. We oftentimes think about the future sort of out there by itself, what is going to happen in 5 or 10 years. One of the things that has happened in these wars is there are a lot of capabilities that we have developed, rapidly field that will be every bit as relevant in a few years as they are right now. ISR probably leads the pack with respect to that.

Senator NELSON. In that regard, we are living the future right now as we see it develop around us, and I hope that as we do that, we will continue to find a way to do it, obviously, as efficiently and as cost effectively as possible but not be short on personnel simply because we may end up with fewer pilots, but the piloting is obviously done a different way. So I hope that you will consider that.

Also, Secretary Gates, in growing the forces and the capacity of the ANSFs, we have talked about the numbers increasing and you mentioned sustainability of the numbers and the range from the lower and we are adding 40,000 and looking at a higher range of 378,000. Can we establish what we think would be a sustainable number as we look forward? Because, obviously, that is a pretty sizable percent of the population. Now, it is good to have people working. There is no question about it—fully employed. But do we have some idea of what the Afghans can support and sustain into their future? Secretary Gates?

Secretary GATES. The sustainability issue, at least for the next number of years, is more what the United States can sustain because the Afghans' ability to sustain a military force would be a fraction of the size of what they already have, much less what they may increase to, which is why I think of the size of their force more in terms of a surge like ours so that once we have defeated the Taliban or degraded them to a point that a smaller Afghan force can keep control where it is almost like the Afghan local police or smaller numbers of the Army can manage to keep the Taliban or others inside the country down to the point where they are not a threat to the stability of the government or to the people of Afghanistan. They cannot afford a force the size that they already have. So I think the only way we can think of it or the way we ought to think of it is something that we would be willing to support for a few years.

Senator NELSON. In the short term?

Secretary GATES. Yes, for a few years. But then it seems to me, particularly if there is a political solution to this war, as we all believe there needs to be ultimately, that they could get by with a significantly smaller force. We probably would have to help them even then, but it would be a dramatically smaller bill than it is now. If it is a smaller bill, we may be able to get other countries to help us as well.

Senator NELSON. Hopefully, the NATO support would extend to providing help for the sustainability into the future because until we secure the country, a political solution is going to be very difficult.

Secretary GATES. Just as an example, I mean, the Japanese basically pay the salaries for the Afghan national police. That is their contribution. They do not have troops there, but that is not a small thing that they are doing.

Senator NELSON. Thank you. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Nelson. Senator Ayotte?

Senator AYOTTE. Secretary Gates and Admiral Mullen, I want to thank you for being here today and commend both of you for your long and distinguished service to our country.

Before I ask any questions, I just want to say that I believe our Government's most important responsibility is to protect the American people. This is a deeply held personal belief for me. I am from a military family. My husband is in the Guard and is a veteran of the Iraq war. So I applaud your efforts to ensure that our brave men and women in uniform have everything that they need to fight and win our wars. Supporting our men and women in uniform is certainly a solemn and sacred responsibility that we have.

As we draw down in Iraq and our country confronts a fiscal crisis, I think it would be a mistake to drastically cut the size of our military or our readiness.

That said, you appreciate—and I know based on Admiral Mullen's comments—that we face a fiscal crisis in this country and that we face great challenges in balancing the need to protect our country and to make sure that we serve and provide for our troops with the need to cut back in all areas. I want to commend Secretary Gates for proactively going forward to look for efficiencies and billions of dollars in savings. As a new member of this committee, I want you to know that I look forward to working with DOD to bring reforms forward and efficiencies to fruition and also to look for additional cost savings.

I have a question based on having the appearance of Secretary Vickers the other day for his nomination, and that is that he testified that 25 percent of the detainees that are being released from Guantanamo are going back into theater and engaging in hostilities again. I wanted to ask Secretary Gates whether that is an accurate figure and how that is informing our release decisions from Guantanamo.

Secretary GATES. That is about the right figure based on the latest information that I have.

I would say that we have been very selective in terms of returning people. One of the things we have discovered over time is that we are not particularly good at predicting which returnee will be a recidivist. Some of those that we have considered the most dangerous and who have been released or who we considered dangerous and potentially going back into the fight have not, and some that we evaluated as not being much of a danger or much of a risk we have discovered in the fight.

Then I would say that the NDAA of Fiscal Year 2011 imposes some additional restrictions on who we can release, and Congress put me in the uncomfortable position of having to certify people who get returned, that they are no longer a danger. So I will tell you that that raises the bar very high as far as I am concerned.

Senator AYOTTE. One of the concerns that I think this raises as well is if we are able to capture a high-value target in an area

where we may not currently be engaged in a direct conflict, where are we going to put these individuals if the President still goes forward to attempt to close Guantanamo?

Secretary GATES. I think the honest answer to that question is we do not know if we capture them outside of the areas where we are at war and are not covered by the existing war authorizations. One possibility is for such a person to be put in the custody of their home government. Another possibility is that we bring them to the United States. After all, we have brought a variety of terrorists to the United States and put them on trial in Article III courts here over the years, but it will be a challenge.

Senator AYOTTE. Would that cause you to make a different recommendation to the President on closing Guantanamo given the challenges that it presents?

Secretary GATES. I think we are in the position, frankly, that the prospects for closing Guantanamo, as best I can tell, are very, very low given very broad opposition to doing that here in Congress.

Senator AYOTTE. But we also are not using it to add additional detainees there that might be appropriate for holding at Guantanamo either, are we?

Secretary GATES. Not at this point.

Senator AYOTTE. I wanted to ask you about the reset equipment for combat within the budget. I am concerned about the lower funding levels proposed in fiscal year 2012 to reset equipment for combat units returning from deployments. I wanted to get your thoughts on that part of the budget.

On September 11, 2010, the New Hampshire National Guard deployed the largest number of guardsmen and women since World War II for our State, and these troops will be returning in the second half of this year. I know that reset is more than just buying equipment. It includes manning time and time to train. So restoring readiness levels takes time. But I also know that the National Guard units have historically been at the end of the food chain in getting new equipment and resources for training. This can impact their readiness for Federal missions but also can impact their responsiveness to State emergencies.

So with this in mind, how confident are you in that the amounts included in the fiscal year 2012 budget for the services for reset will allow all units in the Active and Reserve components to be able to address the critical readiness needs that we have going forward?

Secretary GATES. One of the things that has happened over the past 4 years that I am very proud of is that when I assumed this position, the historic equipment on hand percentage across the board for the National Guard was about 70 percent, and when I took this job, it was at about 40 percent. It is now on a national basis at about 77 percent. What has changed now compared with the past, just to your point about the food chain, is the Guard now is getting the same kind of equipment that the Active Force has. So they are getting much higher quality equipment. At the same time, they are getting more equipment.

How fast we can do this for units that are coming back from conflict is going to be a challenge because it is a lot of money. One of the concerns that I have about the CR is that there is some reset

money in there, and it is going to be very difficult for us to execute. One of the things that we will have to do, if we get a year-long CR, we will have to get pretty close to shut down the recapitalization of the humvees at Red River and Letterkenny depots. So all of these things are tied together, but it is going to be a challenge. Until a year or 2 ago, we would have testified to you that we will need reset money for at least a couple of years after the conflict ends, and we think that is probably now a longer period of time, longer than 2 years.

The problem is that when the conflicts end, that reset money for the most part has come out of these OCO budgets, and finding the dollars for a significant reset after the end of the conflict, if we are not getting any OCO funding, I think will be a big challenge for us.

Senator AYOTTE. I know that my time is up.

I thank you very much, Secretary Gates and Admiral Mullen. I appreciate it.

Chairman LEVIN. Thank you, Senator Ayotte.

Senator Akaka.

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

Aloha, Secretary Gates and Admiral Mullen and Secretary Hale. I want to thank you all for your leadership and service. Secretary Gates, if this is your final budget testimony before this committee, I would like to say that I appreciate the excellent job that you have done leading our military. I want to also thank the brave men and women of our armed forces and their families for their service.

Secretary Gates and Admiral Mullen, I applaud the steps taken to care for our servicemembers' mental well-being. I believe that taking care of those defending our Nation is a responsibility and not a choice. I also believe that the healing process should also account for families as well.

I am interested in hearing your thoughts on the progress DOD is making in helping families as a whole as they work through the challenges of PTSD, TBI, and other stress-inducing situations for families.

Admiral MULLEN. Thanks, Senator Akaka. I know that you have focused on these issues, and all of us greatly appreciate that. I think we are in a much better position than we were a few years ago, but we also have a much better understanding of the size of the problem.

I will speak specifically to families first. While early on there was a great deal of focus on spouses, in terms of the stress that they have undergone, what I have seen certainly over the course of the last couple years is an increasing awareness and understanding of the need to address the whole family, including the kids, as they have been stressed. I mean, if you are in a high-end, high-rotation unit and you were 10 years old when these wars started, and you had mostly your dad, but mom and dad, on their fourth or fifth deployment, you just went off to college and you basically almost have not seen your dad. There are issues associated with that that I think we are going to have to deal with in the long run. A 15-year-old in one of these military families—their whole life has been at war. That is something a lot of us have never been through.

So there has been an extraordinary amount of effort placed in terms of prioritizing inside each of the Services to get at the major issues. It is not just the stress and the mental stress. We are short health care providers, although we are up dramatically from where we were in 2001. We were in the 1,000 range in 2001. We are over 7,000 now. We have TRICARE health providers that are almost 50,000, but we are still short. The country is short, and we have to figure out a better way to break through, to join with the VA, another committee I know that is near and dear to your heart as chairman, and work together with the VA and, quite frankly, with communities throughout the country to get at this.

The last thing I would say is the initiative that the First Lady has undertaken and announced with the President about a month ago, an extraordinarily important issue focused on military families across a number of issues to include this—it is wellness. It is education. It is employment. It is child care—signed up by all the Secretaries from every department, 16 of them, is a huge step forward in terms of giving this visibility in a way that we just have not had before.

So I am more optimistic than I have been, but we have some substantial steps that need to be taken.

Secretary GATES. I would like to just mention two things, Senator. One is one of the significant changes, I think, we have made in the last 3 years or so—we have moved virtually—we used to pay for—most of these family programs associated with those who are deployed and the challenges that they have been facing have been in the supplementals and in the OCO funding. We have over the last 3 years moved virtually all of that money into the base budget so that long after the war funding ends, we will be able to sustain these family-oriented programs. This year, I think we have $8.3 billion in the budget for these programs, and that is about a $200 million increase over fiscal year 2011.

Senator AKAKA. I know your concern goes back also to the TRICARE program probably needing more resources than they have had before.

Secretary Gates, I believe that an electronic medical record system would be very beneficial to current and former military families and members, as well as the health care providers. Mr. Secretary, can you provide an update on where DOD is on electronic health records?

Secretary GATES. We will get you an answer for the record that has the details.

Military Health System (MHS) medical facilities use the Armed Forces Health Longitudinal Technology Application (AHLTA), the Department of Defense's (DOD) current electronic health record (EHR) capability, as part of a family of systems. AHLTA generates, maintains, stores and provides secure online access to comprehensive outpatient records. The current DOD EHR family of systems forms one of the largest ambulatory EHRs in the world, with documentation of an average of 145,000 clinical encounters each day. The MHS is currently executing a plan to improve system speed, operational availability and the user interface to enhance provider satisfaction until interagency EHR (iEHR) capabilities are delivered. Executing this plan allows MHS to meet providers' near term needs, while better preparing our applications and supporting infrastructure for the EHR Way Ahead.

The DOD EHR Way Ahead Analysis of Alternatives (AoA) is ongoing. Because DOD and the Department of Veterans Affairs (VA) are engaged in concurrent EHR modernization efforts, significant opportunities for collaboration exist. To achieve common objectives, a DOD–VA EHR Senior Coordinating Group has been estab-

lished. The group, which consists of representatives from DOD, VA, and the White House, is charged with reaching agreement on a proposed approach to a DOD–VA iEHR.

The Senior Coordinating Group established six teams to reach agreements on proposed courses of action. The six teams are the Enterprise Architecture, Data Interoperability, Business Process, Systems Capabilities Presentation Layer, and Mission Requirements and Performance Outcomes Teams. The agreements reached by the group will form the basis for a proposed DOD–VA iEHR approach.

On February 12, 2011, a high-level common data and architecture approach was presented to and subsequently endorsed by the Deputy Secretaries of DOD and VA and the Vice Chairman of the Joint Chiefs of Staff. Regardless of the alternative selected as a result of the DOD AoA, the agreements made by the Departments will apply to the iEHR. Additional meetings between Secretary Shinseki and I will occur to further define high level plans for the iEHR.

Secretary GATES. I will tell you we have made a lot of progress, but it is not fast enough as far as Secretary Shinseki and I are concerned. He and I met, just the two of us, about 2 weeks ago to try and accelerate this effort. So he and I will meet again with our staffs in the middle of March to assess where we are and what needs to be done to move this forward and get it done. Then we will have a follow-up meeting at the end of April.

I have found, unfortunately, with these huge bureaucracies, whether it is Veterans Affairs or DOD, that things like this that are big projects do not move very fast if they do not get high-level attention. So Secretary Shinseki and I are both committed to making as-fast-as-possible progress on this.

Senator AKAKA. Thank you very much.

Chairman LEVIN. Thank you very much, Senator Akaka.

Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman. Secretary Gates, Admiral Mullen, I very much appreciate the fact that you opened your testimony with highlighting the damaging effects of a year-long CR on DOD. I am very concerned about these impacts. Senator Bill Nelson and I recently wrote to our leaders suggesting that we should be working on the defense appropriations bill right now. I made a similar suggestion to our leaders last fall, advice that unfortunately they did not take.

But I will say to my colleagues that it is inconceivable to me that we have spent the past 10 days debating the Federal Aviation Administration reauthorization, not to say that that is not important, but it pales in comparison to the urgency of acting on the defense appropriations bill.

So I hope our Senate leaders heard you loud and clear today and that we will return next week and make that our first order of business. Certainly the impact that you have outlined is a disaster, and there is just no need for us to be debating a bill that is not urgent when we should be doing a high priority bill and certainly the passage of the defense appropriations bill is the highest priority. So thank you for your testimony on that.

Admiral Mullen, in your testimony you stated that one of the greatest success stories this year has been the growth and development of the ANSFs. You went on to say that that has gone incredibly well. I understand that that is going well generally, and I also understand how imperative it is that we build up those forces so that we can eventually leave Afghanistan.

But I want you to know that I am concerned that the focus on so rapidly increasing the number of Afghan security forces is short-changing the vetting of those recruits. Recently six U.S. military personnel, including Private 1st Class Buddy McClain of Maine, were killed by an Afghan border police officer. The press have reported that in the past 13 months, Afghan personnel have attacked our military personnel or our coalition partners six times.

What are we doing to better vet those Afghan recruits to ensure that tragic incidents and attacks like this do not occur?

Admiral MULLEN. Certainly it is, Senator Collins, each one of them, a tragedy.

To go to the overall structure, when I go back 12 months or 15 months with General Caldwell and what we had then versus what we have now, we have moved incredibly quickly. But we have also focused on the quality of the move, and by that I mean the quality of the instructors, the quality of the infrastructure, a substantial training program that was virtually nonexistent there before. The Secretary talked earlier about the improvement in literacy. We are now focused very much on the need to both train in specific skill sets, and all of this while we are obviously fighting a war, moving pretty quickly, moving very quickly to ensure, as best we can, that nothing like that in the security forces, the military or the police, occurs. I would assure you there is a tremendous amount of focus on this with respect to the leadership.

That said, tragically these things do occur on occasion. They did in Iraq. They do in Afghanistan. While we will do everything we can to eliminate them, I would not sit here and tell you that we will be 100 percent successful with respect to that.

Every one of these is investigated thoroughly. Every one of them. In fact, the one to which you refer—I went through this with General Caldwell specifically. What happened? What do we know about this guy? What was the background? There was not a lot there with respect to his background that would have led him to specifically take that action to kill our six troops. So we take that. We investigate it. We certainly integrate that back into what we are doing, but it is a big challenge.

Senator COLLINS. Secretary Gates, I applaud you for holding accountable both military and civilian personnel who have failed to perform adequately. On Tuesday, Senator Lieberman and I met with one of the victims of the Fort Hood massacre, Sergeant Alonzo Lunsford. He was accompanied by friends and family members, as well as other family members who had lost loved ones in this attack. The very first question that they asked Senator Lieberman and me and the one that I pose to you today is when will the supervisors that filed such misleading officer evaluation reports regarding Major Hassan be held accountable.

These evaluation reports ignored his increasingly erratic behavior, his poor performance as a physician. We know from our investigation that one of his commanding officers told the people at Fort Hood you are getting our worst, and yet when you read the officer performance evaluations, they are glowing by and large. So this attack occurred 15 months ago, and what the victims and their family members are asking us is when will these individuals be held accountable.

Secretary GATES. At my request, the Secretary of the Army has undertaken an investigation to address this specifically, and the latest information that I have is that he is nearing decisions on this. So I do not have a precise timeline, but I think in the very near future he will be reaching his conclusions and taking whatever actions he deems appropriate.

Senator COLLINS. Thank you.

My time has expired. I am going to submit some questions for the record.

Admiral Mullen, I do want to mention to you that I am very concerned about the increase in suicides among the National Guard. I recently had the honor to welcome back a company of Maine National Guard men and women who have spent a year in Afghanistan. It seems to me we are doing a better job in helping the Active-Duty Force which has those resources more readily available, but I am really concerned about whether we are providing that same kind of support to the Guard and Reserve.

Admiral MULLEN. I said this many times. We would be nowhere close to where we are in these wars without the extraordinary performance of the Guard and Reserve, and they deserve every bit the attention that everybody else has gotten.

Certainly on the suicide issue, it is a huge concern to all of us. The Services are working it and, in particular, the surge in that over the last year on the Guard side. So there is a great deal of effort to try to, first of all, understand it and then address it, as we have in the Services as well.

Senator COLLINS. Thank you. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Collins.

I think Senator Collins speaks for all of us on that issue of suicide. Thank you.

Senator Reed.

Senator REED. Thank you, Mr. Chairman.

Let me begin by associating myself with the remarks of Chairman Levin and Senator McCain and others about your extraordinary service, Mr. Secretary, to the Nation throughout your tenure in difficult times and making difficult judgments. Thank you for what you have done and we continue to wish you well as you continue to serve.

Admiral Mullen, I know in October you will finish your tour, and I will add that commendation to you for your extraordinary service of 43 years in uniform in the U.S. Navy and to all your colleagues at DOD.

Let me emphasize what you all have emphasized. It is absolutely critical to fund the defense budget going forward not in an ad hoc, every 60 days basis, but over a long period of time to provide certainty for programs, certainty for strategy.

But there is another aspect of our national strategy that is increasingly important and that is the role the DOS will play in Iraq and Afghanistan. Mr. Secretary, I would assume that you would stress with the same urgency the need to fund those types of DOS programs in Iraq and Afghanistan because otherwise what you have accomplished and, more specifically, what young men and women in our military forces have accomplished could be severely

jeopardized and our national security severely threatened if we do not follow through.

A concern that many of us have is that you are able to summon an almost reflexive response by the American people when you talk about helping men and women in uniform. That same response is not elicited when people start criticizing foreign aid which this could be labeled. I just think it would be helpful if you would comment on this issue of the need also to support that effort.

Secretary GATES. First of all, I would say that for the entire time I have been in this job, I have been an advocate for more money for the DOS. Actually this dates back to my days in the Central Intelligence Agency (CIA) when we had case officers collecting information that any good political officer in the Foreign Service could get, but there were not enough. So it has been a concern of mine all along.

I would say that right now it is a critically urgent concern because if DOS does not get the money that they have requested for the transition in Iraq, we are really going to be in the soup. We have spent probably close to $800 billion or $900 billion, perhaps more importantly, more than 4,000 lives, and here we are at the end game and it reminds me of the final scene in "Charlie Wilson's War." We have spent billions to drive the Soviets out of Afghanistan, and we could not get a million dollars to build schools in Afghanistan in 1989 and 1990.

The same thing is going to happen in Iraq. If we cannot have a transition to DOS and the police training function, if they do not have a presence in various places throughout Iraq, much of the investment that we have made in trying to get the Iraqis to the place they are is at risk in my view. The chairman mentioned the need for DOS funding in his opening statement. But you would find, I think, extraordinary support across the entire DOD for their budget, but more importantly our real worry that all that we have gained is potentially at risk if we do not have the kind of DOS presence and DOS activities in Iraq.

Here is the other piece of the problem and it goes to the CR. DOS cannot spend the money to get ready right now. This is getting toward the end of February. There are facilities to be built. There are people to be hired, and they cannot do any of that. So we are going to run out of time in terms of being able to get this accomplished.

So I hope that the passion in this reflects just how strongly we feel about this. This is really, really important.

Admiral MULLEN. Senator Reed, just quickly, you talk about Iraq and Afghanistan. This is a global issue. This is not a lot of money invested in places around the world that prevent conflicts. The military does this. We have to do it with our partners in DOS, otherwise we are going back for a lot more investment and a lot more casualties.

Senator REED. Mr. Hale, please.

Mr. HALE. Let me just offer a brief additional point. For the first time, in fiscal year 2012, State will request a budget under the OCO fund. It will be very important for Congress to enact that and isolate the money that is associated with these operations, so I hope that's favorably received.

Senator REED. That's an excellent point, Mr. Secretary.

Just, with Afghanistan, too, you mention "Charlie Wilson's War." We learned a very expensive lesson about not spending the million dollars in September 11, 2001, attacks. Frankly, particularly with Afghanistan, where at a point we might have to relearn that lesson, because the threats that are being organized against the United States and our allies are still emanating from border regions of Afghanistan and Pakistan, unless I'm mistaken. Is that a fair judgment, Mr. Secretary?

Secretary GATES. Absolutely. The chairman refers to it as the epicenter of world terrorism. While al Qaeda has metastasized and has branches in Yemen and North Africa and elsewhere, the reality is, that border area with Afghanistan and Pakistan is still the heart of the problem.

Senator REED. Let me make one follow up point about Afghanistan, because as the chairman mentioned, we were there recently. We are building an increasingly credible force there, but it's a force that the government of Afghanistan cannot afford indefinitely. It's much cheaper than our troops. But this is not just a 2- to 3-year commitment. This has to be a multi-year commitment to support their forces in the field. Not singly the United States, but the international community. We have to start now and build that in. Is, I think, is that another point you would agree with?

Secretary GATES. I made the point earlier. I mean, I think that the international community and Afghanistan cannot afford a force of 375,000 Afghan National Security Fund (ANSF) indefinitely. We have to think of this, I think, more as a surge for the Afghans. With a political settlement and with the degrading of the Taliban, perhaps the size of the ANSF can come down to a point where it's more affordable for us and for everybody else. But we have, just as an example, I mean, our fiscal year 2012 budget has in the OCO $12.8 billion to support the ANSF for 1 fiscal year. We can't sustain that for many years. So, a lot depends on being successful by 2014 in getting the transition to the Afghans. Even if we have to support it for a little after that, if we have most of our troops out of there, it's still going to be a lot less money for the American taxpayers.

Senator REED. Thank you very much. Thank you.

Chairman LEVIN. Thank you, Senator Reed. When you go to your NATO meeting, I hope that you would also see what support we might be able to get for the continuing cost of an Afghan army from some of our NATO allies. In that regard it would be helpful as well.

Senator Graham.

Senator GRAHAM. Thank you, Mr. Chairman. Any chance you'll reconsider leaving, Secretary Gates?

Secretary GATES. No, sir.

Senator GRAHAM. I didn't think so. I just can't thank you enough for what you've done for the country. Admiral Mullen. I just want to say something about the administration here. I know we have our differences. But when it comes to Iraq and Afghanistan, I think the policies you've created, the policies the President has supported, have been very sound. We're about to reap the benefits of operations that have been tough, difficult, sometimes mismanaged, but that's the nature of war. We're very close in Iraq. So, I just

want to build on what Senator Reed said. I'm going to be the ranking member of the Foreign Operations Accounts on Appropriations. I'd like for you to put in writing to me and Senator Leahy what you said about this account.

Let's give a real world example. What did it mean in terms of the Egyptian crisis to have a good dialogue with the Egyptian military, Admiral Mullen?

Admiral MULLEN. It was huge. It was the benefits of 30 years of investment of the interaction that we've had with thousands of them in our schools, the values that have rubbed off over time with them, the ability to sustain those contacts, and then see them act in such a responsible way.

Senator GRAHAM. I think that's a real world example of where 30 years of investment really paid off. This account has been reduced to $45 billion in the House. I do share my House colleagues' desire to reduce spending, and no account is above scrutiny. But the $5 billion that is flowing to Pakistan, Iraq, and Afghanistan on the civilian side of the OCO account, what, are you telling us that, basically, that should be seen sort of as emergency spending and not counted against our baseline?

Admiral MULLEN. I think, I mean, certainly some of it is tied to the military. But I think the Kerry-Lugar-Berman piece, that's a 5-year program at a billion and a half a year. That isn't military, and that's what we were taking about earlier. Sustaining that is going to be critical, not just now, but in the long term.

Senator GRAHAM. I guess the point I'm making, we're surging on the civilian side as we draw down our troops. The civilian-military partnership is essential to holding and building.

Admiral MULLEN. Right.

Senator GRAHAM. There are funds going to Pakistan, Iraq, and Afghanistan on the civilian side that I think will be just as important as any brigade, and I would like to treat those funds as a national security asset. I will do everything I can on the Republican side in the Senate to make sure that we protect those funds that you can't hold and build without.

Admiral MULLEN. Sure.

Senator GRAHAM. Now, here's what a waste the American people—we're talking about fiscal austerity at home. What is the percentage of GDP spending on defense when you count all appropriations?

Secretary GATES. Well, two facts. First, the base budget alone——

Senator GRAHAM. Right.

Secretary GATES.—is 3.7 percent of GDP. If you take all the war funding for fiscal year 2011, plus the base budget, it's about 4.9 percent of GDP.

Senator GRAHAM. Historically——

Secretary GATES. But there's another fact that's worth noting——

Senator GRAHAM. Okay.

Secretary GATES.—and that is that as a percentage of Federal outlays——

Senator GRAHAM. Right.

Secretary GATES.—with the exception of the late 1990s and early 2000s, at 18.9 percent it is the lowest level of Federal percentage of outlays since before World War II.

Senator GRAHAM. Okay. Now, we need to understand that as a Congress here, the Secretary of Defense has just told us, and, since World War II terms, we're on the very low end, at a time when I think the threats to our Nation are growing exponentially. Now, as we pull down in Iraq, it is your belief, if the Iraqi Government would ask for American troops to be left behind to perform the three functions you suggested, it would be in our national security interest to say yes?

Secretary GATES. Yes, sir. I believe that.

Senator GRAHAM. Now, there's a fourth component—security for those who are going to be in the lead. DOS, the Department of Justice, Agriculture Department, the police trainers. My concern is, if we don't have a sufficient military footprint, then DOS literally has to build its own security apparatus, which will be in excess of $5 billion. Do you think, all things being equal, it would be better for the U.S. military to be able to continue to provide security?

Secretary GATES. Yes, sir, I do. I'm, partly because we would also have the helicopters and things like that. The private security contractors that State's going to have to hire to perform that role will not have some of the, quote, unquote, enablers that we have.

Senator GRAHAM. Well, see, this is the dilemma. We need to know this soon. Because DOS needs to build capacity. Do they buy helicopters? Do they buy 54 MRAMs? Is it wise to hire a private contractor army to replace the American military if the Iraqis will allow the American military to perform that function. So, the sooner we know the answer to that question, the more likely we are to be successful. Because I have grave concerns about building a DOS army. So, that's must my 2 cents worth.

Detainees. Admiral Mullen, our special operators are all over the world as I speak, is that correct?

Admiral MULLEN. Yes, sir.

Senator GRAHAM. The threat from terrorism is just not confined to Iraq and Afghanistan.

Admiral MULLEN. It is not.

Senator GRAHAM. What would we do as a nation if we were able to capture a high level al Qaeda operative in any country outside of Iraq or Afghanistan, let's say, Somalia, Yemen, as examples. What would we do with that detainee?

Admiral MULLEN. We don't have an answer to that question.

Senator GRAHAM. See, now, this is a big deal to me. We're in a war, and capturing people is part of a intelligence gathering. It's an essential component of this war. Do you agree with that, Admiral Mullen?

Admiral MULLEN. Right.

Senator GRAHAM. It is better to capture someone than it is to kill them in a lot of cases, is that correct?

Admiral MULLEN. It is.

Senator GRAHAM. It's hard to capture someone if you don't have a jail to put them. All those on the other side who want to stop renditions, we need to come up with an American jail, because we're in, the only alternative is to kill them or go to renditions. I

hope, Mr. Chairman, that sometimes this year Republicans and Democrats can have a breakthrough on this issue to help our men and women fighting this war, because it is a very spot to put the special, a tough spot to put the special operators in. Our CIA doesn't interrogate terror suspects any longer. These are things we need to talk about and get an answer to.

Afghanistan. Not only is it miraculous what General Caldwell has done. It's stunning to me that we're in 2009 and 10, and 30 percent of the NCO corps in Afghanistan could read. When he took over, he tested the Afghanistan army for literacy, and on paper, every NCO should read at the 3rd grade level. When they tested the NCO corps, 70 percent could not read at the 3rd grade level, and he is going about fixing that. So, you're dead right. But, we need to know, after 8 years of involvement, 90 percent of the Afghan army could not shoot to NATO standards 18 months ago. So, after all these years we're just finally getting it right. In many ways, we've been in Afghanistan with the right formulation for about 18 months. Is that a fair statement?

Admiral MULLEN. That's a fair statement, and it's a very difficult discussion to have because it was 10 years ago when this started.

Senator GRAHAM. I just want the American people to know that we've made mistakes, but we're finally getting it right.

One last thought. When 2014 comes, I am very optimistic that there will be a better Afghan police and army than we have today, that we can transition. But I've been discussing among my colleagues and others about what an enduring relationship with Afghanistan would look like. It is my belief, Mr. Chairman, that a political economic and military alliance with the Afghan people, at their request, would be incredibly beneficial to our long-term national security interest and could be a game-changer in the region.

To both of you, what do you believe the effect of an enduring military relationship would be on the future security of Afghanistan and the region as a whole if the Afghans requested of us to have joint airbases past 2015? Would that be something you think it would be wise for us to talk about and consider?

Secretary GATES. Absolutely, Senator. I think that, to go to, Admiral Mullen's comments about Pakistan a little while ago, there is a big question in the whole region whether we will stick around. It's in Afghanistan, it's in Pakistan, it's all over the area. A security agreement with Afghanistan that provided for a continuing relationship and some kind of joint facilities and so on for training, for counterterrorism and so on beyond 2014, I think would be very much in our interest. I think that it would serve as a barrier to Iranian influence coming from the West. I think it would serve as a barrier to a reconstitution of the Taliban and others coming from the border areas in Pakistan. So, I think it would be a stabilizing, have a stabilizing effect, not just in Afghanistan, but in the region.

Senator GRAHAM. Would you also agree that it would give an edge to the Afghan security forces in perpetuity over the Taliban, and you might, with that kind of a relationship, get by with a somewhat smaller army?

Secretary GATES. Absolutely.

Chairman LEVIN. Thank you, Senator Graham.

Senator Hagan is next.

We have a vote now on the Senate's schedule for 12:10. We're going to try to work around that vote and to work through that vote. I'm going to turn the gavel over now to Senator Udall, because I have to leave for a few minutes as well. But, we're going to try to keep going right through that vote the best we can.

Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman. I will actually cut my own questions short, because I have to preside over the capsule that's on the Senate floor at noon. But, I do want to say to all three of the individuals here, thank you so much for your service and your testimony, and the excellent work that you do for our country. I did want to agree with Senator Reed and Senator Graham on the concern, and Secretary Gates and Admiral Mullen, your concern about the funding for DOS and the foreign aid. I think that is critically important. As you both said, it certainly was evident as to what has taken place just recently in Egypt.

I did want to talk a little bit about the health of the Special Operations Forces (SOF). Admiral Mullen, in your prepared remarks you acknowledged the continued stress on the force from 9 years of constant conflict. Last week Admiral Olson, Commander of the U.S. Special Operation Command (SOCOM), told an industry group that difficult and repeated deployments of Special Operations personnel are causing some fraying around the edges of the force. Admiral Olson also made the point that demand for SOF will continue to outstrip supply for the foreseeable future.

Given the demand for these SOFs, not only in U.S. Central Command (CENTCOM), but also in other parts of the world, for partnership and capacity-building activities, how does DOD intend to address the readiness issues identified by Admiral Olson? Admiral Mullen and Secretary Gates?

Admiral MULLEN. I think, actually, the force has expanded, I think, from, when these wars started, around 30,000 to on a way to upwards of 56,000. I think there are insatiable appetites and requirements for Special Forces. The vast majority of them are in CENTCOM. That said, they actually are in many, many countries around the world, and they're making investments for the future so that we don't have to go to war in other parts of the world. I think his statement about fraying around the edges is right. They've been on, had a significant number of deployments. I think in Iraq, actually, in Iraq and Afghanistan they'll typically be the last forces out. So, the pressure is going to continue there.

We've worked very, very hard both increasing size to increased dwell time. But as we do that, quite frankly, Petraeus asked for more, because they have such an impact. So, we're on a very, we're on a knife edge there with respect to this. They're extraordinary in their performance and their execution. I consider the Care Coalition, which is the group that takes care of wounded families, families of the fallen, to be the Gold Standard in our military with respect to how we approach that. That said, they're pushed very, very hard.

From a readiness standpoint, as they come back and dwell time will increase, I think we'll be fine in terms of giving them the time, and then to be able to disperse them to other parts of the world, which we have not been able to do in the kinds of numbers and

requests, because they've been so tied to CENTCOM. So, I think we will be able to meet that. But it's going to be awhile until we get on the down side of both these conflicts.

Secretary GATES. I would just add that with the increase in SOCOM and their higher level of activity, another one of the things that we've tried to do is move a lot of the SOCOM money, a lot of the Special Forces money, into the base budget, so that once these wars end we are able to sustain the larger Special Forces that we have, and properly equip them.

Senator HAGAN. Thank you. The international security environment, particularly in cyberspace, continues to evolve. Cyber threats to our electrical grid, telecommunications, military networks, critical infrastructure, and the financial system pose serious concerns to our national security.

Secretary Gates and Admiral Mullen, what is DOD's strategy to recruit, train, and retain cyber specialists, and what is the way forward to centralize the military cyberspace operations and U.S. Cyber Command (CYBERCOM), and to synchronize the defense networks?

Secretary GATES. I think we've made a lot of progress in this area. The creation of CYBERCOM was in important step. I directed the Service Secretaries about a year ago to consider training in the, in cyber, to be their, one of their highest priorities and to ensure that all the spaces that we have in our schools for teaching cyber skills be filled at a priority level. I think they've made a lot of headway. We have a lot of money in this area. This budget for fiscal year 2012 has a half a billion dollars for cyber research at the Defense Advanced Research Projects Agency (DARPA). So, and I think we're in pretty good shape in terms of protecting the dot-mil world. This last summer, Secretary Napolitano and I signed a memorandum of understanding that give, that begins to move us in a direction where we can begin to do better at protecting dot-gov and dot-com. The reality is, there was a big debate, and it went on in the Bush administration, and it continued in this administration, of people who did not, for, did not want to make use of the National Security Agency (NSA) in domestic cyber protection because of civil liberties and privacy concerns. What Secretary Napolitano and I did was arrive at an agreement where Department of Homeland Security senior officials are now integrated into NSA senior leadership. They have their own General Counsel, their own firewalls, their own protections, so that they can exploit and task NSA to begin to get coverage in the dot-gov and dot-com worlds. This is really important. I think it's a start. But we still have a long way to go.

Senator HAGAN. Thank you.

Admiral Mullen, anything to add to that?

Admiral MULLEN. No. Ditto. I mean, it's a huge concern.

Senator HAGAN. Yes.

Admiral MULLEN. A growing threat. A lot has been done. Schools are filled. But we have a long way to go.

Senator HAGAN. I think it's good that the schools are filled, it's positive. Thank you. Thank you, Mr. Chairman.

Senator UDALL [presiding]. Thank you, Senator Hagan.

Senator Chambliss is next.

Senator CHAMBLISS. Thanks very much, Mr. Chairman.

Gentlemen, I don't know what all this conversation is about, about saying great things about you because you're leaving. We're planning on you being, both being around here for awhile longer to help us make some very critical decisions. Whether it's voluntary in your case, Secretary Gates, or your time is up, whatever, Admiral Mullen, to both of you, you provided a very valuable service to our country over this last short term. I'm not even counting the years and years and years that both of you have given. So, thank you very much for that service. Whether we've agreed or disagreed, you've always responded to me in a very professional way. I'm very appreciative of that relationship.

I want to echo what Senator Graham said about this detention and interrogation issue. I mean, guys, we have a real problem there that needs to be addressed in the short term. I'm sure you've probably seen what, the way in which Director Panetta responded yesterday to a question I asked him about if we did capture bin Laden or Zawahiri. That just highlights the fact that we don't have a plan, and we really do have to figure out something here. We thought Baghram might be the answer. But it looks like it's obviously not long-term. So, we look forward to working with you on that.

I continue to have, Secretary Gates, a TACAIR issue that just really bothers me with respect to where we are now. The further we get into the F–35, the more I'm concerned about this.

In May 2009, just to go back a little bit, General Schwartz, Chief of Staff of the Air Force, testified that the military requirement for the F–22 was 240, or 60 more than DOD was willing to purchase. That summer there was a concerted effort made to strip funding for seven additional F–22s out of the NDAA for Fiscal Year 2010. Ultimately, obviously, and you've taken a lot of credit for the fact in your budget that the F–22 has been terminated and there's a huge savings out there.

First, there was an argument that the F–35 would be more affordable than the F–22. Secretary Gates, on July 16, 2009, in a speech in Chicago you personally stated that the F–35 would be less than half the total cost of the F–22. Since that time, the F–35 experienced a Nunn-McCurdy breach due to cost increases, and DOD has recently restructured the program again, delaying deliveries and again driving up the cost.

Last month your own Cost Assessment and Program Evaluation Office established that the unit cost of a JSF average over variance has doubled since the program began to approximately $116 million per copy in fiscal year 2010 dollars. Things may even get worse. Of note, the price per copy for the last F–22s purchased was $130 million.

Second, regarding the threats the United States may face in the future and our ability to maintain air supremacy, you downplayed the threat and stated again on July 16, Mr. Secretary, of 2009 in that Chicago speech that, and I quote, "China is projected to have no 5th generation aircraft by 2020." Well, I heard what you said earlier in response to Senator Inhofe, but the fact is that last month China flew their first 5th generation fighter, the J–20, which your own intelligence experts predict will reach Initial Oper-

ating Capability (IOC) with 20 aircraft, a 20-aircraft squadron well before 2020. Also, over a year ago Russia flew their 5th generation fighter, the PAC FA, which, again, your own intelligence experts predict will have an IOC date well before 2020.

Third, Mr. Secretary, a year ago in this very room, when DOD was in the process of notifying Congress of an F–35 Nunn-McCurdy breach, you had just fired the F–35 program manager, and I asked you if you were going to revisit the issue of additional F–22 production. You responded, and I quote, "No, sir, because the IOCs, based on information that I was given in preparation for this hearing, the IOCs for the Services, for the arrival of the training squadron at Eglin all remain pretty much on track."

Even though we do have a plane you say that's on schedule going to Eglin in May, and additional planes going in September, those are all test airplanes. A few months after you made that statement, the IOC date for the Air Force version slipped from 2013 to 2016, the IOC date for the Navy version slipped from 2014 to 2016, and the Marine Corps version has gone from a projected IOC date of 2012, or next year, to being on a 1-year probation and not even having an IOC date.

In light of all these developments, I hope you can understand why I am extremely concerned as we go into this budget about where we're headed, gentlemen. In light of General Schwartz's stated military requirement I need to ask you one more time, Mr. Secretary, is DOD considering the purchase of any additional F–22s?

Secretary GATES. No, sir. We are not.

Senator CHAMBLISS. DOD is spending billions of dollars to buy hundreds more 4th generation fighters, F–18s. DOD has linked at least some of these additional F–18 purchases directly to delays in the F–35 program. I can understand that. Can you explain why it makes sense to invest billions of taxpayer dollars in buying 4th generation F–18s, which are basically useless whenever there's contested airspace, rather than buying additional F–22s, which can fly anywhere, anytime, in any airspace?

Secretary GATES. Sir, first of all, let me say about the F–35 that the new program manager, Admiral David Venlet, probably the best acquisition person we have in uniform, has completed a comprehensive tactical baseline review. I think we have, now, it, he took several months to do this. I think we have greater understanding and granularity in terms of progress on the F–35. The reality is, both the Navy and Air Force variants have made substantial progress over the last year. The Air Force version flew twice as many flight tests as had been originally planned.

It is training aircraft that are going to Eglin, and both for the Air Force and the Navy. We are investing money in upgrades to the F–22. There's, there are hundreds of millions of dollars in the fiscal year 2012 budget to upgrade the F–22. Some of the lessons learned from the F–35 and the F–22 are being put into upgrades for our existing 4th generation aircraft that our people believe with those upgrades can take on the adversary's best aircraft.

I finally would say that this is China's and Russia's first low observable aircraft. We've been at this 20 years. I think that they are likely to run into a number of the same challenges we did early in

our stealth programs. I think that our tactical air situation will be in good shape.

In addition, the Air Force has realized that they can upgrade some of their 400 F–16s to give them additional capability and sustainment, as well as the early block F–16s, and they're upgrading the most recent blocks of F–16s. So, I think that combining all these different programs that we have in modernizing TACAIR, plus getting on with the F–35, now under new management and new leadership, I think that we're in reasonably good shape.

I would finally say, the last procurement that is, has been negotiated with Lockheed Martin, the Low-Rate Initial Production 4, actually has resulted in a fairly substantial decrease in the price of the F–35 for that particular buy, and we hope that we can continue that trend.

Senator CHAMBLISS. There's no question but that you're increasing the risk, Mr. Secretary, and I hope that we don't get down the road and realize that was too far a reach for us from a risk standpoint.

I have a question that I'd like to ask Admiral Mullen for the record, and it's on a little bit different tack. Admiral Mullen, we're struggling with this issue of the deficit as well as debt reduction long-term. I have quoted you several times, as have a number of us, in saying that the number one national security interest of the United States is the long-term debt that we face. Would you mind just sending us a written statement amplifying on that record? Because your opinion, I can tell you, resonates around the world with respect to that issue. I'm thankful that you stood forward and you made that comment. I'd just like you to amplify it for the record.

Admiral MULLEN. I've tried to stay out of trouble in doing that. But it really in its simplest form focuses on what I believe would be a shrinking national security budget. We are now involved in, as we should be, looking at ways to save money and do it more efficiently and effectively. But at some point in time, the size of our budget could have a dramatic effect on the size of our force structure. That's the danger that's there, given the national security requirements, which seem to be growing, not reducing, not getting smaller.

[The information referred to follows:]

The ties between the strength of our economy and our Nation's security are inseparable and incontrovertible. We need a vibrant, growing economy to exert influence internationally and to provide for our military and other defense capabilities. In turn, we need the security provided by our national defenses to underwrite our economic endeavors and our livelihoods. But today we find both our economy and our security threatened by our burgeoning national debt.

The U.S. national debt is projected to quickly reach levels with few precedents for a nation not fully mobilized for war. Continued future budgetary pressures could make it extremely difficult for us to maintain the size and readiness of our military forces and to promote the technological innovation (in all areas not just defense) needed to preserve an advantage over our competitors. This could threaten our ability to maintain a credible deterrent against potential adversaries and to respond to security contingencies—large or small.

In many ways, these budgetary pressures are a present reality, and we in the military have already started tightening our belts and working to become a more fiscally responsible Pentagon.

How we should deal with the looming threat of our national debt is a historically necessary conversation. It will involve tough decisions with significant trade-offs, opportunity costs, and strategic risks. What we do, or don't do, will shape our Nation for decades to come.

Senator CHAMBLISS. Thank you.

Senator UDALL. Thank you, Senator Chambliss, and thank you, Senator Chambliss, for your work with Senator Warner on this very important challenge related to our annual deficits and our long-term debt. I know there are many senators who are eager to work with you in this important mission. Thank you.

Senator Blumenthal, you're recognized.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

I join the chairman, ranking member, and others on the committee in thanking you for your extraordinary service, Admiral Mullen and Secretary Gates. In particular, for your continued commitment to the JSF and the single-engine, and the submarine building program, which I know was reiterated as recently as yesterday in remarks in Florida. So, I assume that will continue. I want to express my thanks. In particular, I'd like to focus on one area of your prepared testimony, Admiral Mullen, relating to the injuries of many of these young men and women returning from these conflicts in Iraq and Afghanistan. Specifically, TBIs that are new in their magnitude and number, and ask you perhaps to describe more specifically what is being done in terms of the treatment, both in-service and veterans. Also, what can be done to enlist the growing number of private efforts, for example, the Woodruff Foundation, which you may be familiar with, that could provide resources.

Admiral MULLEN. One of the areas we've struggled in throughout these wars is the stigma issue, will I raise my hand and ask for help. On my most recent trip into Afghanistan, which was December, I was with the Command Sergeant Major there for the 101st, and he relayed to me an extraordinary statistic, which essentially had those that were in concussive events, essentially they were returning to duty at about 98 percent.

We have put in place procedures, if you are in a concussive event, within 50 meters, et cetera, you get pulled out of the fight. One of the reasons that the return to duty rate is so high is because we're treating them well literally in the battlefield, as fast as possible. If they're asked, they're willing, because they're not going to get sent home, they're willing to raise their hand and say, I need some help.

Now, we have a long way to go on stigma, in post-traumatic stress, et cetera, in families with the same challenges. But we actually have made some progress there. We have, at the same time, I have been struck, in the TBI, the difficult ones are the mild ones. The most serious are ones that become very obvious. But it is the mild ones oftentimes that your, you don't see your symptoms for months, or you don't admit you have them. It is those who obviously are in the military, those who transfer then, who transfer out of the military back to communities throughout the country.

I've also been struck, I'm going to use a comparison, when you look at Walter Reed or Balboa, or the Intrepid Center for the amputees, and where we are, we're, I would argue, leading the world with respect to that. That's just not the case in TBI because there's a lot of newness to this that surprised me. We know a lot about the brain, but we don't know a lot about how these injuries affect the brain. So, we've tried to reach out, not just, not to reach and

understand it just inside the military, but reach experts throughout the country who are contributing in ways—there's a Brain Center at UCLA, for instance, which has contributed significantly—and to get the best minds that we can across, throughout the country to help us work our way through this. But, I'm struck that we're in the nascent stages of this even at, even in this year, in so many ways.

Senator BLUMENTHAL. Is there a specific command or a structure within either the Pentagon or dealing through the VA that is coordinating this effort?

Admiral MULLEN. There is, there's not a single point of contact. There's, obviously, a significant effort inside the Pentagon. We have taken steps to try to work with the VA, and then also understand the capabilities that are out in the country as we've engaged for those who've transferred back home. But there's an awful lot we still have to do to make those connections so we're all working it together, which is going, which I think would be the most effective. We're just not there yet.

Senator BLUMENTHAL. To take a related subject, I'm sure you are familiar with reports about the danger of a combination of different pharmaceutic drugs——

Admiral MULLEN. Yes.

Senator BLUMENTHAL.—in treatment of post-traumatic stress and similar kinds of phenomenon. I wonder if you or Secretary Gates could describe efforts being made to address those dangers.

Admiral MULLEN. Sometimes we're slow to need because we've gone through a time where we have, in too many cases, over-medicated, too many prescriptions. Not just in the battlefield or back here when they get back, but also in the VA. What, in particular, the Army has done recently is put in place a much more aggressive multifaceted treatment regime which expands beyond drugs to yoga, to acupuncture, to other forms which have proven positive to support those who've been through the kind of combat that they've been through. So, I'm actually encouraged by that significant effort put forward now to try to back off of that over-medication. That's not in, that's going to take us awhile. But, certainly it's a concern we all have.

Secretary GATES. I'd say there are two additional problems here that we have to deal with. One is servicemembers stockpiling prescriptions. The second is, the frequency with which servicemembers will go outside the military healthcare system and get prescriptions. We don't have any visibility into that in terms of just how much medication they're taking, or how those drugs all interact with one another. So, these are all areas that we're aware of and trying to work on. But we still have a ways to go.

Senator BLUMENTHAL. Thank you very much.

Thank you, Mr. Chairman.

Senator UDALL. Thank you, Senator Blumenthal.

Senator Shaheen.

Senator SHAHEEN. Mr. Chairman. Thank you all for being here.

I want to add my concern to those that have been expressed already about the JSF and what is happening with that program. I appreciated your comments about the efforts to get the program back on track, and I certainly hope that that is correct and the pro-

gram will go forward and it will be effective with those efforts to readjust it.

I also want to commend DOD on your decision to cancel the planned purchase and production of the Medium Extended Air Defense System (MEADS) program. I'm new here, so I'm still getting the acronyms down. But, I think it's important, as DOD found, that we can't afford to purchase MEADS and make the critical investments that we need to make in the Patriot over the next two decades. So, I certainly hope Congress will support your decision and press for the continued Patriot modernization.

Admiral Mullen, during the House hearing yesterday you touched on something that you just referenced a little bit just now in your exchange with Senator Blumenthal, and that is about research into what we need to know about brain injuries. You talked about the importance of consistent and sustained support for research and development in our military budgets. Can you talk about whether you feel like the budget that's been submitted adequately addresses that to prepare us for the future? What have been the most cost-effective efforts that the military's used to leverage research and development (R&D) in the budget?

Admiral MULLEN. I'll be very specific to focus on Secretary Gates because, and he spoke earlier, his frustration that if you're a leader of one of these bureaucracies, there are things that, if you really want to get it done you're going to have to focus on it personally. This is another area, probably 2 years ago, 3 years ago, that he made a priority to ensure that we actually were growing in science and technology (S&T) and R&D. What's happened over the course of the last 2 decades is many of the programs we've talked about—I'll use JSF—has R&D money, but what it's really become program money, and it's not true R&D. So, I think for, particularly as budgets tighten and we look to capabilities in the future, we can't buy it all, we can't protect against everything. But having a robust S&T base, 6.1 through 6.5 and 6.6, is really important in terms of being ready for things in the future. So, even in these times where there's an extraordinary amount of pressure on the budget, and I think that will increase, I think we have to continue to get that right.

You talk about most effective. I think the investment—and this is not an uncontroversial, sometimes an uncontroversial investment—but I've watched DARPA over the many years work, and they really reach at some of the, to get at some of the most difficult problems. I think we need to be mindful of sustaining that investment as well, for example. One other comment is, the S&T or the R&D investment in the medical field to get at brain research, and that, as I understand this budget, that actually is in pretty good shape as well.

Secretary GATES. I would just amplify that by saying that in this budget there is $1.1 billion for and TBI and PTSD research.

Senator SHAHEEN. Thank you. In New Hampshire we have a very significant defense industry that has been doing a lot of cutting edge research, and I know that DARPA's role has been very important in promoting that research.

The National Guard and Reserves, as you all have said, has played a huge role in allowing us to be effective in Iraq and Af-

ghanistan. In New Hampshire, as Senator Ayotte pointed out, we've seen the largest deployment of our Guard since World War II. I appreciated everyone's expressed commitment, again, to the health and well-being of all the servicemen and women and their families.

One of the things that we have done—and Admiral Mullen, again, I think you've been briefed personally on the Full Cycle Deployment program that we have in New Hampshire, that is a model to help families both as they're preparing for deployment and when they return, as well as the member who's being deployed. This program has been supported by congressionally-directed spending—earmarks—which are not likely to continue. So, are there, are you looking at models like this as you think about developing ways to be most effective in supporting Guard and Reserves who are deploying? Are there ways in which, as the congressionally-directed spending ends, that we can continue to support these kinds of programs that have been so effective?

Admiral MULLEN. Senator, when you speak to this, and as you have spoken to the, and the way you've spoken to it, I'm immediately reminded of the need to be, build resilience in our people and families, literally from the first day they come into the Guard, Reserve, or on active duty in all Services. We've come to understand that. We've actually made some significant progress there, but we still have a long way to go. We've built more of it in our members than we have in our families, and we need to build it in the families as well.

I would need to get back to you with a more specific answer on, because I want to know more about the, where your program, where the New Hampshire program is. Because what we do try to do is canvas the field and look at the best programs that are out there, and then inspire others to grab those. So, in particular, I'd be happy to do that and get back to you. As I speak, I really don't know where there resourcing side of it is with respect to that kind of, with respect to the program in New Hampshire.

Senator SHAHEEN. I withdrawal very much appreciate your getting back to me. Thank you. My time has expired.

[The information referred to follows:]

The New Hampshire Deployment Cycle Support Program (NH DCSP) has generated promising results by establishing a support system that starts as soon as deployments are identified and directly engaging the individual servicemember and his or her family in their community. The prevention-based approach allows for assessing risks and resiliencies, early action to mitigate those risks, and ongoing support throughout the deployment cycle.

Compared to non-participating New Hampshire Army National Guard members, those accessing DCSP have shown to have been more favorably impacted across a number of areas: suicides, resiliency, mental health, family fitness, readiness to deploy, retention, unemployment, and homelessness. Among the prominent outcomes are:

- Of 30 at risk of suicide (28 servicemembers and 2 spouses), all are using NH DCSP in active prevention with a licensed clinician and support team
- Of 77 servicemembers deemed "at risk" of not deploying due to mental health issues, DCSP intervention enabled more than half of those (43) to deploy
- Over a 2-year period, the percentage of DCSP SMs choosing to remain in service was four times higher

Being a publicly- and privately-funded service delivery system that includes utilization of social service capacities in all 234 New Hampshire communities presents

a useful model which warrants emulation. As fiscal limitations become more pronounced, the Department of Defense will have to weigh support of NH DCSP against other competing priorities.

Senator UDALL. Thank you, Senator Shaheen.

Senator McCaskill is recognized.

Senator MCCASKILL. Thank you, as always, for being here.

I want to say, Secretary Gates, that I know the President has an awful lot of hard decisions to make this year. I think one of the hardest decisions he has is how he's going to replace you.

Let me start with a topic that is very difficult, I think, for you all to get your arms around, and that is the incredibly serious allegations that have been made about sexual assault within the military. I'm not assuming that the allegations that are contained in a lawsuit that was recently filed are true. But if we take them as factual, then we have a real serious problem, that a woman in our military was raped by more than one member of the military, and the video shared around the unit of this rape that had occurred. A woman raped and who goes to the chaplain, and the chaplain tells her that she needed to go to church more, if she would attend church more.

The rape kits are only kept for a year. I can't think of a police department in the country that would only hold onto a rape kit for a year.

I just think that we have to look at this problem in a systemic way in terms of, do these women have a safe place they can go? Are we gathering the evidence quickly? Or, do we have experts available in terms of prosecuting these cases?

But if someone rapes a woman and the evidence is there, and that person doesn't end up in prison, then we have failed. I know that you all feel probably as strongly about this as I do. But I'd like you to address this and tell me what, who I should deal with within the military structure to follow up and make sure that we make some obviously very important changes that are needed.

Secretary GATES. Senator, it is a problem. It's a serious problem. I have zero tolerance for any kind of sexual assault, as do the leaders of all of the Services. I've worked with Admiral Mullen and the Service Chiefs and Service Secretaries to ensure that we're doing all we can to respond to sexual assaults.

I've engaged, had a number of meetings myself with the senior leadership of DOD. I've focused on four areas—reducing the stigma associated with reporting, ensuring sufficient commander training, ensuring investigator training and resourcing, and ensuring trial counsel training and resourcing. We've made some progress. We've hired dozens more investigators, field instructors, and prosecutors, and lab examiners. We've spent almost $2 million over the past 2 years training our prosecutors better. Generally, the defendants go to somebody who's specialized in this kind of allegation or crime, and our prosecutors tend to be generalists, and so we don't do very well in the court, and so we've spent this money to try and make our prosecutors effective.

More victims are stepping forward. We have had improvement, or, an increase in the number of court-martials. We've gone from about 30 percent of alleged violators being court-martialed to about 52 percent now. So, at least it's headed in the right direction.

We've expanded the Sexual Assault Response Coordinator and Victim Advocate Program ten-fold, from about 300 to 3,000. We now have an advocate at every base and installation around the world, including in Iraq and Afghanistan.

I heard some suggestions and comments yesterday in the House hearing that I take very seriously and would like to pursue. One of them is ensuring the confidentiality of the relationship between the victim advocate and a victim, ensuring, or, providing a military lawyer for victims. Commanders have the authority to move somebody out of a unit. I'm worried by the press accounts that that hasn't happened, and so they're considering over on the House side legislation that would create this as a right for somebody who's been a victim so they can get out of a unit where the person who attacked them is in the same unit, and so on. So, I think there are some ideas that I heard in that hearing yesterday that I think are definitely worth pursuing. So, we do take it seriously.

I've taken this seriously, frankly, because sexual assault is a problem on university campuses.

Senator MCCASKILL. Right.

Secretary GATES. Texas A&M, just like every big public university in America has a problem with this. One of the suggestions that I've made to our folks working on this is to get in touch with some of the universities that have the best prevention programs in the country, to see if we can learn something from these universities.

So, I think we have a broad program to try and tackle this. But there is no question that there's more to do. I just invite Admiral Mullen to comment.

Admiral MULLEN. I testified over here in 2004. I was a vice chief of the Navy on this subject. There was a lot of work that needed to be done. It was very obvious in all the Services. I testified with my three Vice Service Chiefs. So, I agree with what the Secretary said in terms of our having made progress. It's not enough. It's completely intolerable. It has to be answered, I think, on the sort of the skill side, as well as the leadership side. I still hear too many anecdotal stories where it's ongoing, including in theater.

With my wife, we visit VA hospitals, and females talk about trying, having come in the military, previously sexually assaulted before they came in, coming into the military, looking for a safe haven, and finding out that it isn't. It's almost, it's an intensity that certainly is not expected.

This is, Senator, a vastly under-reported offense. So, we can see the statistics we have, but it's the ones that we don't have that we have to get after as well.

Senator MCCASKILL. I guarantee that——

Admiral MULLEN. While we've made a lot of progress, there's a lot left to do.

Senator MCCASKILL. I guarantee that it's more under-reported in the military than it is even on a university campus or in the civilian population at large.

I would just make one suggestion. Having spent many, many, many, many hours and days in courtrooms prosecuting sexual assault cases as a young prosecutor, I relied heavily on people who had specialized in prosecuting those crimes for my training. I relied

heavily on the victim advocacy network that we had on, in terms of rape victims.

In the civilian sector in any major city you're going to have a large group of people with great expertise. I know they would volunteer their time to help train and mentor people that you need to have this expertise, whether it's people at the emergency rooms that are gathering rape kits, having a victim advocate with the victim at the hospital when the rape kit, or the medical facility, where the rape kit is gathered, whether it's victim advocacy. I think you could find, and I've mentioned to General Quantock at Fort Leonard Wood that I would be happy to assist him getting in touch with this expertise that exists out there. I think that these people that do this, they aren't rape prosecutors and sexual assault prosecutors because they're making big money. They're very much true believers and want to help in this regard. The same thing is true of the victim advocacy organizations. I think this is one where you might be able to get a lot of free training and get you guys up to the point where the civilian population has gotten over the last 20 or 30 years.

Thank you for your interest in this. I'll continue to follow up. I just want to let you know, two questions that I want to do for the record. One, obviously, is continuing, the problem we're having auditing the Pentagon. I cannot see how we can continue to give you what you ask for if we can't see the measurable progress in terms of auditing the Pentagon. I will have a series of questions about the financial management system that's in place.

The last thing is pointing out for the record and questions for you for the record, that I know the GDP of Afghanistan is not large enough to pay for the military we're building. I think it's time that we be very, very honest with the American people that we're building the Afghan military for the nation. It costs what, $12 billion a year? Their GDP isn't even that high. So, once we're gone, I think we're going to be on the hook to help pay for this military for a long time—cheaper than our folks being there. But I think we need to begin to talk about the responsibility for paying for this military down the line. Because clearly Afghanistan can't afford the army we're building.

Thank you.

Secretary GATES. Senator, the contact person that you asked for is Dr. Clifford Stanley, who is the Under Secretary for Personnel and Readiness.

Senator MCCASKILL. Thank you very much, Secretary Gates. Thank you all for being here.

Senator UDALL. Thank you, Senator McCaskill. Before Senator McCaskill leaves, I think we would both agree, Mr. Secretary, that you could take one of those difficult decisions off the President's desk if you would reenlist for a year or 2 more. But we'll leave that decision to you, as it properly should be.

But I, too, want to thank both of you and Secretary Hale for your leadership, and for the courageous decisions that you continue to make, and for telling the Senate of the United States the truth as you see it.

I did want to follow up on what Senator McCaskill also just mentioned about the GDP in Afghanistan. I think you both know that

the NDAA for Fiscal Year 2011 required the President, through the offices of the Pentagon and DOS, to provide an economic strategy for Afghanistan. Could you speak to where we are with that process, and how important you think such a strategy would be to the overall success? Then, specifically, we have the Task Force for Business and Stability Operations, and what further role would you see for that particular task force?

Secretary GATES. I'll take the second part of your question first.

This task force is one of those things that creates incredible antibodies in the bureaucracy, because it doesn't fit anyplace, and, both in DOD and in DOS. I think it's an honest answer to say that without in effect the protection of the Secretary of Defense, this operation would not, could not be sustained.

My belief is that Paul Brinkley and his team have made a huge contribution, both in Iraq and in Afghanistan. It was Paul that took the team to Afghanistan, of private sector geoscientists and others, and were able to do the estimates of the extraordinary mineral wealth that exists in Afghanistan, if only there were the security to exploit it. So, I think they've made a real contribution, and I hope they will continue to do that. But, I think it's fair to say that they face a lot of bureaucratic resistance in doing that.

We talked earlier about the cost of the Afghan security forces. That's why I believe—and we've talked about it before in this hearing—that we essentially need to look at the size of their force as a surge as well, and that once they have a political settlement inside Afghanistan, and the Taliban is degraded in terms of their capabilities, the need for the Afghans to have a smaller military than they have now. Because we can't sustain $12.8 billion a year for very long.

The economic strategy for Afghanistan is, and the task force, really go hand-in-hand. I think there's a significant effort at the Embassy in terms of trying to entice private sector individuals, as well as foreign investors, to invest in Afghanistan. But I have to admit that where the economic strategy for the country stands, I'm just not certain. I'll have to get back to you.

[The information referred to follows:]

An economic strategy is an essential component of the overall success of the Afghan civil-military campaign plan, by focusing efforts and resources in ways that maximize the effects of U.S. assistance in Afghanistan, while helping the Afghans become more self-sufficient. Such a strategy will build on the good work that the Director of the Task Force for Business and Stability Operations, Paul Brinkley, and his team have already started in key sectors and provide overall direction for developing Afghanistan's capacity for self-sustainment.

The Department of Defense, the Department of State, and the U.S. Agency for International Development have participated in discussions, led by the National Security Staff, on the process by which the economic strategy report will be produced. The Department of State and the U.S. Agency for International Development will play a central role in the drafting process, and they will require support from Congress in carrying out the important roles they will have in implementing the strategy. The Department of Defense will also participate in the drafting of the report, as directed by the Executive Office of the President, and will pay particular attention to elements of economic strategy that support the counterinsurgency campaign in Afghanistan, promote economic stabilization, and enhance the establishment of sustainable institutions. We plan to complete this report, as required, in early July 2011.

Senator UDALL. Admiral Mullen, do you have any comments to add?

Admiral MULLEN. I would add only that, again, what Paul Brinkley and his team have done has truly been extraordinary in both countries, and under incredibly difficult circumstances in the countries. Although the circumstances back here may have been more difficult. So, how to sustain that is actually an open question. I think we do need to do that.

Senator UDALL. Yes.

Admiral MULLEN. That becomes the heart of, I think, sort of, the longer-term investment there, not just nationally, but internationally.

Senator UDALL. Yes. I, too, would like to add my compliments to Mr. Brinkley. I've heard many stories about how effective he is, how dedicated he is. So, I hope he understands that many of us here on the Hill, Mr. Secretary, know what accomplishments he's had.

Secretary GATES. Well, and to Admiral Mullen's point about the conditions in which they have worked, several members of Brinkley's team, including Brinkley, have been wounded in attacks. So, they've been really out there on the front lines trying to work these problems.

Senator UDALL. Could I move to a question about the popular uprisings in the Middle East that we're seeing in Algeria, Bahrain, Yemen, Libya, and elsewhere? The people are coming out on the streets for a variety of reasons. How do you analyze those countries' leaders' ability to command their security services?

Secretary GATES. Well, I think it varies from country to country. We talked at the beginning of the hearing about the discipline and the professionalism of the Egyptian military, and the restraint that they exercised under some fairly difficult circumstances. In Tunisia, the military also stood aside and, basically, did not defend Ben Ali. So, I think in each of these countries, though, the circumstances are going to be different.

But the one thing that these armies seem to have in common—certainly in Egypt and in Tunisia—is a sense that they are a national institution, and even though somebody may have been in power for a long time, they see themselves as having a special relationship with their people. I know in my conversations with Minister Tantawi, we talked often about the relationship that the Egyptian army had with the Egyptian people, and that it would protect it's people because they were the people. He delivered, I think, in an exemplary fashion.

Just to defend our intelligence folks a little bit, I think that they'd done a pretty good job of describing the rising temperature in a number of these countries, and the economic and social pressures that were building in a number of these countries, particularly related to the youth bulge, the 15- to 29-year-olds who have educations and can't get a job. The petty corruption and nepotism makes life difficult for ordinary people. Clearly, Ben Ali was quite surprised by what happened in Tunisia. He didn't expect to, in 2 weeks to be pushed out of power. I think that President Mubarak was in the same situation.

I think that the United States, there's been a lot of to-ing and fro-ing about how we've handled this. But the truth is, I think the United States has pretty consistently, primarily privately but also

publicly, encouraged these regimes for years to undertake political and economic reform because these pressures were building. Now they need to move on with it, and there is an urgency to this.

Events move very quickly. We were talking at one point, if Mubarak had given his first speech when he declined to run for office again in September, when he changed the government, when he promised constitutional reform—if he had given that speech 3 weeks before, he'd probably still be the president of Egypt. So, being able to latch onto the speed with which these events are moving, and have people who have seen, relatively, perceive a static situation in their countries, to appreciate that it's not static, that these pressures are building and they do need to get out in front of it, is, I think, what we've been trying to do.

Senator UDALL. Yes. Our advice and encouragement may hold more weight in this region and other regions of the world, as those leaders and those countries look at the example of Egypt and Tunisia, perhaps others.

I have to wonder, Admiral Mullen, Secretary Gates, Secretary Hale, what the British intelligence services were generating in 1776. I think there are these tipping points that you talk about that can't be predicted.

Thank you again for your service.

Chairman LEVIN [presiding]. Thank you very much, Senator Udall.

I just have one additional point and then we'll close it, because I know that you folks are running late on your schedule. That has to do with the size of the Afghanistan army.

I want to give you some statistics about comparing the Iraq army and the Afghanistan army. I know the situations are different. But I still want to give you these statistics.

Iraq has fewer people than Afghanistan. The Afghan population is about 30 million; Iraq about 27 million. But in Iraq you have 665,000 Iraqi security forces. In Afghanistan you have a goal, 378,000 would be the new target if it was accepted. So, it would still be about half the size of the Iraqi security force, with more people to secure.

So, I would, first of all, I think, probably based on that, but some other things, not agree that the increase, the proposal for the increase would be more than they would need, even if over time there would be a lesser need for security. Hopefully there will be a lesser need and, obviously, if there is you could reduce it. But I wouldn't necessarily plan on there being a need for less than 378,000.

Second, when you describe a surge force, in your mind, Mr. Secretary, I would hope that the surge force that you believe it should be looked at, as, would be a, that the surge force would be the 378, and not the current level. So that it would be the additional 70 that would be viewed as the surge, and not the current level, which I believe you spoke at, as a surge force.

Secretary GATES. I would tell you, Mr. Chairman, the budget that we have submitted would accommodate the additional growth.

Chairman LEVIN. All right. That's reassuring.

Finally, I totally agree, both the need for an objective, an honest view about the cost. I think that is essential. That's what you pointed to, and rightly so. But I would just reiterate my hope that

when you meet with your colleagues at a NATO ministerial that you really would drive home the fact that there's going to be an ongoing need, whether it's at 305,000 or whether or not it's at 378,000, that there really needs to be a sharing of that burden among our NATO allies. We cannot carry the 12 billion alone, I agree with you. But just they way they have not, it's been kind of spotty, frankly, in terms of NATO support, on the trainer side, not nearly still what we had hoped for. But, you're properly giving good grades to those who have come through. A lot of our NATO allies really have. Some of them have taken greater losses proportionally than we have, and we should recognize that.

But, I really would hope that you would reinforce that they are going to need a significant military and a security force, that that is the ticket to success, as well as to an exit. Or, at least, a significantly reduced number of foreign troops which, in turn, is part of success. That they should come through financially with some ongoing expected support for the Afghanistan security forces. That would be my summary. Admiral Mullen?

Admiral MULLEN. Sir, just one quick comment. I've been working NATO pretty hard since 2004. I've never seen them more together than they have become over the last couple of years in this mission. Your comment earlier about, out of area—or, maybe it was Senator Lieberman. But I really do think success here bodes well for the future of NATO, and not succeeding does the opposite.

Then, second, we've talked a lot about NATO here. Well, there are 49 countries total that are providing forces right now. So, there are an awful lot of non-NATO contributing countries who've made a difference as well, and are very focused on sustaining that for a period of time. Some of them very small numbers. I understand that. But, they've really made a difference, and we appreciate their contributions as well.

Chairman LEVIN. Yes. I think, I made the mistake of saying NATO when I should have said NATO and other coalition forces. You're absolutely right. A number of those non-NATO countries have made contributions also way out of proportion to their population, way out of proportion to their financial ability. I think we should recognize that, and their losses sometimes have been out of proportion as well. We do appreciate that.

We want to thank all of you for coming. Again, we're grateful for your service.

We hope to see a lot more of you than you expect, Secretary Gates.

Admiral Mullen, we always love to have you here, and know that you want have too many more visits. But again, we hope, know that all of them will be as helpful as this one was this morning.

Secretary Hale, thank you.

We'll stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

HEALTH AND STATUS OF OUR DEFENSE INDUSTRIAL BASE

1. Senator LEVIN. Admiral Mullen, in your posture statement, you expressed concern over the capabilities of our Defense Industrial Base (DIB) and the ability to

produce and support advanced technology systems for future weapon systems. What is the Department of Defense (DOD) doing to mitigate these concerns?

Admiral MULLEN. In order for the defense industry to remain a source of strategic advantage well into the future, DOD and our Nation require a consistent, realistic, and long-term strategy for shaping the structure and capabilities of the DIB. For example, the fiscal year 2012 budget request contains resources for two providers of the Littoral Combat Ship (LCS), a result enabled by establishing a competitive environment in which two competitors have offered affordable alternatives. Additionally, the Navy continues to pursue the work share agreement on the *Virginia* class submarine program. Looking ahead, the Deputy Secretary of Defense has directed the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) to undertake a sector-by-sector, tier-by-tier assessment of the DIB that will include space and shipbuilding. This effort will be accomplished in full partnership with the Military Services. The results of this analysis will allow us to improve our acquisition strategies and influence DOD's program and budget review, beginning with the fiscal year 2013 cycle. Once completed, DOD will continue to map and assess the industrial base on an ongoing basis. Additionally, as the DIB evolves through mergers and acquisitions, DOD participates in reviews conducted by antitrust agencies and in reviews conducted by the interagency Committee on Foreign Investment in the United States to mitigate consolidation and ownership concerns. The affects of the continuing resolution on program execution and the resultant impacts on defense sector production lines remain a concern. What these industrial bases need more than anything else is a plan and investment strategy with a certainty and predictability that has here to fore been very elusive.

DOD is committed to being more forward leaning in its ongoing assessments of the industrial base—refocusing our efforts on our future needs, working much more closely with the Services to foster an integrated approach to the overall industrial base, and placing transparency and dialogue with industry at the forefront of our agenda.

ACQUISITION WORKFORCE

2. Senator LEVIN. Secretary Gates, while much of the attention in the personnel sector has been rightfully focused on deployed warfighters and their families, the success of our military largely depends upon the effectiveness and reliability of high-technology weapon systems that give the U.S. military its premier technological advantage. Fundamental to developing and fielding these weapons systems is a community of highly trained science and technology (S&T) and acquisition personnel in DOD. What will you do to ensure that DOD can continue to attract and retain a highly skilled S&T and acquisition workforce—especially in today's competitive environment where at the national level there is a limited pool of skilled scientists and engineers facing competition from industry, academia, and other Federal agencies?

Secretary GATES. DOD continues its initiative to grow the acquisition workforce through fiscal year 2015. Significant emphasis and progress has been made hiring and supporting the growth of the technical workforce, but there is much more work to do in this area. For example, the Science, Mathematics, and Research for Transformation Scholarship-for-Service program supported 900 students with majors in DOD relevant science and engineering disciplines. Three hundred of these students transitioned into the DOD workforce. Another 230 are expected to transition into the workforce in 2011.

AFGHAN TALIBAN

3. Senator LEVIN. Secretary Gates, in a recent interview, General Petraeus discussed growing friction between local Taliban fighters living in Afghanistan and the Afghan Taliban leadership, who are phoning in orders that the local insurgents should continue to fight against Afghan and coalition forces through the winter, while the Afghan leadership remains in the safety of sanctuaries in Quetta and elsewhere in Pakistan. He said we are seeing a degree of discord among Afghan Taliban leaders and among the lower-level fighters that we've not seen in the past. Do you agree with General Petraeus' assessment that there is friction and discord between local Taliban fighters in Afghanistan and the Taliban leadership in Quetta, Pakistan, as that leadership phones in orders for the lower-level fighters to keep up the fight through the winter?

Secretary GATES. I agree there is tension between Taliban leaders in Pakistan and the fighters and commanders who remain in Afghanistan. I do not believe current frustration levels are sufficient to degrade insurgent capacity or create exploit-

able fissures. For example, increased violence levels this winter indicate that this tension did not undermine the insurgents' desire or ability to conduct attacks.

4. Senator LEVIN. Secretary Gates, is this level of friction something that we've not seen in the past?

Secretary GATES. Every winter since 2002, DOD observed tension between Taliban leaders in Pakistan and the fighters and commanders who remain in Afghanistan. This also occurred during the 1980s mujahedeen resistance against the Soviets. The tone of reporting this winter indicates a heightened level of frustration; however, the multi-faceted nature of this issue makes it difficult to make a qualitative comparison to previous years.

5. Senator LEVIN. Secretary Gates, are we seeing this friction contributing to a slow increase in the number of lower-level insurgents seeking to reintegrate into Afghan society?

Secretary GATES. I do not see evidence that tension with Quetta-based leaders is eroding local insurgents' motivation to fight or increasing lower-level insurgents' willingness to reintegrate. Most insurgents are locals fighting for local issues and not necessarily in support of Taliban senior leadership; therefore, they are likely to sustain their efforts regardless of any frustration with Quetta-based leaders. Emergence of a reintegration program that addresses local concerns, provides protection for fighters and their families, and delivers on promises will make reintegration a more viable option.

GLOBAL SECURITY CONTINGENCY FUND

6. Senator LEVIN. Secretary Gates and Admiral Mullen, in Admiral Mullen's opening statement he made reference to a proposal for a pooled Department of State (DOS)-DOD security sector assistance initiative, called the Global Security Contingency Fund (GSCF). At the hearing, he indicated this initiative would include $50 million from DOS and an authority for DOD to transfer up to $450 million into this initiative. Are you confident that DOS is committed to making this initiative work jointly beyond the tenures of both of you and Secretary Clinton?

Secretary GATES and Admiral MULLEN. Yes. Although I cannot speak for our counterparts at DOS or future leadership of either department, DOD and DOS are working collaboratively on the development of the GSCF. This pilot program is designed to demonstrate the ability of both Departments to respond to emerging requirements rapidly (within the budget cycle) and in a collaborative manner. The benefit of this limited pilot is that it allows future senior leaders to evaluate the GSCF's effectiveness and determine if it should be extended beyond its initial 3-year term.

7. Senator LEVIN. Secretary Gates and Admiral Mullen, do either of you have concerns that the joint arrangement will prove too unwieldy?

Secretary GATES and Admiral MULLEN. No. I am aware of this concern and would work to address it with the processes and procedures we establish. We are applying lessons learned from Section 1206 and other programs in developing the notional processes and procedures. At this point, we plan to have the GSCF be administered by a small combined DOS–DOD fund staff that will provide joint program formulation, decisionmaking, and implementation. That staff would bring in relevant staff augmentation depending on the expertise needed to meet each requirement. Throughout the pilot, I expect the GSCF to undergo continual process improvements as it matures.

8. Senator LEVIN. Secretary Gates and Admiral Mullen, do either of you have any concern that this type of initiative is too much of a militarization of foreign policy?

Secretary GATES and Admiral MULLEN. Not at all. The GSCF is designed to enable DOD and DOS to respond to a variety of emerging global challenges in a collaborative manner. Program formulation for military and other security forces would be joint, while programs for justice sector, rule of law, and stabilization assistance would be formulated by the Secretary of State in consultation with the Secretary of Defense. This ensures that the appropriate Departments retain primary responsibility for missions within their respective core competencies, while benefiting from the cooperation the GSCF structure fosters. This is a force-multiplying authority that maintains DOS primacy in non-military missions.

9. Senator LEVIN. Secretary Gates and Admiral Mullen, does the proposal envision that funds transferred into GSCF would be subject to the standard reprogramming processes?

Secretary GATES. Not at all. The GSCF is designed to enable DOS and DOD to respond to a variety of emerging global challenges in a collaborative manner. Program formulation for military and other security forces would be joint, while programs for justice sector, rule of law, and stabilization assistance would be formulated by the Secretary of State in consultation with the Secretary of Defense. This ensures that the appropriate Departments retain primary responsibility for missions within their respective core competencies, while benefiting from the cooperation the GSCF structure fosters. This is a force-multiplying authority that maintains DOS primacy in non-military missions.

Admiral MULLEN. The reprogramming of funds into the GSCF would be conducted in accordance with the legislative proposal that states that this authority to transfer is in addition to any other transfer authority available to DOS and DOD. Jointly, the Secretaries of State and Defense would provide a quarterly report to the specified congressional committees on obligations of funds or transfers into the Fund made during the preceding quarter, to include the Committee on Armed Services, the Committee on Foreign Affairs, and the Committee on Appropriations of the House of Representatives; and the Committee on Armed Services, the Committee on Foreign Relations, and the Committee on Appropriations of the Senate.

MISSILE DEFENSE COOPERATION WITH RUSSIA

10. Senator LEVIN. Secretary Gates and Admiral Mullen, you each lead a bilateral channel of discussion with your respective Russian counterparts in which you are exploring the possibilities for cooperation on missile defense. These discussions are consistent with similar North Atlantic Treaty Organization (NATO) efforts. Please describe why you believe missile defense cooperation with Russia is in our interest and what kinds of cooperation you believe are both desirable and possible.

Secretary GATES. The United States seeks to responsibly sustain a stable relationship with the Russian Federation as the pace of military-technical innovation increases and the global security environment evolves. DOD also hopes to enlist Russia's help in addressing emerging security challenges from regional actors seeking illicit capabilities.

DOD has made clear that the system it intends to pursue with Russia will not be a "dual-key" system, and it will not in any way limit U.S. or NATO missile defense capabilities. The U.S. concept for missile defense cooperation stems from the conviction that NATO must be responsible for defense of NATO territory and that Russia should be responsible for defense of Russian territory. The United States and Russia would operate their missile defense systems independently, but cooperatively, including sharing sensor data that may improve the ability of both systems to defeat missile attacks. I believe that Russian radars could provide data that would improve the capabilities of U.S. and NATO missile defense systems, and that U.S. sensors could improve the capability of Russia's missile defense systems. Further analysis would help to understand how U.S. and Russian interceptor systems could be mutually supportive in defending our respective territories.

It is important to note that this process will take time, but I believe that meaningful cooperation is possible—cooperation that can strengthen the security of the United States and our NATO Allies as well as Russia.

Admiral MULLEN. The Military Cooperation Working Group is the military-to-military line of communication between me and the Russian Chief of Defense. The Missile Defense Sub-Group is the military-to-military forum that enables bilateral discussion of missile defense cooperation activities, such as joint exercises. These discussions correspond to the ones we conduct at the policy and strategic levels, as well as in multinational NATO-Russia forums. Although attention is presently focused on the European region, Russia and the United States share concerns about global ballistic missile threats, such as those in Northeast Asia. Our bilateral engagement on missile defense issues is intended to shape awareness of these threats and develop cooperative long-term responses to them. We have a clear directive to reset our bilateral relationship with Russia. While missile defense cooperation between Russia and NATO continues to develop, there will remain a clear need for the United States and Russia to maintain bilateral dialog on critical issues and concerns unique to our two countries.

AFGHANISTAN COUNTERTERRORISM OPERATIONS

11. Senator LEVIN. Secretary Gates, according to published reports, the tempo of counterterrorism operations in Afghanistan by U.S. and Afghan Special Operations Forces (SOF) has increased dramatically in the last 6 months and demonstrated significant results. Lieutenant General Rodriguez stated recently that the Afghan people are playing an increasingly important role in the success of these operations by "helping to provide significantly more tips because they see Afghan Security Forces out among them more than they ever had because of the increase in the number [of Afghan Forces]." Reportedly, 85 percent of counterterrorism operations take place without a shot being fired.

Do you agree with Lieutenant General Rodriguez that the increased presence of Afghan Security Forces has resulted in better intelligence because the population is more likely to come forward with information?

Secretary GATES. Counterterrorism network targeting operations increased in the past 6 months, complementing the additional U.S. and partner nation forces deployed to Afghanistan during this period. Almost all of these operations are conducted jointly with Afghan National Security Forces (ANSF). I agree with Lieutenant General Rodriguez that partnered operations with the ANSF in all counterinsurgency activities result in increased reporting by the local population and better intelligence.

12. Senator LEVIN. Secretary Gates, what has been the impact of this intelligence on the success of counterterrorism operations?

Secretary GATES. The increased trust and confidence the Afghan people have in the ANSFs, especially in the Afghan National Army (ANA) and the Afghan Special Forces, has had a significant positive impact on the success of counterterrorism (CT) network targeting operations. Afghan civilians feel safer and are more likely to provide information about insurgent activities when they witness a competent and impartial ANSF playing a prominent role in protecting the population and degrading the insurgency. This cooperation enables a higher degree of success in CT operations, greater precision during the execution of these operations, and an increased likelihood of receiving information that can be used to plan future operations.

13. Senator LEVIN. Secretary Gates, are news reports accurate that 85 percent of SOF's counterterrorism operations are conducted successfully without a shot being fired?

Secretary GATES. Yes. During the period from February 1, 2010 to January 31, 2011, 85 percent of counterterrorism network targeting operations were conducted without shots being fired. The quality of intelligence that shapes these operations, the careful and deliberate planning that precedes each operation, and the unmatched skill of our operators with their Afghan partners allows us to successfully capture many terrorists without the use of force.

CONTINUED PRESENCE OF U.S. MILITARY FORCES IN IRAQ

14. Senator LEVIN. Admiral Mullen, in your personal and professional military view, and from a purely military perspective, if the Government of Iraq requested the continued presence of U.S. military forces, including combat forces, would you recommend the approval of such a request?

Admiral MULLEN. I cannot answer that question without knowing exactly what type of presence or mission the Iraqis would like us to do. Then, I would have to consider variables like risk to our troops, our enduring national interests, our long-term strategic partnership with Iraq, our worldwide military commitments, and Iraq's ability to do that mission on their own before making a recommendation to the President. In the meantime, we remain focused on executing a responsible drawdown of our military forces according to our security agreement with the Government of Iraq.

VIOLENCE AGAINST RELIGIOUS MINORITIES

15. Senator LEVIN. Secretary Gates, during my trip to Iraq in January, I met with leaders of Iraq's Christian religious minorities who expressed their desire to preserve the Christian communities within Iraq and the need for greater security so Christians can stay in their communities without fearing for their lives. What is your assessment of the Iraqi Government's efforts to ensure the safety of its many religious minorities?

Secretary GATES. The Iraqi Government took positive steps to protect religious minorities more effectively, particularly since the October 31, 2010 bombing of Our Lady of Salvation Church in Baghdad. The Iraqi Government increased security at virtually all churches and police patrols in minority-dominated areas. The Iraqi police force arrested 12 individuals suspected of carrying out the attack on Our Lady of Salvation Church, including an al Qaeda operative. The Iraqi security forces (ISF) have endeavored to fortify minority religious sites and increase check points in minority neighborhoods. This must be done with the concurrence of minority populations because some of these communities believe increased security may serve to identify their facilities as targets. U.S. Forces-Iraq continues to advise, train, assist, and equip the ISF to enable them to conduct more effective security operations against violent extremist organizations seeking to attack minority religious communities. Al Qaeda in Iraq remains the most enduring threat to Christians and other minorities because it characterizes churches as legitimate targets of jihadist efforts to rid the region of western influence, ideology, and theology.

16. Senator LEVIN. Secretary Gates, in your view, what more should they be doing to improve that protection?

Secretary GATES. In the process of establishing a professional, reliable security service, the Iraqi Government should also improve Iraqi rule-of-law institutions, and particularly ensure that the property rights of Christians and other minorities are protected by these institutions. The Iraqi Government must also continue to modernize and professionalize the ISF to ensure that they protect all Iraqis impartially. Examples include recruiting and training more minority police, and reliably implementing the process of restoring property rights to Christians, as well as other minorities, whose lands were illegally confiscated when they fled their traditional homelands due to sectarian and other anti-minority violence. Since many minorities choose resettlement within Iraq, other impediments to protection and reintegration include lack of adequate educational and economic opportunities in areas to which minorities are moving and congregating (such as the Ninewa Plain). These are longer-term challenges that supplement, rather than replace, improved police interaction with minorities and the equitable administration of justice.

17. Senator LEVIN. Secretary Gates, are the Iraqis recruiting and training any police units that are comprised exclusively of religious minorities and, if so, are they deployed exclusively to the areas where their respective communities reside?

Secretary GATES. Iraqis are recruiting and training police cadets from the minority communities, which improves police visibility within those communities and builds trust between police and minority Iraqis. However, as with most national police forces, Iraq does not create police units segregated by religious affiliation, which could imply uneven standards, complicate overall force integration, and limit the ability to deploy such units or individuals to where they may be needed to address security concerns elsewhere in Iraq. Matching ISF individuals or units to minority-dominated areas is further complicated by the fact that minority demographics are in flux and groups within, for example, the Christian community, are subdivided among numerous denominations (Assyrian, Armenian Orthodox, Chaldean, Jacobite, Arab, and so forth) which do not necessarily share objectives.

SPACE SYSTEMS FUNDING

18. Senator LEVIN. Secretary Gates, the Air Force has proposed to incrementally fund the acquisition of two large and critical satellite programs, using multi-year, fixed-prices contracting authority that will require advanced appropriations. In your view, why is this authority needed for these two satellite programs?

Secretary GATES. DOD requires authority to use advance appropriations to fully fund the block buy of Advanced Extremely High Frequency (AEHF) satellites 5 and 6 during fiscal year 2012. After careful review, DOD determined multiyear procurement authorization is not required for this acquisition. For AEHF 5 and 6, the Air Force is procuring two satellites, in a block buy, in a single year. The Air Force worked closely with the DOD Cost Assessment and Program Evaluation (CAPE) office and, based on CAPE independent estimates, expects to realize unit cost savings from the bulk buy of piece parts, electronic components, and sub assemblies, as well as from a more efficient assembly and test process. In order to achieve savings, DOD needs to order these satellites in blocks of two. However, fully funding both satellites in a single year is not practically achievable in today's budget environment. Therefore, I propose a modified approach whereby DOD fully funds the satellite block buy over a fixed number of years using advance appropriations.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

REPEAL OF "DON'T ASK, DON'T TELL"

19. Senator AKAKA. Secretary Gates, on December 22, 2010, the President signed legislation that will lead to the eventual repeal of "Don't Ask, Don't Tell". The Services were directed to provide a plan by February 4, 2011, indicating how they will prepare their respective Services for the implementation of the repeal. In your opinion, what are the biggest challenges the Services face as they prepare for this change?

Secretary GATES. The biggest challenge will be training those members who are not co-located with their units or who serve intermittently. This is why DOD is moving forward in an extremely deliberate and purposeful manner to develop and deploy our training and education.

20. Senator AKAKA. Secretary Gates, how are these challenges being addressed, and what is the current timeline for certification as you see it?

Secretary GATES. There is no set date for certification. I am working closely with the Services to develop multiple ways to train the Force. Among various approaches, DOD identified that the most preferred approach is with leadership driven face-to-face training. When that is not feasible, computer-based training will also be available.

I continue to work purposefully and responsibly toward certification.

SOCIAL SECURITY NUMBERS

21. Senator AKAKA. Secretary Gates, on November 5, 2010, the Under Secretary for Defense for Personnel and Readiness, Mr. Clifford Stanley, sent a Memorandum For Record (MFR) titled, "Updated Plan for the Removal of Social Security Numbers (SSN) from DOD Identification (ID) Cards." The MFR states that SSNs may not be removed as previously indicated in 2009 based on concerns raised by DOD stakeholders. What is DOD's position on the removal of SSNs from ID cards issued to retired personnel, dependents, and those currently serving?

Secretary GATES. DOD recognizes the ongoing risks and dangers associated with identity theft and the need to protect Personally Identifiable Information, such as the SSN.

In 2007, DOD implemented a three-phase plan to remove SSNs from DOD ID Cards. In a November 5, 2010 Under Secretary of Defense for Personnel and Readiness Memorandum, DOD updated its implementation plan. This was due to concern over interruptions to benefits provided to servicemembers, retirees and their families, and it was due to adverse impacts to DOD contingency operations. This updated implementation plan is, as follows:

- Phase One—The act of removing the printed dependent SSNs from all Dependent ID Cards continues, as initiated in 2008 under the original plan. This phase will be completed by the end of 2012. The standard Dependent ID card life cycle requires replacement every 4 years.
- Phase Two—The act of removing the SSN from all ID cards and replacing it with a DOD ID Number will be implemented in June 2011.
- Phase Three—The act of removing all SSNs from barcodes on the ID cards remains on schedule, with implementation expected in 2012.

22. Senator AKAKA. Secretary Gates, what are the leading alternative identifiers which are being considered to replace SSNs?

Secretary GATES. The SSN will be replaced on DOD ID cards by the DOD ID Number. The DOD ID number is a unique, 10-digit identifier created upon initial enrollment of the individual into the Defense Eligibility Enrollment Reporting System database. The DOD ID Number is permanently fixed—it will not change over time or be contingent on one's role (e.g. dependent, civilian).

All individuals eligible to receive DOD benefits—such as commissary, exchange, Morale, Welfare and Recreation or TRICARE purchased care—will also receive a DOD Benefits Number. The DOD Benefits number is an 11-digit number. The first nine digits are common to the sponsor. The last two digits indicate the card holder's relationship to the sponsor. The DOD Benefits Number has been agreed to by the TRICARE Management Activity (TMA) as an acceptable substitute for the SSN for management of benefits with no interruption of services. Similar to the DOD ID number, the DOD Benefits Number will not change over time.

LITERACY EDUCATION

23. Senator AKAKA. Secretary Gates, with a 14 percent literacy rate among new Afghan recruits, every Afghan soldier and police recruit now undertakes mandatory literacy education. By October 2011, 128,000 Afghan soldiers are projected to be literate to at least the first-grade level, further enabling security forces to become self-sustaining. What are the overall goals of this program and how is it progressing against the baseline plan?

Secretary GATES. In parallel with DOD's instruction programs for ANSF recruits is a drive to educate the "legacy illiterate" (i.e., those serving in the ANA who have not had the benefit of literacy training). The goal of the literacy program is to bring all ANSF personnel up to a basic level of literacy (third grade-level). The program employs 1,800 teachers and provides new recruits with 64 hours of basic literacy training and an additional 248 hours after they complete basic training. As of February 2011, approximately 66,600 ANSF personnel have received literacy training; approximately 34,950 ANSF personnel have completed first grade-level literacy training, which is on track toward achieving the goal of 100,000 personnel completing first grade-level literacy training by October 2011; and approximately 10,187 ANSF personnel have completed third grade-level literacy training, with the goal of having 14,028 personnel complete third grade-level training by October 2011.

Literacy remains a major challenge to the development of the ANSF, as about 86 percent of new recruits entering the force are totally illiterate. NATO Training Mission-Afghanistan (NTM–A) instituted a mandatory literacy program in April 2010, and continues to work with the Afghan Ministry of Defense and Ministry of Interior to increase the literacy of the force.

24. Senator AKAKA. Secretary Gates, please describe the importance of this program to the future ability of the Afghan Government to succeed.

Secretary GATES. Literacy education is a key component in the development of the Afghanistan National Security Forces (ANSF). Basic literacy skills allow Afghan military and police personnel to perform their duties, including reading maps, writing reports, and calling for military support in the field. Illiteracy can cost lives in combat and renders the police ineffective in providing basic public security functions. Literacy training is also a major incentive for enlistment and retention and increases the comparative advantage that the ANSF has over the Taliban in terms of drawing new personnel. Literacy also contributes to the overall ability of the Afghan government to succeed by strengthening the professionalism of the ANSF and instituting longer-term capacity for self-sustainment.

ARMY TROOP REDUCTION

25. Senator AKAKA. Secretary Gates, in January, you announced that in fiscal year 2015, the Army would decrease its permanently authorized end strength by 27,000 soldiers. In addition, the Army will also shed 22,000 positions by fiscal year 2013, reducing the temporary surge numbers. This total reduction of 49,000 is very significant. How will this reduction affect the ability of the force to meet future demands?

Secretary GATES. Two factors will determine how the end-strength reduction will impact on the Army's ability to meet future demands: the future demand level and the Army's end-strength reduction implementation plan. With regard to the demand level, I cannot predict with certainty when and where contingencies may occur that will require Army forces. I do believe that Army forces will continue to be required for a variety of missions, but that near-term demands will not reach the high level of commitment seen in recent years. As long as this assumption is valid, the Army will be able to implement the planned end-strength reductions while meeting demands and improving readiness and strategic depth. The Army is continuing to ensure accomplishment of its assigned missions, improve operational readiness to meet future demands and care for the well-being of its soldiers and their families.

26. Senator AKAKA. Secretary Gates, will this result in a potential realignment of combat forces to better support such demands?

Secretary GATES. The Army is developing options to implement directed manpower reductions, while satisfying near-term demands and increasing readiness for unforeseen contingencies. The Army will plan and implement its end-strength reduction and any associated structure adjustments in a deliberate fashion with the intent of achieving a balanced and capable force. The Army is continuing to ensure accomplishment of its assigned missions, improve operational readiness to meet future demands and care for the well-being of its soldiers and their families.

27. Senator AKAKA. Secretary Gates, how will it affect our reliance on Guard and Reserve Forces?

Secretary GATES. The Army depends on access to its Reserve component to accomplish its assigned missions. The planned Army Active component end-strength reductions will have modest impacts on Army Reserve component forces needed to support current and anticipated operational demand. The Army is developing options to implement the reductions, while satisfying near-term demands and increasing its readiness for unforeseen contingencies. The Army is continuing to ensure accomplishment of its assigned missions, improve operational readiness to meet future demands and care for the well-being of its soldiers and their families.

READINESS IN THE PACIFIC REGION

28. Senator AKAKA. Secretary Gates, the North Korean shelling of Yeonpyeong Island, the sinking of the Cheonan, and China's growing military capability continue to remind us of the importance of our military engagement in the Asia-Pacific region. Given the many demands on the defense budget and the recently announced reductions, how does the fiscal year 2012 budget impact our military readiness in the Pacific region?

Secretary GATES. America's forward presence in the region played a key role in ensuring decades of stability in Asia. The United States continues to be globally postured in order to secure the homeland and its citizens from direct attack and to advance American interests around the world. While there are many demands on U.S. forces in the Asia Pacific, the fiscal year 2012 defense budget ensures that DOD remains prepared to meet the challenges and fulfill security commitments in the region.

The fiscal year 2012 budget makes a number of investments that enhance the ability of U.S. forces to project power into the Asia-Pacific region and elsewhere. Chief among these are the commencement of a new long-range bomber program and increased procurement of conventional cruise missiles across the Future Years Defense Program (FYDP).

At the same time, DOD has worked, and will continue to work, with U.S. allies and partners to maintain peace and ensure stability throughout Asia. With the fiscal year 2012 budget, DOD intends to enhance its forward military presence in the Pacific, invest in base resiliency to protect critical infrastructure, and develop new concepts of operation for how the United States will project power when challenged with emerging capabilities in the future.

DOD will continue working with Japan to implement the bilateral Realignment Roadmap agreement and relocate 8,000 marines from Okinawa to Guam in order to offer strategic flexibility, enhance contingency response capabilities, and improve peacetime engagement. DOD requested $181 million in the fiscal year 2012 budget to support military construction to meet the requirements for the Marine Corps relocation to Guam.

DOD will enhance the readiness of our forces in Korea with Tour Normalization. This initiative will further the long-term commitment to provide greater stability for forward stationed servicemembers and their families. For fiscal year 2012, the Army allocated $106 million for Tour Normalization, while the other services have not identified their allocation amount. DOD will also continue transitioning wartime operational control to South Korea by December 2015.

Finally, DOD also intends to exercise regularly with our allies and partners. Examples of these exercises include the annual Ulchi Freedom Guardian and Foal Eagle/Key Resolve exercises in the Republic of Korea, the Keen Edge/Keen Sword and Annualex exercises in Japan, Talisman Sabre with Australia, and the U.S.-Thailand-hosted Cobra Gold which attracts partners from across the region. The United States continues to be engaged throughout the region. The earthquake, tsunami, and nuclear crisis response efforts in Japan are the latest examples, once again demonstrating the value of being able to work in close partnership in times of critical need.

FUTURE ISSUES FOR SECRETARIES OF DEFENSE

29. Senator AKAKA. Secretary Gates, you mentioned that this would most likely be your last defense budget hearing before this committee. If you were to compile a list of items that "keep you up at night", what would this list look like? In other words, from your perspective as our 22nd Secretary of Defense, what should your successor be told to watch out for?

Secretary GATES. As I previously testified to the House Armed Services Committee, thinking about the future, two issues that worry me are the defense budget and jurisdictional lines in Congress.

First, I see a growing disconnect between the missions given to the military and the discussion of the defense budget. It is true that, as the biggest part of the discretionary Federal budget, DOD cannot presume to exempt itself from the scrutiny and pressure faced by the rest of our government. It is imperative to eliminate wasteful, excessive, and unneeded spending.

Nevertheless, drastic and ill-conceived cuts to the overall defense budget would be operationally catastrophic, and would have little impact on the Nation's $1.6 trillion deficit. DOD needs a budget baseline with a steady, sustainable, and predictable rate of growth that avoids extreme peaks and valleys in defense spending that can be enormously harmful to readiness, planning, and financial management. Only then can DOD have the right balance between winning the wars of today and being prepared for likely future threats. We shrink from our global security responsibilities at our peril, as retrenchment brought about by short-sighted cuts could well lead to costlier and more tragic consequences later—indeed as they always have in the past. The best way to support our military personnel is to ensure that they have the tools and training they need to prevail against present and future adversaries.

Second, I worry that the increasing integration of national security policy and execution in the executive branch are not paralleled by the legislative branch of the government. Jurisdictional lines in Congress prevent congressional leadership from seeing the overall national security picture that the executive branch sees, and these lines risk splintering coherent whole-of-government efforts into multiple lines of authority and disparate agency budget accounts. It is my hope that efforts to achieve needed integration in Congress can reinforce our resolve on critical national security policies.

Third, I am concerned that DOS and the U.S. Agency for International Development (USAID) do not have the resources necessary to contribute to a more integrated, coherent, and successful civil-military strategy. Ensuring support for whole-of-government efforts, especially in Iraq and Afghanistan, is critical to creating and maintaining secure environments in key regions of the world.

LANGUAGE SKILLS AND CULTURAL UNDERSTANDING

30. Senator AKAKA. Secretary Gates, I have long-supported efforts to improve the language skills and cultural understanding of our military and Federal workforce. The United States must have the language skills and cultural understanding to successfully engage in this world. Please discuss how DOD's fiscal year 2012 budget ensures that our military and civilian workers have the language skills necessary to meet its mission.

Secretary GATES. Baseline funding of $792 million is projected in fiscal year 2012 to support language and culture instruction to achieve higher proficiencies.

Programs include the following: increasing pre-accession training, education and immersion opportunities at the Service Academies and Reserve Officer Training Corps (ROTC); continuing the ROTC Skill Proficiency Bonus; providing pre-deployment training for general purpose forces; continuing Language Training Detachments to provide and sustain commanders' needs for language; regional and cultural training for the general purpose forces; continuing support to the Afghanistan/Pakistan Hands program; and enhancing English language training for partner nation personnel.

DOD is moving ahead to develop strategic direction, to create effective policies and to refine processes for generating language, regional and cultural capabilities.

ADDICTION ISSUES

31. Senator AKAKA. Admiral Mullen, the Army Inspector General (IG) report released in January indicates that between 25 and 35 percent of patients assigned to special wounded-care companies or battalions are addicted to or dependent on drugs, particularly prescription narcotic pain relievers. What steps are being taken to address the issue of potential overmedication or addiction within Wounded Transition Units (WTU)?

Admiral MULLEN. After receiving multiple briefings from scientists and line leaders with a growing concern about drugs, I have come to the conclusion that reducing the use of illicit drugs, unprescribed pharmaceuticals, and excess alcohol requires an integrated approach. Drug abuse is a systems problem that requires a coordinated medical and line leadership approach.

The Army Surgeon General LTG Eric B. Schoomaker established an aggressive program to minimize dependence on narcotics to treat pain through implementation of the recommendations of the Pain Management Task Force. The Task Force membership included a variety of medical specialties and disciplines from the Army, as well as representatives from the Navy, Air Force, TMA, and Veterans Health Administration (VHA). Between October 2009 and January 2010 this task force conducted 28 site visits at Army, Navy, and Air Force Medical Centers, Hospitals and Health Clinics, as well as VHA and civilian hospitals. During site visits, leadership and staff were asked to assess pain management capabilities, strengths, weaknesses, and best practices at their respective facilities.

The task force developed 109 recommendations that lead to a comprehensive pain management strategy that utilizes state-of-the-art/science modalities and technologies, and provides optimal quality of life for soldiers with acute and chronic pain. Medical providers are now informed and encouraged to utilize alternative means of pain management wherever possible. Such techniques include development and integration into clinical practice of a common Pain Assessment Tool, establishing acute pain medicine services across the continuum of care, implementing a drug abuse assessment strategy in the primary care setting, providing appropriate pain management and clinical pharmacy oversight in Warrior Transition Units (WTU), incorporation of pain related questions into the WTU Satisfaction Survey, and establishing a tiered pain management approach leveraging techniques such as osteopathic manipulation, acupuncture, and yoga.

U.S. Army Medical Command (MEDCOM) has established a number of policies that also address this issue, including:

1. OTSG/MEDCOM Policy 09–022, WTU High Risk Medication Review and Sole Provider Program. This has proven to be a highly successful medication reconciliation policy that has reduced adverse events in warriors. Providers perform medication reconciliation with each Warrior within 24 hours of assignment. Clinical pharmacists monitor and support safe and effective medication treatment and review medication profiles weekly. Case managers periodically perform clinical risk assessment and when assigned. Warriors identified as high risk are closely monitored, dispensed smaller quantities of medications, and are assigned to one provider and pharmacy.
2. OTSG/MEDCOM Policy 09–064, Use of Opioid Medications in Pain Management. This policy educates providers regarding the proper selection of patients and appropriate treatment with opioid analgesics. Primary Care Managers (PCM) will assess patients face-to-face before initiating opioid therapy for risk factors and meet with patients every 60–90 days to monitor clinical response and potential adverse effects.
3. MEDCOM published OPORD 10–76, Comprehensive Pain Management Campaign Plan (CPMCP) in September 2010, a phased operationalization of Pain Task Force recommendations including:
   a. 4.4.1. Establish Regional Medical Commands (RMC) Integrative Pain Management Centers and expansion/standardization of non-medication pain management modalities.
   b. 4.2.1. Incorporate integrative and alternative therapeutic modalities into a patient centered plan of care. Standards are being developed in order to expand/establish standards for alternative medicine programs (acupuncture, bio-feedback, yoga, osteopathic manipulation, and mind-body techniques).

Additionally, Dr. Stanley and I have had several discussions regarding this issue. One outcome of these discussions was a Memorandum on "A Systems Approach to Drug Demand Reduction in the Force." In this memorandum I made several recommendations that I believe will further reduce drug demand. These recommendations included:

- Subsume all DOD drug testing efforts under Readiness and fully fund the program
- Fund the expansion of drug testing to include the most commonly abused prescription drugs
- Complete the Prescription Drug Verification Portal to allow testing labs to instantly verify narcotics prescriptions in the TRICARE database

As recommended, the Drug Demand Reduction Office is now under the Deputy Under Secretary for Readiness and has been fully funded, including funding to complete the Prescription Drug Verification Portal. As of March 2011 the portal was undergoing connectivity testing and was scheduled to begin beta testing before the end of the month. Additionally, a testing method for benzodiazepines is under development and expected to be implemented during the second quarter of 2012.

It is important, however, to keep in mind that addiction is not the same as being prescribed narcotics or controlled substances even over a long period of time. Addiction refers to behaviors as a result of using or seeking drugs (narcotics) including active behaviors to obtain, abuse, and persist in a pattern of abuse in spite of adverse consequences. Tolerance and withdrawal may result after 6–8 weeks of daily use or years of intermittent use, however this does not equate to addiction. Consensus among addiction physicians shows development of narcotic dependence when treating pain in the absence of other risk factors is rare. Risk factors for addition include:

1. Personal history of addiction to opioids or other mood-altering substances (i.e. alcohol)
2. Family history of substance use disorders
3. History of poor medication compliance or abuse
4. Co-morbid psychopathology (depression, anxiety, etc) which may motivate a patient to self-medicate psychological pain.

Returning to the importance of line leadership involvement, I am also moving forward with a doctrinal change called "Total Force Fitness" which calls upon line leaders to take a proactive role in setting the conditions for healthy lifestyles in the force.

While the few specific examples I provided represent true progress, much more is being done. Task forces continue to study the many related issues and researchers continue to explore alternate pain management techniques. There will, of course, always be room for improvement, but we have made significant strides.

32. Senator AKAKA. Admiral Mullen, what is your overall assessment of the effectiveness of these WTUs?

Admiral MULLEN. The WTUs have been effective in helping ensure that our most seriously wounded soldiers are receiving the care they require and deserve. To some extent, however, WTUs have become victims of their own success. While intended to focus on our most seriously injured, the WTUs have become the default unit for our less injured soldiers also. The Warrior Care and Transition Program (WCTP), overseen by the Army's Warrior Transition Command, a Major Subordinate Command of the MEDCOM, currently provides care, support, and advocacy for some 17,000 soldiers and veterans. This represents a dramatic increase in scope and impact compared to what preceded the establishment of the WCTP. WTU plays a central role in the management of the care provided to wounded, ill, and injured soldiers.

Although a remarkable amount has been accomplished, the WCTP continues to mature and improve through a coordinated medical and line leadership effort. Through a vigorous program of organizational inspections and assistance visits, the Army's Warrior Transition Command continues to identify areas of the program that can be improved, as well as best practices that can be implemented across all WTUs. Additionally, through the Department of the Army's Inspector General Program, Army leadership recently identified 56 recommendations for improving the WCTP. The Army, under the leadership of BG Darryl Williams, Commander of Warrior Transition Command, is currently in the process of implementing these recommendations as part of a program of continuous refinement and improvement.

Additionally, the Army's Warrior Transition Command continues to respond to the requirements and recommendations of the ongoing DOD Inspector General's review of WTUs. Also, I am aware that the Congressionally mandated Recovering Warrior Task Force recently received an entire day of testimony from Brigadier General Williams and the staff of the Warrior Transition Command on the various aspects of WTUs and the WCTP and is now conducting site visits at WTU locations. I look forward to the findings and recommendations of the Task Force and I am confident Army leadership will continue its commitment both to transparency and responsiveness to the findings and recommendations of the Recovering Warrior Task Force.

I commend Army Chief of Staff, General George Casey for his leadership in ensuring that the care of wounded, ill, and injured soldiers continues to improve and flourish. As Secretary of Defense Gates and I have repeatedly stated, after the war itself, we have no greater responsibility than to care for those who have been wounded, become ill, or been injured in service to their country.

PSYCHOLOGICAL EVALUATIONS OF TROOPS

33. Senator AKAKA. Admiral Mullen, upon completing deployments and prior to returning to the civilian world, Guard and Reserve members are required to undergo a demobilization process to evaluate each member's overall health and wellbeing.

Oftentimes, mental health issues do not surface immediately, but rather after the soldier returns to civilian life. What changes do you plan to make in how these men and women are evaluated upon return from deployment to better account for their psychological wellbeing?

Admiral MULLEN. It is DOD policy that all returning servicemembers will receive a Post-Deployment Health Assessment within 30 days of their return from deployment with the participation of health care providers. In addition, they should receive a Post-Deployment Health Reassessment 3 to 6 months following their return. Both of these assessments have significant portions focusing on the evaluation of psychological well-being, and both of these assessments are required for returning Reserve component members.

In addition, DOD is implementing mental health assessments, described below, which will be required for Guard and Reserve members. The purpose of the mental health assessment is to identify mental health conditions including posttraumatic stress disorder, suicidal tendencies, and other behavioral health conditions that require referral for additional care and treatment.

On July 19, 2010, the Assistant Secretary of Defense for Health Affairs (ASD(HA)) issued a policy memorandum to the military departments to implement the mandatory mental health assessments following deployment. The Services have requested that the DOD Reserve Health Readiness Program (RHRP) support their Reserve and Guard Components by conducting the mental health assessments according to the HA policy guidance. RHRP has modified its contract to address the requirement telephonically. RHRP providers will use the DOD mental health assessment training program and become certified to conduct mental health assessments for the Reserve components as specified in the ASD(HA) guidance. The Air Force Reserve component expects to be in full compliance with the policy no later than April 2011. The other Service components are currently working with the RHRP to implement the mandatory mental health assessments in their Reserve components as quickly as possible.

NATIONAL GUARD AND RESERVE SUICIDE PREVENTION

34. Senator AKAKA. Admiral Mullen, DOD appears to be doing a better job preventing suicides within our Active-Duty Forces than in the past. At the same time, the suicide rates for National Guard and Reserve units have increased. Please discuss actions that are being considered or implemented to help our Guard and Reserve members in this area.

Admiral MULLEN. The resilience and suicide prevention programs that the Services have implemented are also being tailored to fit the unique needs of the National Guard and Reserve members and their families. The National Guard in each State has programs that are unique to the state, which incorporate such approaches as peer support, call centers, or embedded mental health providers. For Reserve members and their families who have entered the deployment cycle, the Yellow Ribbon Reintegration Program provides information and referrals that support their health and well-being.

DOD also has other tools, such as the online Real Warrior Campaign, Service-produced video messaging, Military Pathways self-assessment tools and the National Resource Directory that can enable remote access to support. This is particularly useful to Reserve component members and their families since they are dispersed throughout communities nationwide and not centrally located at an installation.

The following are some examples of ongoing National Guard and Reserve efforts being made to help members in this area:

- The Air National Guard Psychological Health Program has embedded Wing Directors of Psychological Health (WDPHs) to provide consultation, information, referral, and case management for Airmen and their families. WDPHs work with State Directors of Psychological Health, Joint Family Support Assistance Program and Military and Family Life Consultants, serving as consultants to medical personnel conducting pre- and post-deployment assessments of airmen and provide further screening, referral and case management as appropriate.
- The Army National Guard (ARNG) has distributed the Resilience and Risk Reduction Campaign Plan, and the ARNG "Leader's Guide to Soldier Resilience" to State leaders to promote the mental, physical, and spiritual health of soldiers and families. These guides complement peer-to-peer support programs, aimed at building a support network for soldiers in between traditional drill periods.
- The Navy Reserve sponsors a Psychological Health Outreach Program where counselors provide education, referrals, and resources to Navy and

Marine Corps reservists and their families, to include those who may be considered suicide risks. This proactive outreach to every corner of the country occurs during the deployment cycle and continues throughout the reintegration period in a variety of venues.

QUESTIONS SUBMITTED BY SENATOR MARK UDALL

PRESIDENT'S ECONOMIC STRATEGY FOR AFGHANISTAN

35. Senator UDALL. Secretary Gates and Admiral Mullen, the National Defense Authorization Act (NDAA) for Fiscal Year 2011 requires the President to provide an economic strategy for Afghanistan, one that supports the counterinsurgency campaign and helps create sustainable Afghan institutions—but also one that will help the Afghan Government eventually be able to pay for its own security. When can we expect to see this strategy, and how important do you believe an economic strategy is to the success of the overall campaign?

Secretary GATES. An economic strategy will contribute to the overall success of the civil-military campaign plan by helping USAID focus its efforts and resources in ways that maximize the effects of U.S. assistance in Afghanistan. We have participated in discussions, led by the National Security Staff, on the process by which the report will be produced. DOS and USAID are part of this process. DOD will participate in drafting of the report, as directed by the Executive Office of the President, and will pay particular attention to elements of economic strategy that support the U.S. counterinsurgency campaign in Afghanistan, promote economic stabilization, and enhance the establishment of sustainable institutions. DOD will work, as directed, to help complete this report as expeditiously as possible, noting the complexity and difficulty of the task.

Admiral MULLEN. An economic strategy is a key element of our whole-of-government approach to the campaign in Afghanistan in the short and medium term. Economic development addresses the drivers of instability in key population areas by providing equitable access to basic services. A economic strategy is also important to the longer-term sustainability of the Afghan state by enhancing the government revenue base and building a robust private sector that underpins job creation, economic growth and long-term fiscal sustainability.

In a coordinated interagency effort, DOS, USAID, and DOD are working to develop a U.S. strategy to strengthen Afghanistan's economy. Other departments and agencies across the U.S. Government, such as the Department of Treasury, will also be able to provide useful input to the strategy.

36. Senator UDALL. Secretary Gates and Admiral Mullen, what are likely to be the basic tenets of that economic strategy—the minimum objectives it should meet in order to complement and support the overall campaign?

Secretary GATES. DOD plays a supporting role to DOS and USAID in terms of an economic strategy for Afghanistan. I believe that it is important, at a minimum, for the economic strategy to address the need to expand employment opportunities for Afghanistan's bourgeoning population of young people and increase government revenue, giving hope that Afghanistan will in the future be able to provide for its own security with minimum outside assistance.

To reach fiscal sustainability and increase economic growth, Afghanistan must establish a transparent and accountable regulatory regime for managing public resources, including those generated by its natural resource base. The economic strategy should also account for agricultural growth, which contributes to food security. Finally, an economic strategy should make the maximum use of the resources that build towards an economic structure which benefits the majority of Afghans and does not facilitate the empowerment of a few elites.

Admiral MULLEN. While we would defer to DOS and USAID, who have the real expertise on this area, from DOD view it is important that at a minimum the economic strategy address the need to provide jobs for Afghanistan's bourgeoning population of young people. Additionally, this strategy should chart a way forward that gives hope that Afghanistan will in the future be able to provide for its own security with minimum outside assistance to ensure that Afghanistan is never again a safe haven for extremist to attack the United States. The strategy should make maximum use of the resources influx we now have to build towards an economic structure that benefits the majority of Afghans and does not facilitate the empowerment of exploitive elite.

An economic strategy will be an important element of developing Afghanistan's long term fiscal sustainability. It will emphasize the need to move from donor dependency to export-led growth.

37. Senator UDALL. Secretary Gates and Admiral Mullen, from a DOD perspective, what should be the further trajectory of engagement and commitment by the USAID and other elements of the U.S. Government that provide civilian assistance?

Secretary GATES. The U.S. strategy should take into account both near-term activities that help stabilize cleared areas, as well as longer-term considerations that are more typical of traditional development programs. To that end, the U.S. Embassy in Kabul and U.S. Forces-Afghanistan recently revised the joint civil-military campaign plan, which spells out the integrated civilian and military efforts required for our strategy in Afghanistan to succeed. DOS and USAID contributed additional personnel through the civilian surge, allowing civilians to partner and share expertise with U.S. military units at every level of the chain of command, from the national level down to the district level. I strongly support USAID's continued assistance to the Afghan Government to build effective governance structures and effectively deliver services to the Afghan people. Given the importance of agriculture to the Afghan economy, USAID agricultural experts along with U.S. Department of Agriculture experts have an important role in advising Afghans on ways to increase the productivity and income of Afghan farmers, and in helping to build the capacity of the Ministry of Agriculture, Irrigation, and Livestock.

Admiral MULLEN. USAID and its civilian partners play a critical role in Afghanistan, and need more resources to continue to perform the challenging task of rebuilding Afghanistan. In areas that are more stable, USAID has demonstrated its value by providing longer-term economic development projects. We see significant need to preserve and expand the programs and activities currently undertaken by USAID to support the stabilization effort, build capacity of the government and civil society, encourage economic growth, and further the social development of Afghanistan. As we continue our efforts to develop Afghanistan's economy, we will consider how best to ensure the unique capabilities that USAID provides are sustained.

As we begin to thin out our military presence in areas that we transition to ANSFs, we will rely on our civilian partners to take a lead role in engaging with Afghan counterparts. The sustainment of civilian assistance in Afghanistan will be critical to our strategic partnership with the Afghans, and as Secretary Gates recently observed: "Economic development is a lot cheaper than sending soldiers".

Note: General Petraeus's testimony on March 15, 2011:

> "I am concerned that levels of funding for our DOS and USAID partners will not sufficiently enable them to build on the hard-fought security achievements of our men and women in uniform. Inadequate resourcing of our civilian partners could, in fact, jeopardize accomplishment of the overall mission. I offer that assessment, noting that we have just completed a joint civil-military campaign plan between U.S. Forces Afghanistan and the U.S. Embassy which emphasizes the critical integration of civilian and military efforts in an endeavor such as that in Afghanistan."

TASK FORCE FOR BUSINESS AND STABILITY OPERATIONS

38. Senator UDALL. Secretary Gates and Admiral Mullen, what further role in Afghanistan do you envisage for the Task Force for Business and Stability Operations (TFBSO)?

Secretary GATES. TFBSO is an invaluable element of the United States' comprehensive civil-military effort in Afghanistan. TFBSO's mission—generating economic growth in conflict areas, specifically in Afghanistan, including through the mobilization of private investment—is one that no other part of the U.S. Government is currently able to perform. I understand the view of some that DOD is not the appropriate fit for such a mission, but it is important to note that this work is not currently being carried out by any other U.S. department or agency.

Moreover, senior Afghan officials requested that TFBSO continue its activities in Afghanistan, and senior U.S. military and civilian leaders in Afghanistan expressed strong support for TFBSO's activities. While DOD works to provide options to Congress for the continuation of TFBSO's mission, I request your support in continuing the TFBSO program so that it may continue performing its vital role.

Admiral MULLEN. The TFBSO has fulfilled an important role in Afghanistan. There is a large institutional gap in U.S. capability regarding economic development operations in conflict zones. TFBSO has demonstrated value to DOD field commanders and U.S. Ambassadors—both in Iraq and Afghanistan—as filling a vital

need for initiating longer-term economic development projects while the countries are, or were, in ongoing operations. Specifically, it helps fill the gap between initial stabilization and longer-term economic development. We see significant need to preserve the programs and activities currently undertaken by the TFBSO to support economic stabilization operations in Afghanistan. As we continue our efforts to develop Afghanistan's economy, we will consider how best to ensure the unique capabilities the TFBSO provides are sustained.

39. Senator UDALL. Secretary Gates, please share your views on the requirement in the NDAA to provide a plan for transferring TFBSO's activities to USAID, whether you would support such a transfer in fiscal year 2012, and whether you have any concerns regarding the potential transfer of the TFBSO's activities to USAID.

Secretary GATES. The TFBSO proved to be an invaluable element of the United States' comprehensive civil-military effort in Afghanistan. TFBSO's mission—generating economic growth in conflict areas, specifically in Afghanistan, including through the mobilization of private investment—is one that no other part of the U.S. Government is currently able to perform. I understand the view of some that DOD is not the appropriate fit for such a mission, but it is important to note that this work is not currently being carried out by any other U.S. department or agency.

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QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN

MEDICATION MANAGEMENT

40. Senator MANCHIN. Secretary Gates, last week the New York Times reported on servicemembers that come home from battle caught in a web of misuse and overuse of prescription drugs—in fact, a young man from my home State was featured as an example of how the misuse of medications can lead to disaster. We send our men and women to war on multiple deployments and give them medications to keep them awake, to help them sleep, and to help ease the physical and psychological pain of being in a stressful environment. As a result, many are coming home broken, not healed. We are finding out that the stories behind many suicides and unexpected deaths are often complicated by dangerous cocktails of drugs.

It's been nearly 2 years since the Pentagon was directed in Section 715 of the NDAA for Fiscal Year 2010 to study how medications are being used, and misused, to treat the physical and mental wounds of our warfighters, and how to decrease the risks to our troops. The study is now overdue by almost a year. This problem is costing lives and money. When can we expect to receive this critical study on the management of medications for physically and psychologically wounded members of the Armed Forces?

Secretary GATES. I appreciate the sensitivity of this issue and your concern for a solid prevention strategy. As was indicated in the interim report, DOD pinpointed certain effective methodologies that identify dangerous combinations of medications. The scope of this study is complex and multi-layered, however. It includes both inpatient and outpatient care at military treatment facilities, service specific WTUs, community-based WTUs, and private sector care.

Additionally, this protocol must be approved by the Institutional Review Board (IRB) that oversees the contractor with whom the Department is engaged in for the study. Likewise, DOD needs approval by the IRBs of the six multi-Service sites where the contractor would conduct focus groups and a review of medication practices.

The overall IRB process may take up to a year. At this time, DOD obtained all of the necessary IRB approvals.

The site visits are scheduled to take place no later than March 31, 2011. These site visits are instrumental in formulating a gap analysis between current and best practices and in developing policies and procedures that will carry out the intent of the legislation. DOD anticipates completion of the final report by November 2011.

Thank you for your continued patience as we develop a comprehensive report that is thoroughly responsive to the legislative requirements.

41. Senator MANCHIN. Admiral Mullen, please provide more information about the growing problem of over-medicating and self-medicating soldiers and what resources in the fiscal year 2012 budget are being directed toward this problem.

Admiral MULLEN. Increased medication use is a societal problem and DOD medicine mirrors civilian practice. This problem has been of increasing concern to Dr. Stanley and me. Our ongoing discussions lead me to believe that drug abuse represents both a symptom and a problem that fuels the worsening of other conditions. Senior military leaders have been aware of the acute need to gain better controls on the inappropriate use of drugs. However, until recently, we have been unaware of the hurdles faced by their subordinate commanders and by the DOD drug testing community. We realize that drug demand reduction operates within a larger system of readiness and is therefore of great importance to the Chiefs.

Despite growing concerns among commanders that drug use is a problem within the ranks, the DOD drug testing programs have remained at budget flat line for the past several years and are facing an estimated $11 million shortfall. While the abuse of prescription drugs has grown substantially since the beginning of the wars, we have only been capable of testing a fraction of these compounds. Until recently, the main DOD drug testing program was positioned under the TMA while its budget was under the Office of the Secretary of Defense (OSD) Policy (DASD Counternarcotics and Global Threats) within the Counternarcotics Central Transfer Account. This created a dual loyalty conflict.

Compared to the 1980s, when highly effective drug testing in the DOD was first launched, there has been a substantial reduction in commanders' willingness to take urinalysis positive individuals to adjudication. This was certainly a concern heard by VCSA Chiarelli during his visits to installations for a suicide prevention task force review. Commanders indicated the competing demands of filling ranks for deployment and removing drug-using troops made random urinalysis untenable for many. Furthermore, the adjudication process is often long and is perceived to distract leaders from deployment-specific tasks. Rising rates of legal narcotics prescriptions without a seamless capability to quickly verify the prescription means that these actually cloak the real extent of the problem.

To help alleviate these problems, I recommended that Dr. Stanley take the following actions:

- Subsume the DOD drug testing efforts directly under Readiness and fully fund the program to the required levels.
- Complete the Prescription Drug Verification Portal (the portal that would allow drug testing labs to instantly verify narcotics prescriptions in the TRICARE database).
- Make drug prosecution statistics part of regular unit readiness reporting.
- Designate several independent drug testing teams (similar to the approach used by the UK MOD) as mobile units that can independently obtain specimens at random. This encourages commanders to remain compliant and introduces a new variable that is likely to improve deterrence.
- Fund the expansion of drug testing to include the most common prescription drugs of abuse (particularly benzodiazepines e.g. Valium, this is estimated by the Drug Demand Reduction Program Office to be a $20 million shortfall).
- Preface these changes with an announcement to the force encouraging drug counseling and treatment 90 days prior to any launch of a new testing regimen. The objective of the program should be to drive inappropriate drug use to their lowest possible levels.
- Regularly exchange information between the DOD Drug Demand Reduction Program and the ongoing suicide prevention programs and the DOD Joint Pain Task Force.

As previously stated, several of these recommendations have already been implemented and others are in progress.

In addition to the initiatives above, the Army's new policies and procedures for identifying and mitigating polypharmacy have reduced the risk of over-medication and self-medication. These include:

- OTSG/MEDCOM Policy 10–076, Guide for Enhancing Patient Safety and Reducing Risk via the Prevention and Management of Polypharmacy Involving Psychotropic Medications and Central Nervous System Depressants: Implementation of this policy has resulted in improved communication by involving the patient in the treatment plan. The provider will review medications at each encounter and refer to a clinical pharmacist for a comprehensive medication review when the patient is on four or more medica-

tions with at least one a psychotropic or Central Nervous System depressant.

- Revision of MEDCOM Regulation 40–51, Medical Review Officers and Review of Positive Urinalysis Drug Testing Results: This revision will limit the authorized use of controlled substances and clarify the timeframe for determining legitimate use of controlled substances.

Note: As of the date and time of submission. This response does not address specific resources included in the fiscal year 2012 budget request. A revised response will be provided once granularity on this subject is obtained.

EFFICIENCY INITIATIVES

42. Senator MANCHIN. Secretary Gates, I want to applaud your efforts to, as you've said, "reform the way the Pentagon does business—to not only make every defense dollar count, but also to become a more ... effective organization." The American taxpayers want us to start making the hard choices—to root out every inefficiency, cut every bit of waste, and most importantly, change the culture of endless money.

I am still concerned that we do not have the full audit of DOD. What are the obstacles preventing this commonsense practice from occurring, and what can we do to make it happen sooner?

Secretary GATES. DOD's massive size and complexity make it extremely difficult to achieve full auditability. In addition, DOD financial processes were established and ingrained in systems long ago. These processes and systems were designed for budgetary accounting—not proprietary or commercial accounting called for in the Chief Financial Officers (CFO) Act. To meet the commercial accounting standards called for in the CFO Act, there is a substantial amount of work to be done, including efforts to address the most difficult challenges:

- DOD systems are not integrated—breaking the audit trail
- Systems do not collect data at the transaction level
- Many diverse functional organizations must work together in end-to-end processes
- Earlier focus was on information of limited value to management and was not supported throughout DOD

Meeting these challenges and improving DOD's business processes receive more attention than ever before. DOD is addressing them by changing the way it does business. To realize success, DOD is using a streamlined approach that focuses on improving and auditing the information we most use to manage. Improving the budgetary and mission critical asset information used to manage the DOD will allow commanders and other leaders to better meet mission needs with available resources. I believe this alignment of operational and financial objectives is the most effective incentive to improve financial management.

DOD also established long- and short-term goals, set up a governance process, and provided funding to the Military Services to make process and system improvements. These system improvements, primarily made by deploying Enterprise Resource Planning Systems (ERPS), have broad operational improvement goals which include improving business processes in a way to support audited financial statements. DOD also implemented other effective measures such as including audit related actions and objectives in Senior Executive performance plans. Preparing DOD for financial statement audits is a monumental task, but with leadership focus, accountability, and our streamlined approach, I believe it can succeed. With this streamlined approach I believe that DOD can achieve its goal of meeting this objective by 2017.

CHINA

43. Senator MANCHIN. Secretary Gates, during the next 5 to 10 years, how do you see the defense budget changing as a result of China's predicted rise as a worldwide provider of strategic minerals, consumer goods, and weapons?

Secretary GATES. The rise of China as a regional political, economic, and military power with global ambitions is one of the defining elements of the international strategic and security environment.

The primary focus of China's military modernization appears to remain on preparing for contingencies in the Taiwan Strait. However, China's military is also exploring missions beyond Taiwan. DOD is watching carefully, for example, China's development and acquisition of weapon systems and capabilities that would classify as intended for anti-access and area denial missions. The 2010 Quadrennial Defense

Review examined operating in an anti-access/area denial environment and recommended that the United States pursue effective, affordable, and sustainable U.S. defense posture based on a broad portfolio of military capabilities with maximum versatility across the widest possible spectrum of conflict.

The President's budget proposal for fiscal year 2012 includes $113 billion for DOD to procure the capabilities needed to protect the United States and its interests in the Asia-Pacific region. Included in this amount are funds to invest in new programs, as well as modernization efforts for existing equipment. Two specific items of note are investments in a new bomber for the Air Force and five additional ships for the Navy.

These investments will enable the United States to sustain our forward presence in the Western Pacific and to operate in contested areas in the future.

44. Senator MANCHIN. Secretary Gates, what does DOD now spend on goods from China?

Secretary GATES. In fiscal year 2010, the DOD purchased a total of $123,560 in unspecified miscellaneous commercial, industrial, and professional goods and services directly from Chinese industry. DOD expects to issue its annual report to Congress on purchases from foreign entities shortly, presenting in greater detail DOD purchase of goods and services from all foreign countries, including China.

QUESTIONS SUBMITTED BY SENATOR KIRSTEN E. GILLIBRAND

AFGHANISTAN

45. Senator GILLIBRAND. Secretary Gates, in December 2010 President Obama, while discussing the results of his Afghanistan-Pakistan review policy, said "the United States is on track to achieve its goals in the war against terrorism against al Qaeda in the Afghanistan-Pakistan region." The review also stated "as a result of our integrated efforts in 2010, we are setting the conditions . . . to begin a responsible, conditions-based U.S. troop reduction in July 2011." Now that we are about 135 days away from that July 2011 objective, how many troops do you think conditions on the ground will allow us to bring home this year?

Secretary GATES. General Petraeus will provide options and make a recommendation for the drawdown of U.S. surge forces in the coming months. This timing will allow him to take into account important on-the-ground considerations, including progress in provinces and districts that are being transitioned to Afghan-security lead. This analytical process will allow the time needed to provide the President the best information to inform his ultimate decision on this matter. Until that time, it is too early to say how many U.S. forces will redeploy.

46. Senator GILLIBRAND. Secretary Gates, you have budgeted in fiscal year 2012 for 98,000 troops in Afghanistan—the same force level you have today. I understand that you wish to leave yourself wiggle room in case conditions on the ground do not permit a timely withdrawal, but the American people want to see execution of the promise to begin withdrawal this summer. At some point we need to reduce our troop presence and turn security over to the Afghan security forces. Why could you not have assumed a lower number of troops in building your fiscal year 2012 budget?

Secretary GATES. There is every indication that conditions will permit the United States to begin withdrawing forces in July 2011. General Petraeus will provide options and make a recommendation for the commencement of the drawdown of U.S. surge forces. General Petraeus may also recommend, as the transition process continues and the responsibility for security in selected regions is transitioned to Afghan security forces, that some U.S. forces be reinvested in other areas.

DOD's budget request is driven by numerous factors, including assumptions that may need to be reassessed as conditions evolve in a dynamic environment. General Petraeus and I continue to assess the conditions on the ground so that we may provide options and a recommendation to the President, but I believe that it is premature to attempt to forecast a budget based on lower U.S. force levels at this point in time.

47. Senator GILLIBRAND. Secretary Gates, as I assess the situation, it seems that 135 days out you are still not confident about conditions on the ground. When will you be confident?

Secretary GATES. I am confident that we are making steady progress on the ground. I recently returned from my 13th trip to Afghanistan as Secretary of Defense and the progress made by our forces exceeds my expectations.

The President and I trust the judgment of General Petraeus, who will provide us options and make a recommendation in the coming months for the commencement of the drawdown of U.S. surge forces in July 2011.

48. Senator GILLIBRAND. Secretary Gates, if your assumptions are ultimately too high, where will the extra funding go?

Secretary GATES. I will consult with Congress to determine the best course of action.

49. Senator GILLIBRAND. Secretary Gates, are you planning a similar model in Afghanistan that we executed in Iraq—changing composition of the forces deployed in Afghanistan, over time, to an "advise and assist mission" in support of Afghan forces?

Secretary GATES. The short answer is yes. As the United States moves toward transferring lead responsibility for security to the Afghan security forces in 2014, I expect to continue to conduct training, advising, and assisting activities and joint counterterrorism operations, at the request of the Government of Afghanistan, to help secure U.S. and Afghan mutual national interests. This is particularly helpful in ensuring that Afghanistan is never again a safe haven from which terrorists attack the United States. An enduring strategic partnership with Afghanistan is important to demonstrate to the Afghans and others in the region that the United States is committed to this goal.

50. Senator GILLIBRAND. Secretary Gates, how much of that progress do you expect to accomplish in fiscal year 2012?

Secretary GATES. The situation in Afghanistan is very fluid. Progress is significant but still fragile and reversible. Based upon the progress in recent months, however, I am increasingly confident that alongside our Afghan and international partners, and with Congressional support, the United States will continue to solidify security gains and transition lead responsibility for security for additional geographic areas to Afghan security forces throughout fiscal year 2012. Concurrently, Afghan security forces will continue to develop their fighting and support capabilities. I believe that our strategic partnership with the Government of Afghanistan, including our willingness to train, advise, assist, and equip the ANSF, and to carry out joint counterterrorism operations through 2014 and beyond, will change the strategic calculus of the Taliban and other actors. Combined with our relentless pursuit of mid-level Taliban commanders, the increasing competency and professionalism of ANSF will encourage greater numbers of fighters to reconcile with the Government of Afghanistan and reintegrate into Afghan society.

51. Senator GILLIBRAND. Admiral Mullen, in the recently published National Military Strategy (NMS) you stated "we must continue to support and facilitate whole-of-nation approaches . . . military power complements economic development, governance, and the rule of law." Yet you just said that improvements in Afghanistan's governance and reconstruction have not kept pace with improving security. Given the Karzai Government's extensive corruption, including the looming collapse of the Kabul Bank that pays Afghan military salaries, how do you hope to sustain the erosion of al Qaeda and the Taliban's support among the Afghan people no matter what successes our troops obtain?

Admiral MULLEN. We will sustain the erosion of al Qaeda and the Taliban's support among the people by capitalizing on our successes and momentum gained through the winter 2010 campaign. The new Civilian-Military Campaign Plan is closely aligned with the Government of Afghanistan's National Development Strategy and the Joint Afghan NATO Inteqal Board (JANIB) transition plan. Our objectives are oriented towards the goals of the Lisbon Conference and transitioning the lead for security to Afghan security forces by the end of 2014. There is a greater emphasis on interagency coordination and support to our civilian partners on provincial and district governance, trade, transportation, infrastructure; counter-narcotics programs; customs and border-capacity development and sustainable private-sector development. There will be an emphasis on civilian and diplomatic efforts throughout transition but we now have the right inputs to make the strategy successful.

52. Senator GILLIBRAND. Admiral Mullen, when I traveled to Afghanistan and Pakistan a few months ago I heard repeatedly from our commanders on the ground

that our mission in Afghanistan is inextricably linked to Pakistan's harboring of al Qaeda, Taliban, and aligned organizations. U.S.-Pakistani relations have chafed greatly over the past year. How are we going to execute a redeployment strategy in Afghanistan if Pakistan does not go after the insurgency within its borders?

Admiral MULLEN. Our commanders on the ground accurately characterize the inextricable linkage of security and counterinsurgency operations in Afghanistan and Pakistan. Peace in the region, and our mission success, depend on securing populations and denying safe havens for terrorist groups on both sides of the border. Given the difficult terrain and sophisticated threats in the border area, observers not in contact with the Pakistan military may conclude that they are not pursuing insurgents on their side of the border.

The situation on the ground in Pakistan is complex. The Pakistan military has made unprecedented progress over the past 2 years in clear and hold operations against militants in Khyber-Pakhtunkhwa and the Federally Administered Tribal Areas (FATA). In the course of those operations, they have lost roughly 3,000 dead and 8,000 wounded among security forces fighting militants, with thousands of civilian casualties as well. While it is true that the Pakistan military has not gone after Afghanistan-focused insurgents to the same degree it has taken on those groups targeting their own government this is a function both of Pakistan's perceptions about the specific threats and the capabilities of the Pakistan military, which are already stretched by the need to continue holding areas previously cleared.

Although our bilateral relations with Pakistan have had difficult moments in the past year, there have also been noteworthy positive developments such as cooperation between our forces in flood relief operations and the development of more formal, robust defense planning ties and security assistance. We have also greatly improved operational cooperation between our forces in the border regions, reducing safe havens in both Afghanistan and Pakistan.

DOD continues to plan force level reductions in Afghanistan based on the increasing capabilities of ANSFs and conditions on the ground. As our cooperation and coordination with Pakistan in the border area grows and develops, the greater the conditions will be to secure the population.

TERRORISM

53. Senator GILLIBRAND. Admiral Mullen, in the NMS it states "the intersection between states, state sponsored, and non-state adversaries is most dangerous in the area of weapons of mass destruction proliferation and nuclear terrorism." And then it goes on to say "the prospect of multiple nuclear armed regimes in the Middle East with nascent security and command and control mechanisms amplifies the threat of conflict, and significantly increases the probability of miscalculation or the loss of control of a nuclear weapon to non-state actors." How confident are you that al Qaeda or associated insurgent groups could not acquire or steal a nuclear weapon or nuclear materials from Pakistan, that they could in turn use in a nuclear September 11 scenario?

Admiral MULLEN. The prospect of unsecure nuclear weapons or materials, and their acquisition and use by al Qaeda or an affiliate, is a serious threat that DOD addresses in the NMS as well as in our operational planning efforts. This scenario presents a formidable challenge for developing prevention and response strategies; however, as preventing nuclear-armed terrorism is a top presidential priority, we have a number of initiatives in place to broadly address this threat.

With regard to Pakistan specifically, as the Secretary has said before, we are confident in the security of Pakistan's nuclear arsenal.

54. Senator GILLIBRAND. Admiral Mullen, how are the growing U.S.-Pakistan tensions impacting our ability to protect against that scenario?

Admiral MULLEN. The U.S.-Pakistan relationship has endured periods of tension as well as periods of cooperative growth in recent years. While street protests and negative media coverage frequently complicate our work in Pakistan, they do not prevent the cooperative efforts that we and our Pakistan military counterparts see as critical to mutual security. Compared to 10 years ago, when bilateral relations were nearly frozen due to sanctions we have far more robust mechanisms for cooperation and dialogue today. The bilateral relationship reflects a slow, difficult process of deepening trust and cooperation. Full transparency may require years to develop. Progress depends on our ability to identify and build upon areas of mutual concern and mutual interest; those areas become a platform for effectively preventing worst case scenarios from materializing in Pakistan.

55. Senator GILLIBRAND. Admiral Mullen, I am very concerned about the growing risk of Yemen's collapse, given the recent protests, the historical conflicts within and across Yemen's boundaries, and the country's dire poverty. A year ago, a bomb attempt conceived in Yemen threatened our Homeland. Last year I asked Secretary Gates why we ought to focus so many resources on Afghanistan when we face a similar threat of an unstable state with Al Qaeda or related elements in Yemen. We seem to be addressing Yemen with a target counter-terrorism mission, rather than a larger counterinsurgency footprint as in Afghanistan. Please explain the strategic difference. Which do you think is more effective?

Admiral MULLEN. The largest difference between our strategies in these two countries lies in the scope and scale of our efforts. Unique threat contexts in each of these countries have shaped our responses. We invaded Afghanistan to fight the Islamist Taliban militia and its terrorist affiliate, al Qaeda, who held control of most of the country. Our efforts in Yemen, on the other hand, are limited to the cooperative counter-terrorism assistance we can provide that respects Yemen's sovereignty. While the scale and scope of the threat is larger in Afghanistan, our significant military presence allows us to conduct full-scale military operations. We do not have that liberty in Yemen, because we cannot operate within the country without Yemeni permission. Instead, the U.S. military seeks to build Yemeni counter-terrorism capacity. We have a viable threat in Yemen, and the growing instability there may allow for greater terrorist activity, but our ability to combat AQAP is confined to our cooperative arrangements with the Yemenis. Both our counter-insurgency and counter-terror strategies can be effective depending on how and where they are applied. In each of these countries, we are working within our resource and legal constraints to develop comprehensive approaches to ending terrorism. Counter-insurgency efforts in Afghanistan are engaging with communities to target enemy insurgents while improving security. In Yemen, we are training counter-terrorism forces while pursuing a range of development initiatives to reduce the systemic causes of terrorist recruitment.

CYBERSPACE

56. Senator GILLIBRAND. Admiral Mullen, the NMS states, "the United States faces persistent, widespread, and growing threats from state and non-state actors in space and cyberspace. Should a large-scale cyber intrusion or debilitating cyber attack occur, we must provide a broad range of options to ensure our access and use of the cyberspace domain and hold malicious actors accountable. We must seek executive and congressional action to provide new authorities to enable effective action in cyberspace". What are the specific authorities you need to support cyberspace operations?

Admiral MULLEN. Foremost, we need to clearly specify the military's functions and authorities with respect to both offensive and defensive activities in cyberspace, both to protect DOD networks and in support of broader national security interests. In the past, network protection was reactive, limited to implementing "fixes" to network vulnerabilities that had already been exploited by threat actors. Such a posture is insufficient and cannot be characterized as a effective "defense" in a domain where offensive action has clear advantage. In cyberspace, static defenses are quickly subverted, overwhelmed, and defeated. DOD is developing a dynamic, agile, active, and informed defensive capability. I am confident that this approach will result in more secure, hardened, and resilient DOD networks. Extending similar capability to the Nation's critical infrastructure and government functions, as called for in the Comprehensive National Cybersecurity Initiative, will require an integrated whole-of-government approach.

57. Senator GILLIBRAND. Admiral Mullen, in the strategy you state that the United States faces growing threats from state and non-state actors in cyberspace. Are you saying that you are seeing evidence of terrorist groups gaining the capability of launching a cyber attack or simply using the Internet for recruitment, motivation, or fundraising?

Admiral MULLEN. Yes. Al Qaeda and associated Violent Extremist Organizations (VEOs) aggressively use the Internet to disseminate their ideology and propaganda; to radicalize, recruit, and mobilize new members; to coordinate operations; and, to generate and distribute funds. A VEO's ability to exploit the Internet complicates our military's efforts in Iraq and Afghanistan, while posing challenges to our domestic law enforcement and Homeland Security initiatives. Additionally, I am concerned that these VEOs may eventually acquire and use sophisticated cyber tools developed by nation-states, criminal organizations, or disaffected cyber specialists whom they

may recruit. If this occurs, the U.S. Government will not have the luxury of time and distance to separate ourselves from the adversary.

58. Senator GILLIBRAND. Admiral Mullen, the fiscal year 2012 budget requests have $2.3 billion for cyber security. Can you explain the components of that number and how it compares to the last 3 years?

Admiral MULLEN. The fiscal year 2012 budget request for cyber security of $2.32 billion is made up of core information assurance (IA) activities [$2.00 billion], the cyber security/DIB initiative [$0.20 billion], and Cyber Command (CYBERCOM) headquarters operations [$0.12 billion] programs. The core IA program includes the following program elements: Public Key Infrastructure, Key Management Initiative, and Information System Security Program. DOD must protect and defend information, information-based processes, and information systems on the Global Information Grid at all security levels to meet its strategic goals.

The Department is also working to identify and mature the capabilities required to support cyber operations and the stand-up of CYBERCOM. The fiscal year 2012 President's budget request for cyber security continues to address computer network defense; cyber identity and access management; engineering and deployment controls; cryptographic key production and management; cross domain capabilities; workforce development; and operational resiliency. The fiscal year 2012 request also initiates the design and construction of a Joint Operations Center for CYBERCOM; adds resources to monitor and secure classified networks and information; increases manpower to assess cyber threats and develop countermeasures; sustains cyber schoolhouses; and supports evolution of DIB cyber security activities.

The enacted fiscal year 2009 and fiscal year 2010 budgets for cyber security were for $2.32 billion and $2.35 billion, respectively. The fiscal year 2011 budget request was for $2.50 billion. Cost reductions in fiscal year 2012 are due to operational changes to include the removal of initial/one-time facility and equipment costs for establishing CYBERCOM at Fort Meade in fiscal year 2011, and cyber security funding transfers into DISA's Working Capital Fund.

HOMELAND DEFENSE SECURITY PREPAREDNESS

59. Senator GILLIBRAND. Secretary Gates, the NMS states that "we will continue to dedicate, fund, and train a portion of the National Guard for homeland defense and defense support of civil authorities. Working with Canada and Mexico, we will remain prepared to deter and defeat direct threats to our North American homeland." What is your assessment of the terrorist infiltration threat along our northern border and what specific steps are you taking to counter it?

Secretary GATES. This question is best answered by the Department of Homeland Security (DHS), which is responsible for preventing terrorist attacks within the United States (6 U.S.C. §•A(b)(1)(A)); preventing the entry of terrorists and the instruments of terrorism into the United States (6 U.S.C. § 202(1)); and securing the borders, territorial waters, ports, terminals, waterways, and air, land, and sea transportation systems of the United States (6 U.S.C. § 202(2)).

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

RISKS ASSOCIATED WITH WITHDRAWAL FROM IRAQ

60. Senator MCCAIN. Secretary Gates and Admiral Mullen, U.S. troops are currently deployed with ISFs and Kurdish peshmerga fighters along the disputed internal boundaries between Arab and Kurdish communities. These "Combined Security Mechanisms" are easing tensions between Arabs and Kurds, while contributing to the integration of peshmerga units into the ISFs. How risky and potentially dangerous is it for these peacekeeping mechanisms to go away at the end of this year, as they must under the current security agreement?

Secretary GATES. The U.S. Government continues to implement the U.S.-Iraq Security Agreement fully, including completing the drawdown of U.S. forces from Iraq by December 31, 2011. As part of the drawdown, U.S. Forces-Iraq (USF–I) is taking steps to mitigate the potential for conflict by building confidence at the local, provincial, and national levels between security forces and political leaders. USF–I is also working closely with DOS to transition the U.S. military's role as a mediator and honest broker in northern Iraq to the post-2011 civilian-led mission.

The Combined Security Mechanism (CSM) consists of a series of trilateral (U.S. military, ISF, and Kurdish Security Forces (KSF)) coordination centers and checkpoints to facilitate confidence-building and coordination at the local and national

levels in areas of northern Iraq with Disputed Internal Boundaries. At the same time, Prime Minister Maliki's 2009 designation of some KSF units as "Regional Guard Brigades" allowed USF–I to advise, train, and assist these forces so that they are able to integrate into the ISF. USF–I developed drawdown plans for ending U.S. participation in the CSMs by engaging with Iraqi and Kurdish military leaders to transition this trilateral mechanism to a bilateral forum. ISF and KSF modernization efforts also increased stability, improved communication, and built confidence among leaders in DIBs areas. These efforts will mitigate the impact of U.S. forces' drawdown from the CSMs.

DOS plans to establish temporary Embassy Branch Offices in the DIBs to address local and provincial ethno-sectarian tensions. Even so, DOS's ability to successfully lead the mediator and honest broker missions in northern Iraq depends on full funding of its fiscal year 2012 budget request. Without full funding, the achievement of the U.S. goal to facilitate peaceful, political processes for resolving outstanding issues in northern Iraq is at risk.

Admiral MULLEN. Unresolved Arab-Kurd issues, including the resolution of Article 140, agreement on a hydrocarbon law, revenue sharing, and the status of Kirkuk, remain a primary concern. Tensions are elevated within disputed areas and will remain so until these issues are resolved. Dialogue among Arab and Kurdish leaders with international mediation has been helpful but it is highly unlikely issues will be resolved before U.S. military forces leave Iraq at the end of the year.

In the short term, the Combined Security Mechanism is an effective stop gap until these broader issues are resolved and provides a confidence building measure between the Government of Iraq and the Kurdish Regional Government. In coordination with the State Department, we have developed plans to mitigate the risk of U.S. forces leaving the disputed areas at the end of the year by significantly increasing our diplomatic presence in the north. We believe this increased diplomatic presence, if fully funded, will help address Arab-Kurd tensions. The risk of violent confrontation will increase without an adequately resourced replacement for the current U.S. military presence.

61. Senator MCCAIN. Secretary Gates and Admiral Mullen, please explain what comparable civilian arrangement will take over the peacekeeping role now played by U.S. troops operating along the Arab-Kurd fault lines in Iraq.

Secretary GATES. DOS's plan for its 2012 civilian-led mission prioritizes engagement in northern Iraqi areas with Disputed Internal Boundaries by providing for the establishment of Embassy Branch Offices (EBOs) in Ninewa and Kirkuk Provinces. The EBOs will be staffed by diplomats, development specialists, and representatives from other U.S. agencies, such as the Departments of Justice, Agriculture, and Treasury, in order to bring a whole-of-government approach to conflict prevention and peace building in northern Iraq. The location of the EBOs along the Arab-Kurd ethnic fault line reflects the concern that Arab-Kurd tensions remain a leading source of instability in Iraq. DOS's ability to play a mediating and honest broker role in northern Iraq depends on full funding of its fiscal year 2012 budget request.

Admiral MULLEN. As part of the U.S. military drawdown in Iraq, we have planned for and are actively transitioning enduring programs to the State Department and the Government of Iraq. This includes the U.S. role in the trilateral security relationship we share with the ISF and the Peshmerga along Arab-Kurd fault lines. While different from the military's current role, the State Department will utilize the diplomatic tools inherent to its capabilities in mitigating tensions between Arabs and Kurds. I am concerned the State Department will assume increased risk in this very important role if their funding is further decreased.

IRANIAN INTENT

62. Senator MCCAIN. Secretary Gates, would you agree that the highest priority of the Iranian government during this year is to prevent any changes to the security agreement with Iraq so as to ensure that no U.S. troops will remain in Iraq by January 1, 2012?

Secretary GATES. Iran would almost certainly oppose a continued U.S. troop presence after 2011. I remain troubled by Iran's continued support to, and training of, militant groups that target both Iraqi and U.S. personnel. The United States encourages Iran to maintain constructive and peaceful relations with its neighbor Iraq, with which it shares a long history of cultural, religious, and economic ties. Iran can be a better neighbor by respecting Iraqi sovereignty, and by ending its support to those who support terrorism in Iraq.

NUCLEAR WEAPONS STOCKPILE MODERNIZATION

63. Senator MCCAIN. Secretary Gates, in their proposal to fund the remainder of fiscal year 2011, House appropriators cut $300 million from the President's request for nuclear weapons modernization. Do you agree that it is critical that Congress fund the $624 million increase in fiscal year 2011 and that a long-term commitment to the funding proposal set forth in connection to the New START treaty, commonly referred to as the 1251 report, is of the upmost importance to national security and the viability of our nuclear deterrent?

Secretary GATES. Yes, it is critical that Congress fund the entire $624 million fiscal year 2011 increase for the National Nuclear Security Administration (NNSA) and sustain the long-term funding requirements as laid out in the 1251 Report to Congress, which serves as a roadmap to implementing the Nuclear Posture Review (NPR) and New START treaty. The treaty is buttressed by credible modernization plans and long-term funding for the U.S. nuclear weapons stockpile and the infrastructure that supports it. This administration proposes significant investments over the next decade to rebuild and sustain America's aging nuclear infrastructure—especially the national labs, and the science, technology, and engineering base. This funding not only begins with a commitment to the long overdue modernization of the nuclear weapons infrastructure, it continues ongoing activities and starts the studies necessary to sustain and life-extend the nuclear deterrent so it remains in a safe, secure, and effective status. In addition, the funding augments NNSA activities required to sustain the personnel with key critical skills to continue to sustain our nuclear arsenal.

BALLISTIC MISSILE DEFENSE

64. Senator MCCAIN. Secretary Gates, while the fiscal year 2012 budget includes a $200 million increase over the President's fiscal year 2011 level, overall FYDP funding is cut by $2.6 billion. Given the President's commitment to missile defense as reaffirmed during our debate on the New START treaty just a few months ago, how does DOD justify significant out-year decreases for missile defense?

Secretary GATES. The Missile Defense Agency (MDA) budget for 2011 through 2015 is based on the missile defense priorities set forth in the Ballistic Missile Defense Review (BMDR). The MDA budget strategy in fiscal year 2012 identified efficiencies and balanced personnel, budgetary and management resources within and across its components. In instituting efficiency initiatives, the MDA will make greater use of competition across its acquisition programs and realize savings through a refined approach to contracting for services.

EVOLUTIONARY ACQUISITION FOR SPACE EFFICIENCY INITIATIVE

65. Senator MCCAIN. Secretary Gates, while I appreciate the stated goals of the Evolutionary Acquisition for Space Efficiency initiative for procuring satellite systems, I remained concerned with the overall track record of cost overruns and schedule delays for space systems. Does DOD intend to follow the requirements set forth by this committee on multiyear procurements, to include:

- A certification that the use of such a contract will result in substantial savings;
- That the minimum need for the property to be purchased is expected to remain substantially unchanged during the contemplated contract period;
- That the head of the agency will request funding for the contract at the level required to avoid contract cancellation;
- That there is a stable design for the property to be acquired and that the technical risks associated with such property are not excessive; and
- That the estimates of both the cost of the contract and that anticipated cost avoidance through the use of a multiyear contract are realistic.

Secretary GATES. The DOD discussed the multiyear procurement provisions at length with the White House and congressional staffs. As a result of these discussions, DOD determined that multiyear procurement authorization is not required for this space system. Therefore, the model DOD is implementing is not multiyear procurement. The Air Force is procuring two satellites in a block in a single year. However, full funding for both satellites in a single year is just not practically achievable in today's budget environment.

I share your concern with the past performance of space programs. I am bringing the block buy approach forward to address specific root causes of some of those difficulties. The stability that comes with buying in quantity, even in quantities of two,

will help the prime contractors, subcontractors, and parts and supplies vendors. These satellites have thousands of often sophisticated components, tens of thousands of complex integrated circuits, and many dozens of unique designs only found in U.S. factories. The people who design and manufacture these parts and subparts are highly talented but small in number, and DOD wants to keep them working for its needs. Further, the government will realize lower unit costs by buying in quantity and by minimizing production line stops and restarts.

66. Senator MCCAIN. Secretary Gates, in pursing this contracting strategy, what sort of accountability does DOD intend to place on the prime contractor of these satellite systems?

Secretary GATES. The best approach for accountability under the acquisition strategy for the AEHF communications satellites is the fixed-price, incentive fee contract. Government liability is constrained if the contractor experiences problems directly related to contractor responsibilities within the scope of the contract. Contract penalties for unmet milestones or premature failure in on-orbit performance will also apply. Along with these provisions, DOD plans to bring improved industrial base stability that should help avoid some of the conditions that contributed to past cost overruns.

In addition, designating block buys as subprograms will provide congressional insight into actual space vehicle block costs. The resulting visibility ensures Air Force and DOD accountability for the costs and funding requirements to which they committed at the block Milestone Decision.

67. Senator MCCAIN. Secretary Gates, do you share my concern about using these sorts of contracts for these sorts of programs?

Secretary GATES. While I share your general concern regarding accountability and space acquisition management in particular, I think there is merit to the block buy approach for AEHF. The AEHF satellite program, the first program with which DOD seeks to implement this approach, is now a well-defined acquisition program with plenty of execution data around which to design a stable production program. The operational requirements are well validated; all derived system-level specifications are clear; and the experienced government/contractor team is in place. Additionally, one satellite has launched, one is in storage awaiting launch, and two more are in various stages of production. I anticipate the block buy of satellites 5 and 6 to be a smooth continuation of the production line. To support these contracting efforts, DOD is implementing "should cost" analyses to gain a much more detailed and thorough understanding of the cost structure for AEHF and other space programs. I believe maturity and stability lend well to a fixed-price contracting strategy.

68. Senator MCCAIN. Secretary Gates, how do you intend to ensure that these types of contracts are used appropriately and judiciously for these programs?

Secretary GATES. DOD put a great deal of thought into this overall approach to include the contracting strategy, focusing on mature programs that have reached the production phases of their life cycles. Because development is complete, I do not expect unplanned design or manufacturing changes. However, an important element of this approach is sound obsolescence management. The contractor team will have an on-going effort to identify components set to be discontinued or superseded. As they identify these parts, their engineers can make smart adaptations to the assembly or test before the update affects the production flow. On our end, DOD is ensuring the performance requirements levied upon these systems do not change, which is critical over the duration of the block build. In summary, these conditions go hand-in-hand with a fixed-price contracting approach.

NUCLEAR TRIAD MODERNIZATION

69. Senator MCCAIN. Secretary Gates, when released last year, the NPR set forth a broad vision that must not be viewed outside of the realm of affordability. The cost alone for modernizing both the nuclear weapons complex and the triad are substantial, and as we move to reduce the size of our nuclear stockpile, this modernization effort becomes all the more important. Factoring in the cost of missile defense and prompt global strike—both essential and critical, but also costly, programs—the overall budget outlook seems to suggest steady increases for the foreseeable future. The same defense budget which you recently stated will experience at most long-term growth of 1 percent a year after inflation. What is the near-term and long-term affordability of implementing the NPR?

Secretary GATES. The 2010 NPR concluded that a Triad of strategic forces best maintains strategic stability at reasonable cost, while hedging against potential technical problems or geopolitical surprise. The 10-year estimate for sustaining the nuclear deterrent (approximately $214 billion) was identified in the fiscal year 2012 Annual Update to the report pursuant to section 1251 of the NDAA for Fiscal Year 2010. These costs are larger than the planned overall growth of 1 percent per year after inflation. This results from the need to begin the activities necessary to replace or sustain all three legs of our nuclear Triad over the next 2 to 3 decades. This cost projection is considered essential to maintaining our nuclear deterrent and is in accordance with the NPR.

DOD will continue to assess the force size required for an effective deterrent. While we work to maintain a safe, secure, and effective arsenal, a wide range of efficiency measures also are being explored, including a research and development program, which was noted in the NPR. This program was initiated to focus on commonality between the military departments' requirements and joint, scalable flight-test demonstrations. DOD is committed to sustaining and modernizing the Triad in an efficient and cost-effective manner while maintaining strategic stability and deterrent capability.

70. Senator MCCAIN. Secretary Gates, the fiscal year 2012 budget provides funding for a next generation long-range bomber and the next generation ballistic missile submarine; however, little has been said about the next generation intercontinental ballistic missile (ICBM) which is needed by 2030. When does DOD intend to provide details on the funding requirements and timeline for the development, production, and deployment of a new ICBM?

Secretary GATES. The administration plans to sustain the Minuteman III ICBM through 2030, as required by section 139 of the NDAA for Fiscal Year 2007. Sustainment programs include ICBM Fuze Refurbishment for the Mk12A and Mk21 reentry vehicles, Joint Fuze Development on the Mk21 and Mk12A replacement, the ICBM Cryptography Upgrade II for nuclear surety, the Safety Enhanced Reentry Vehicle program, the Propulsion System Rocket Engine Refurbishment Life Extension Program, the Environmental Control System Replacement Program, the ICBM Security Modernization Program, and the Minuteman Minimum Essential Emergency Communications Network Program Upgrade. Other sustainment programs may be necessary, and weapon system requirements are being reviewed to ensure the viability of the Minuteman III ICBM through 2030.

The preparatory analysis for a follow-on ICBM capability fielded in the 2030 timeframe began in 2011. The Ground-Based Strategic Deterrent (GBSD) Analysis of Alternatives (AoA) will assess potential materiel solutions including sustaining the current Minuteman III ICBM weapon system and supporting infrastructure. During the GBSD AoA review, concepts will be evaluated for effectiveness, cost, schedule, concepts of operations, and overall risk in meeting operational requirements. DOD will recommend a specific way-ahead to the budget for an ICBM follow-on in fiscal year 2014.

71. Senator MCCAIN. Secretary Gates, what about a replacement nuclear capable air-launched cruise missile (ALCM)?

Secretary GATES. The ALCM will be maintained in the inventory until the Long-Range Standoff (LRSO) missile capability is fielded. The ALCM will undergo multiple service life-extension programs to ensure the viability of the propulsion systems, guidance and flight control systems, and warhead arming components. DOD intends to field an advanced penetrating LRSO missile to replace the ALCM, and the Air Force has programmed $0.9 billion for research, development, test, and evaluation (RDT&E) over the next 5 years for the development of the LRSO.

72. Senator MCCAIN. Secretary Gates, when should budgets begin to reflect the steady increases suggested in the NPR?

Secretary GATES. In fiscal year 2012, DOD will begin to see more substantial progress with NPR-driven modernization recommendations. These include:

(1) Investments in research, development, and test and evaluation of Conventional Prompt Global Strike capabilities;
(2) Construction of the Navy's West Coast Explosive Handling Wharf to ensure safe missile and warhead off/on loading operations and maintenance for Pacific SSBN operations; and
(3) The Air Force initiation, as directed, of a program for a new long-range, nuclear-capable penetrating bomber.

The President's fiscal year 2011 and fiscal year 2012 budgets include funding of NPR initiatives. The February 2011 update to the report submitted pursuant to section 1251 of the NDAA for Fiscal Year 2010 provides a summary of spending for delivery systems and weapon-related activities of the NNSA, which total approximately $214 billion from fiscal year 2012–fiscal year 2021.

73. Senator McCain. Secretary Gates, what are the implications for the strategic deterrent if we don't modernize the triad or find we cannot afford to?

Secretary Gates. The United States will sustain a safe, secure, and effective nuclear arsenal as long as nuclear weapons exist. The NPR calls for making investments in nuclear delivery systems to ensure that existing capabilities are adequately sustained with essential upgrades and modifications. Such investments, and the NPR's strategy for continued delivery system capability, represent a credible modernization plan necessary to sustain and support our Nation's deterrent.

2005 BASE REALIGNMENT AND CLOSURE

74. Senator McCain. Secretary Gates, as you may know, DOD is required by law to complete base realignment and closure (BRAC) resulting from the 2005 BRAC round by September 15, 2011. Is DOD on track to meet this deadline? If not, why not?

Secretary Gates. While the Department faces scheduling challenges in a few cases, it is working diligently to ensure we satisfy our BRAC legal obligations.

75. Senator McCain. Secretary Gates, in meeting the deadline, will you have construction completed on all facilities and infrastructure directly and indirectly required to support the BRAC moves?

Secretary Gates. There are a limited number of direct and indirect infrastructure projects on which some elements of construction will continue after September 15. The Department is working diligently to ensure it satisfies the BRAC legal obligations, even if some construction continues past the deadline.

76. Senator McCain. Secretary Gates, what are the costs incurred by DOD to complete all 2005 BRAC actions and any unobligated balances you may have?

Secretary Gates. The overall cost to implement BRAC 2005 is $35.1 billion. I do not anticipate that the Department will have any significant unobligated balances at the end of the BRAC 2005 implementation period.

77. Senator McCain. Secretary Gates, in your opinion, should DOD conduct another round of BRAC to reduce excess infrastructure? If so, when should DOD conduct the next round?

Secretary Gates. DOD is not currently seeking authority to undertake another round of closures and realignments under the Defense BRAC Act of 1990, as amended. The Department is currently focused on completing implementation of the 2005 BRAC round.

STATUS OF THE NATO ALLIANCE

78. Senator McCain. Secretary Gates, at the NATO Munich Security Conference that I attended last month, it was clear that the intent for European members of the alliance is to address fiscal constraints by slashing their defense budgets, ending drafts, sharing resources, and increasing their reliance on American military capabilities. How are you addressing concerns the changes could burden the United States by reducing the number of European troops available for NATO missions and other military efforts around the world?

Secretary Gates. Over the past 10 years, most European Allies increased their deployable and sustainable forces and capabilities, in spite of steady declines in defense spending. They accomplished this by reducing the size of forces designed primarily for territorial defense, and by investing in more capable expeditionary forces. But there are obviously limits to how long those Allies can rely on reinvesting the savings from force structure reductions to sustain this type of transformation. I am now generally urging senior European Ally officials to avoid reducing force structure as they consider decisions about how to allocate scarce defense resources, and instead to seek efficiencies through multinational cooperation and sharing resources. Most European Allies have told me that they are not planning to make defense cuts that will affect current operational commitments. Of course, the realities of the fiscal crisis in Europe and the required reductions in defense spending are such that

preserving force structure and sustaining the current high operating tempo will probably result in less investment in future capabilities. As a result, I intend to ask my Defense counterparts to commit to increasing defense investment once their military operating tempo decreases after the successful transition of security responsibility to the Afghan Government.

I do not believe that Europe has descended into an irreversible fiscal crisis. At their next meeting in March, NATO Defense Ministers will be asked to agree to Political Guidance for Allied defense planners. This planning guidance looks forward 10 years. I intend to push hard for no decrease in NATO's level of ambition, continued increases in the deployability and sustainability of NATO forces, and a long-term recommitment to the benchmarks of 2 percent GDP devoted to defense spending and 20 percent of defense expenditures allocated to investment in future capabilities.

79. Senator McCain. Secretary Gates, how is the dynamic nature of fiscal decisions by members of the alliance affecting U.S. military planning?

Secretary Gates. DOD must consider the availability and capability of NATO forces in its planning process. DOD always seeks to mitigate the risks of assumptions in its contingency plans (including assumptions about partner participation) by developing multiple options for plan execution. DOD is also engaged in regular bilateral dialogue with our Allies (particularly with the United Kingdom, Canada, and Australia), and in multilateral discussions to clarify planning assumptions.

The NATO Alliance has a particularly well-developed defense planning process to assist Allies in identifying NATO needs. This process is focused not only on ensuring that Allied military forces prevail in current operations, but also on ensuring that NATO can implement the November 2010 Strategic Concept, including the ability to address 21st century security challenges. This planning process and these multilateral discussions inform our national decisions on defense planning and resourcing.

80. Senator McCain. Secretary Gates, will the reduction of forces and resources available from other alliance members force the United States to have to make adjustments in order to meet treaty obligations?

Secretary Gates. The reduction of forces and resources available from other Alliance members will not force the United States to make adjustments in order to meet its obligations under the North Atlantic Treaty. In keeping with Article 3 of the Treaty, DOD will continue to work with America's Allies through the NATO Defense Planning Process to determine the correct mix of forces and capabilities needed to maintain and develop our individual and collective capacity to resist armed attack, and to maintain the security of the North Atlantic area. In addition to treaty obligations, Allied partners agreed in the NATO Strategic Concept and other strategic-level guidance that NATO must also have the capability to conduct non-Article 5 crisis response operations. In the current and projected security environment, meeting NATO's level of ambition for crisis response operations and security cooperation with partners is likely to require a much greater share of Allies' national defense resources than honoring treaty obligations.

81. Senator McCain. Secretary Gates, the current plan for U.S. Army force structure in Europe since 2004 has been to drawn down from four to two Brigades Combat Teams (BCT) by 2014 and to close military bases at Bamberg and Schweinfurt. This would reduce the Army force posture in Europe by 8,000 troops, leaving approximately 36,000 Army forces available in theater for missions and training. You are in the process of evaluating a request by the Commander of European Command (EUCOM) to leave the four BCTs in place. In light of the actions of other European nations to reduce their military resources and forces, why would it be in the best interest of the United States to reverse our planned reductions, reverse base closures, and to maintain additional forces in Europe?

Secretary Gates. As part of a broader review of global defense posture, the United States is reexamining our capabilities and force structure in Europe ensuring that our country is well positioned to support Allies and partners in a 21st century security environment. NATO's new Strategic Concept reaffirmed NATO's core commitment to Article 5 of the North Atlantic Treaty, as well as its commitment to crisis management and cooperative security. Allies must be prepared to meet a broad range of 21st century challenges through work in new areas, such as missile defense and cyber security, and through modernizing traditional capabilities. The United States is committed to a defense posture in Europe that meets its enduring commitment to NATO's Article 5, ensures a credible deterrent against all forms of aggression, and maintains a robust capacity to build Allied and partner capacity for coali-

tion operations. The President is making his decision about U.S. Army force structure in Europe based on that information.

82. Senator McCain. Secretary Gates, what does EUCOM gain by having 44,000 Army personnel in Europe vice 36,000 troops assigned and available for theater security cooperation efforts, particularly given the realization that the Commanders of Africa Command (AFRICOM), Southern Command (SOUTHCOM), or Central Command (CENTCOM) have very little or no forces assigned to their commands?

Secretary Gates. U.S. Army force posture in Europe not only enables theater security cooperation, but it also assures our allies; it is the cornerstone of NATO; and it supports global requirements, including those for operations in Iraq and Afghanistan. Over the past 10 years, EUCOM-assigned Army brigade combat teams (BCTs) in particular have rotated consistently into the CENTCOM area of responsibility. Forward-based forces provide significant flexibility in force management, and often are more efficient than U.S.-based forces, as demonstrated most recently by the rapid manner in which EUCOM-assigned forces were allocated to AFRICOM for Operation Odyssey Dawn. Moreover, CENTCOM routinely receives forces assigned outside its area of operations, including from EUCOM.

83. Senator McCain. Secretary Gates, would this decision actually validate the intent of the NATO alliance members to increase reliance on the U.S. forces and capabilities for their regional security requirements?

Secretary Gates. Almost all of the forces and capabilities available to NATO, other than the headquarters that are part of the NATO command structure, are provided by member nations and funded through their national defense budgets. The principal external influences on national defense budget decisions are the NATO defense planning process and bilateral consultations. The NATO defense planning process allocates force planning targets to nations based on the principles of burden sharing and reasonable challenge. When a nation fails to achieve its force planning targets due to insufficient defense spending, those targets are not reallocated to another nation unless other Allies determine that the original allocation posed an unreasonable challenge (the challenge is considered reasonable as long as it does not require the Nation to spend more than 2 percent of its GDP on defense).

Although nations may use many excuses for not allocating sufficient resources to meet NATO objectives, it is unlikely that U.S. decisions to support our security commitments will prompt other Allies not to support their commitments. In fact, the opposite is normally true. In the multilateral reviews of each member's defense plans that occur at NATO, peer pressure makes it more difficult for nations to reduce their commitment to NATO further, and the most intense pressure comes from those nations that are setting an example by meeting their commitments. The fact that no Allies have pressed to reduce the NATO level of ambition upon which defense requirements are based, nor the goal of spending 2 percent of GDP on defense, indicates that they want that peer pressure to continue. Although I am never happy when European Allies decide to reduce defense spending, I firmly believe that without the example set by U.S. leadership within the Alliance, European Allies' defense spending would be even lower.

COMPETITION AND LIFECYCLE COSTS

84. Senator McCain. Secretary Gates, both the Weapon System Acquisition Reform Act (WSARA) of 2009 and DOD's efficiency initiatives espouse guiding principles of increasing competition to lower lifecycle costs. While these are commendable goals given the current budget crisis, I am concerned with the pace and extent of implementation, particularly given recent DOD data that of $366 billion in total DOD contract obligations in fiscal year 2010, $188 billion was identified as not competed or receiving only one bid. Please provide examples from each of the military departments where competition has been used to lower lifecycle costs.

Secretary Gates. Life-cycle cost can be defined as the total cost to the government of a program over its full life, including costs for research and development; testing; production; facilities; operations; maintenance; personnel; environmental compliance; energy; and disposal. Competition can be used to reduce costs in each of the individual stages but is most effective in reducing procurement/acquisition and sustainment costs. The following are some examples of competition reducing cost in these areas:

- In the Army, within the Joint Tactical Radio System (JTRS) portfolio, the Multifunctional Distribution Information System-Low Volume Terminal (MIDS–LVT) radio program is an example of how competition has resulted

in procurement cost savings. During the production phase of the MIDS–LVT program, competition has resulted in approximately 60 percent cost savings. The initial production cost of the radio was $435,000 per unit and, through ongoing competition between the two approved vendor production sources, the cost per unit has steadily decreased to $181,000 per unit. With over 2,600 MIDS–LVT units purchased to date, the program has achieved hundreds of millions of dollars in procurement savings through the successful MIDS–LVT competitive acquisition strategy.

• For the Air Force, the MQ–1 Predator Organizational-level maintenance contract is a good example of how competition produced acquisition cost savings. The initial contract, issued in March 2005, was a sole source award to the Original Equipment Manufacturer (OEM), General Atomics Aeronautical Systems. This decision not to compete the Organization-level maintenance contract was primarily driven by the lack of published technical orders. When those technical orders became available, the contract was recompeted 1 year ahead of schedule and awarded to Battle Space Flight Services. This competition resulted in a savings of $102 million. Because of increased and accelerated wartime demand, the Air Force is anticipating additional savings over the life of the contract. The ability to compete between the OEM and the current supplier in the future will continue to enable cost savings.

• For the Navy, the most visible example is the LCS Program. After receiving proposals from Lockheed Martin and Austal USA in early 2010 that were deemed unaffordable, the Navy changed its acquisition strategy to an all-or-nothing competitive contract award and encouraged the companies to establish leaner teaming arrangements. After proposals were submitted, the Navy realized they could achieve competitive prices, and the requirement was re-solicited for a 10-ship contract award to each company. In December 2010, Lockheed Martin and Austal USA were each awarded fixed-price incentive contracts for the design and construction of 10 ships from fiscal year 2010 through fiscal year 2015. The benefits of competition; serial production; employment of mature technologies; design stability; fixed-price contracting; commonality; and economies of scale contributed to reduced life cycle costs and a highly affordable ship construction program. The approach, self-financed within the program budget by re-investing a portion of the greater than $2 billion in total savings through the FYDP, enabled the addition of a year of ship procurements. The approach also enables the DoN to efficiently produce the ships at an increased rate to meet operational requirements sooner.

85. Senator McCain. Secretary Gates, have you found areas where DOD can leverage commercial investment in technology, manufacturing, and service capability to decrease expenses for lifecycle support requirements?

Secretary Gates. DOD is leveraging commercial technology, manufacturing, and service capabilities in many ways to reduce weapons system life cycle costs. Since 1998, the USD(AT&L) Commercial Technologies for Maintenance Activities (CTMA) program has been steadily improving maintenance efficiency and effectiveness by integrating proven commercial maintenance technologies into DOD maintenance activities. The Military Departments are undertaking a variety of initiatives leveraging commercial investments through the CTMA program. For example:

• The Department of Air Force implemented a commercially developed capability, which replaced legacy pin-to-pin continuity procedures with the Enhanced Wiring Integrity System (EWIS). The EWIS gives maintainers the ability to check the integrity of entire wire bundles within seconds and not only detects a fault, but also isolates the fault to within inches of its origin to assist the maintainer in rapidly repairing the wire. The EWIS is widespread across the Air Force, and it is transitioning to the U.S. Navy and Army aviation, as well as to the Marine Corps land systems.

• The Department of Navy utilized commercial technology employed by airports to detect trace amounts of explosives on passengers and luggage to detect contaminate in lubricants and hydraulic fluids used across the DOD. The resultant capability is being employed on Military Sealift Command vessels where this hand-held tool can assess contamination, viscosity, and other critical fluid parameters in under a minute per test. This capability is in transition to the Army, Navy, and Air Force for diesel oils used in ground vehicles and support equipment.

• The Department of Army is leading the transition of a commercial technology developed for the automotive maintenance industry and widely used

for commercial airline maintenance. This capability, the Automated Process and Inspection Guide (AP&IG), provides accurate point of maintenance technical data and collects standard inspection and maintenance data. AP&IG has: reduced inspection times by 40 percent; reduced repair turn times; and improved overall maintenance quality.

Performance Based Logistics (PBL) is a strategy that has been successful in leveraging company investment in technology and services throughout commercial industry. This support strategy has transferred to many applications across the DOD for Weapon System Sustainment. PBL incentivizes the provider to deliver a guaranteed outcome at a fixed price. What have traditionally been revenue centers in transactional relationships between government and industry become cost centers under PBL. PBL strategies can improve both product reliability and processes to drive down costs. Industry makes up front investments to lower costs by improving the product and streamlining sustainment processes. PBL strategies support the warfighter through increased availability, reduced logistics footprint, and lower life cycle costs.

86. Senator McCain. Secretary Gates, how specifically is DOD better incentivizing and empowering program managers to bring competition into otherwise previously sole-sourced lifecycle programs, whether termed as maintenance, repair, and overhaul (MRO); or contractor logistics support (CLS); or PBL?

Secretary Gates. The USD(AT&L) November 3, 2010 memo to the Military Departments and Defense Agencies directed immediate action to increase competition. The acquisition community is addressing this in the development of Weapon System Acquisition Strategies. Specifically, the Secretaries of the Military Departments and Defense Agency Directors were directed to implement the following:

- Present a competitive acquisition strategy at each program milestone: Provide a one-page competitive strategy for each Acquisition Category (ACAT) 1D program at each milestone as part of the overall acquisition strategy.
- Report to USD(AT&L) in fiscal year 2011 on how their military department or agency intends to reduce single-bid competitions—negotiations when only one offer is received. At a minimum, the report will address market research, restricted specifications, and adequate time for proposal preparation.
- Achieve a 2 percent reduction in single-bid competitive contracts in fiscal year 2011, with continuing reductions thereafter.
- Remove obstacles to competition: ensure contracting officers conduct negotiations with all single-bid offerors, unless this requirement is specifically waived by the Head of Contracting Activity or Military Department Secretary. The basis of these negotiations will be cost or price analysis, as the case may be, using either certified or non-certified cost or pricing data, as appropriate.
- Have their component or agency competition advocate develop a plan to improve both the overall rate of competition and the rate of effective competition. These plans establish an improvement rate of at least 2 percent per year for overall competition and an improvement rate of at least 10 percent per year for effective competition.
- Require open systems architectures and set rules for acquisition of technical data rights: Program managers are to conduct a business case analysis in concert with the engineering tradeoff analysis presented at Milestone B. The business case analysis outlines the open systems architecture approach, combined with technical data rights the Government pursues in order to ensure a lifetime consideration of competition in the acquisition of weapon systems. The results of this analysis will be reported in the Acquisition Strategy Report and in the competition strategy.
- Increase the dynamic small business role in the defense marketplace competition: All competitive and non-competitive procurement actions will seek to increase small business participation through weighting factors in past performance and fee construct.

These actions apply to all contracts, including MRO, CLS, and PBL contracts. The result will be program executive officers and program managers developing a competitive strategy early in acquisition that spans the program's life and improves the ability to compete MRO, CLS, and PBL contracts in sustainment. For example, the Navy undertook a specific initiative to engage each program executive officer, program manager, and Product Support Manager (PSM) to emphasize real competition at every stage of acquisition and sustainment.

- The Navy directed the program executive officers/program managers/PSMs to establish a competitive environment throughout the life cycle of their programs, and to enable better competitive opportunities in the sustainment phase. Additionally, program executive officers and program managers are reviewing their existing portfolios in pursuit of increased competitive opportunities, including consideration of breakout opportunities, and expanding open architecture solutions and small business opportunities that fosters additional competition.
- The Army is emphasizing the conduct of logistics analyses early to baseline costs and develop technical data requirements that facilitate competition in sustainment contracts.
- The Air Force is also taking proactive steps to ensure program managers and PSMs correctly identify and pursue data rights in their contract negotiations to facilitate competition in sustainment. The outcome will be required warfighting capability at a reduced cost to the Government.

87. Senator MCCAIN. Secretary Gates, the committee spearheaded legislation which became Section 805 of the NDAA for Fiscal Year 2010 regarding Lifecycle Management and Product Support, calling for PSMs to maximize competition and make the best possible use of available DOD and industry resources at the system, subsystem, and component levels. Section 805 was implemented through Under Secretary Carter's Directive-Type Memorandum on October 6, 2010. Since then, how has competition at subsystem and component levels been pursued to reduce lifecycle costs?

Secretary GATES. Since the issuance of the DTM, the military departments continue to implement section 805 and have made significant progress identifying PSMs for ACAT I and II programs and issuing the guidance. One of the PSM's major duties is to promote opportunities to maximize competition while meeting the objective of best-value, long-term outcomes for the warfighter.

To this end, the Defense Acquisition University developed and fielded DOD Life Cycle Management and PSM Rapid Deployment training with strong attendance across the DOD and the industry acquisition community, which specifically addresses increased competition.

Additionally, the military departments are undertaking a variety of initiatives to increase competition. For example:

- The Navy engaged each Program Executive Office (PEO) and program manager to establish a solid foundation for a competitive environment throughout the life cycle. Therefore, the PEOs and program managers are reviewing existing portfolios in pursuit of increased competition opportunities, including consideration of breakout opportunities at the subsystem and component levels to reduce lifecycle costs.
- The Air Force published regulations and guidebooks that detail the importance of competition. The Air Force is specifically focusing on sole-source contracts for software maintenance, as well as engine repairs and parts, to increase competition.
- The Army plans to review and refine internal practices and processes over the course of the next year that empower the PSM to promote competitive opportunities.

COST-SHARING FOR MILITARY HEALTHCARE

88. Senator MCCAIN. Secretary Gates, regarding the administration's healthcare reform proposals, I received a letter signed by the Joint Chiefs of Staff (JCS) endorsing the administration's reform proposal and request that this letter be included in the record. I know that we will hear from many other interested stakeholders, and we must consider those views as well. Do you agree that we must always remain committed to ensuring that the quality of healthcare for our military servicemembers, their families, and veterans is never compromised, even in tough economic times?

CHAIRMAN OF THE JOINT CHIEFS OF STAFF
WASHINGTON, D.C. 20318-9999

11 February 2011

The Honorable John McCain
Ranking Member
Committee on Armed Services
United States Senate
Washington, D.C. 20510

Dear Mr. McCain,

We are writing to convey our strong support for the military health care program changes that are included in the President's proposed fiscal year 2012 budget.

Our objectives are clear – we will continue to provide the finest health care benefits in the country for our active and retired military Service members and their families while continuing to serve as responsible financial stewards of the taxpayers' investment in our military.

As our first priority, we reviewed our internal costs and have implemented or will implement a number of efficiencies to reduce contractor overhead, medical contracting, and purchasing costs. We are continuing to focus on improving the care we provide our wounded warriors and the support to their families, as well as creating patient-centered medical homes to improve the coordination of care and satisfaction of our patients.

Second, we sought equity across all health care programs – beneficiaries and health care delivery providers should have the same benefits and equivalent payment systems regardless of where they live or work in the country. That led us to propose modest increases in TRICARE enrollment fees for working-age retirees and indexing of those fees. These changes are modest and manageable, and leave fees well below the inflation-adjusted out-of-pocket costs set in 1995 when the current fees were established.

Third, we are also proposing changes in pharmacy co-pays aimed at improving efficiency by encouraging the use of generic drugs and mail-order delivery. However, we are preserving our patient's rights to purchase non-generic drugs although at slightly higher costs to the individual. In addition, we propose to gradually phase-out some special subsidies provided to a relatively small number of hospitals serving military patients.

Further, we incorporated numerous safeguards – grandfathering all current enrollees in unique programs; phasing-in new reimbursement methodologies for providers; and exempting certain beneficiaries (survivors and medically retired Service members) from any changes – to protect our most vulnerable beneficiaries and providers. We want to emphasize that none of these proposals affect the free health care we deliver to our active duty personnel.

We will continue to wisely invest in items of vital interest, including improved research, diagnosis, and treatment of Service members with psychological health issues and/or traumatic brain injury, enhanced access to health services, and new weapons systems and technologies for our warriors on the battlefield.

We understand that any changes to health care benefits create concern among the people we serve and the communities from which we receive care. The proposals the Department has submitted keep faith with its commitment to our troops and their families as well as the Nation's commitment to veterans. Our approach is careful, gradual, and responsible. We ask that you support all the proposals as submitted in the President's fiscal year 2012 budget.

Sincerely,

JAMES E. CARTWRIGHT
General, U.S. Marine Corps
Vice Chairman
of the Joint Chiefs of Staff

M. G. MULLEN
Admiral, U.S. Navy

GEORGE W. CASEY, JR.
General, U.S. Army
Chief of Staff

GARY ROUGHEAD
Admiral, US Navy
Chief of Naval Operations

NORTON A. SCHWARTZ
General, U.S. Air Force
Chief of Staff

JAMES F. AMOS
General, U.S. Marine Corps
Commandant of the Marine Corps

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Secretary GATES. Yes. The performance and the quality of care delivered by the Military Health System (MHS) in austere, combat environments continue to exceed anything ever witnessed and recorded in battlefield medicine. For example, increased survival rates from wounds and decreased loss of personnel from disease and non-battle injuries are two areas where our medical system established itself as world-class.

Here at home, our MHS is also among the best in terms of quality and outcome throughout the Nation.

I stand proudly and strongly by DOD's commitment to military healthcare quality and excellence and will never compromise or waver from this standard. This proven commitment to high performance is separate and distinct from any potential minor

changes in TRICARE enrollment fees or copayments. Our MHS rests on a core principle of trust with the people DOD serves, and that trust must never be broken.

89. Senator McCAIN. Secretary Gates, please explain how the health reform proposals that you have put forth fulfill this obligation, and most especially for our wounded warriors?

Secretary GATES. The overall health budget for fiscal year 2012 represents an increase in the fiscal year 2011 request, as DOD continues to invest in initiatives that strengthen the military healthcare system for today and into the future.

DOD continues increasing financial investment in medical research and development for its wounded warriors, particularly in the areas of traumatic brain injury, psychological health, extremity injuries, amputee care, and regenerative medicine. Additionally, DOD is modifying significantly the Disability Evaluation System to oversee the disability evaluation process in a manner that best meets the needs of each servicemember.

These health reform proposals are intended to secure the long-term financial security of the MHS. By introducing this set of reform proposals now—reforms that establish internal efficiencies, reforms that standardize reimbursement policies to civilian network providers and reforms to beneficiary out-of-pocket costs—DOD continues providing a comprehensive health benefit for DOD beneficiaries.

90. Senator McCAIN. Secretary Gates, what medical index rate would DOD plan to use for TRICARE fees and why?

Secretary GATES. A final decision on the exact medical index has not been made. DOD is in ongoing discussions with various stakeholders on what might serve as the most appropriate index. The aim is to select an index that is transparent, based on actual market costs, relevant to the retired population and demographics at issue, clear and understandable, and one that reflects foreseeable growth in health care costs.

UNAUTHORIZED DISCLOSURES OF CLASSIFIED INFORMATION

91. Senator McCAIN. Secretary Gates, in regard to unauthorized disclosures of classified information, do you believe that changes to DOD policy (particularly policies governing access to classified systems) would be sufficient to prevent another Wikileaks event? If not, what other changes would you recommend?

Secretary GATES. I share your concern regarding the unauthorized disclosure of classified information and DOD is reviewing policies to mitigate the risk of future disclosures. As DOD continues efforts to improve its policies and information sharing capabilities, it will strive to implement the mechanisms necessary to protect intelligence information without reverting back to pre-September 11 stovepipes. One of the major contributing factors in the WikiLeaks incident was the large amount of data that was accessible with little or no access controls. Broad access to information can be combined with access controls to mitigate this vulnerability, without overly restricting users from obtaining the information they need.

One example of an access control mechanism that DOD has begun is to issue a Public Key Infrastructure (PKI)-based identity credential on a hardened smart card. This is very similar to the Common Access Card (CAC) used on the unclassified network. DOD will complete issuing 500,000 cards to SIPRNet users, along with card readers and software, by the end of 2012. This will provide very strong identification of the person accessing the network and requesting data. It will both deter bad behavior and require absolute identification of who is accessing data and managing that access.

In conjunction with this effort, all DOD organizations will configure SIPRNet-based systems to use the PKI credentials to strongly authenticate end-users who are accessing information in the system. This provides the link between end users and the specific data they can access—not just network access. DOD's goal is that by 2013, following completion of credential issuance, all SIPRNet users will log into their local computers with their SIPRNet PKI/smart card credential.

92. Senator McCAIN. Secretary Gates, do you plan to conduct or oversee a damage assessment on the Wikileaks disclosures?

Secretary GATES. DOD conducted an assessment of the disclosed DOD information to determine what actions must be taken to mitigate the disclosures' effect on U.S. forces, the coalition, and host nation partners. At my direction, the Intelligence Review Task Force (IRTF), established under the purview of the Defense Intelligence Agency (DIA), reviewed every line of the disclosed information and worked with our

foreign partners and the combatant commands (COCOM) to warn of potential danger and mitigate the degree of risk or threat resulting from the compromise.

The IRTF did not conduct a full damage assessment due to the interagency nature of the disclosed material and of the risk incurred. The Office of the National Counterintelligence Executive in the Office of the Director of National Intelligence (DNI) has the mandate to conduct damage assessments in these circumstances and is in the process of doing so.

93. Senator MCCAIN. Secretary Gates, what changes need to be made in the way that DOD conducts background investigations for security clearances?

Secretary GATES. DOD investigative service provider is the Office of Personnel Management (OPM) which conducts 95 percent of all background investigations for security clearances across the Federal Government, including the majority of DOD investigations. The background investigations are conducted utilizing requirements set forth in the 1997 Federal Investigative Standards for Background Investigations for Access to Classified Information, which are promulgated at the national level.

The Federal Investigative Standards are currently being rewritten by a working group composed of representatives from the Intelligence Community, DOD, and other executive branch departments and agencies. The new Federal Investigative Standards will apply 21st century technology using an enterprise-wide approach. These technologies will enable more cost-effective and timely case management and information sharing.

94. Senator MCCAIN. Secretary Gates, do you see the need for increased counterintelligence scrutiny or investigations of cleared DOD personnel?

Secretary GATES. DOD investigative service provider is the OPM that conducts 95 percent of all background investigations for security clearances across the Federal Government, including the majority of DOD investigations. The background investigations are conducted utilizing requirements set forth in the 1997 Federal Investigative Standards for Background Investigations for Access to Classified Information, which are promulgated at the national level.

Since DOD investigations are conducted in accordance with the Federal investigative standards, we do not believe additional investigations are warranted beyond what is required by existing policies. When the current personnel security investigation develops indicators requiring security, law enforcement, or counterintelligence follow-up actions, the information is referred to the appropriate organization. DOD policies and legal guidelines concerning law enforcement, security, and counterintelligence investigations identify what circumstances require investigations.

DOD policy directs that when counterintelligence, security, or other types of investigations are completed on, or derogatory information is received regarding personnel with a security clearance, the information must be provided to the individual's Commander/Director. Finally, DOD is a champion of the Joint Reform Effort, and key members of DOD are participating in the development of new national-level personnel security procedures, which will integrate counterintelligence and security equities into procedures regarding the development of derogatory or suspicious information.

95. Senator MCCAIN. Admiral Mullen, do believe that the Joint Worldwide Intelligence Communications System (JWICS) is as vulnerable to a Wikileaks-type scenario as the SIPRNET has proven to be?

Admiral MULLEN. Yes, if the threat results from an individual in a position of trust who opts to violate applicable U.S. military regulations, DOD policy, and Federal law. JWICS does have slightly greater security controls than SIPRNET, but there remains a possibility that its contents could also be exploited for unauthorized and illicit purposes.

96. Senator MCCAIN. Secretary Gates, if you decide to more tightly restrict access to classified data on DOD computer systems, how will you make sure that the right people are still getting the information they need?

Secretary GATES. DOD is working to improve intelligence information sharing, while ensuring the appropriate protections and safeguards are in place. A more resilient information sharing environment can be achieved through both technological solutions and comprehensive policies.

Immediately following the first release of documents by WikiLeaks, I commissioned two internal DOD studies. The first study, led by the Under Secretary of Defense for Intelligence, directed a review of DOD information security policy. The second study, led by the Joint Staff, focused on procedures for handling classified information in forward deployed areas.

The information security policies that were in place at the time of the WikiLeaks disclosures were determined to be adequate. However, adherence to and implementation of those policies were found to need improvement. Since then, DOD combined five separate policies into a single updated version of DOD's Information Security Program policy, and the Defense Security Service is developing web-enabled information security training that will become part of the mandatory information assurance training conducted annually across DOD.

Results of the Joint Staff study showed that forward deployed units maintained an over-reliance on removable electronic storage media, and also revealed a limited capability to detect and monitor anomalous behavior on classified computer networks.

EFFICIENCIES INITIATIVES RELATED TO INTELLIGENCE FUNCTIONS

97. Senator MCCAIN. Secretary Gates, in an August 9, 2010 speech, you announced an immediate 10 percent reduction in funding for intelligence advisory and assistance contracts. What effect has this reduction in intelligence contractors had on the defense intelligence enterprise?

Secretary GATES. Last August, DOD considered an immediate reduction in funding for intelligence advisory and assistance contracts, but have since conducted a DOD-wide review of our reliance on contractors. As the result of this review, funding used to acquire service support contracts was reduced 10 percent per year over the next 3 years from their reported fiscal year 2010 level. Based on the DOD components' allocation of the efficiency achieved by this action, the Military Intelligence Program (MIP) was assessed a portion of this reduction. Contractor funding reductions in the MIP were absorbed by realizing process efficiencies and moving away from higher-priced contractor services. The MIP significantly reduced its reliance on contractor support. Compared to fiscal year 2010 actuals, MIP contractor reliance declined approximately 19 percent.

98. Senator MCCAIN. Secretary Gates, in a subsequent January 6, 2011, statement, you mentioned a review of DOD intelligence organizations conducted in conjunction with the Office of the DNI. Please provide details on the results of that review for the record.

Secretary GATES. The review of intelligence organizations was an integrated effort between DOD and DNI. The analysis team consisted of DOD and DNI members and this partnership was critical for success. The group reviewed baseline resources across the Intelligence Community, identifying areas of major investment and significant recent growth and focusing on analytic organizations.

The decisions made as a result of the review are the following:

1. Resize the Geographic COCOM Joint Intelligence Operations Centers (JIOCs) for Phase 0/1 operations only.
2. Establish a rotational model for DIA support to the COCOMs.
3. Disestablish the Defense Intelligence Operations Coordination Center (DIOCC) and the Joint Functional Component Command for Intelligence, Surveillance, and Reconnaissance (JFCC–ISR).
4. Consolidate selected DOD Counterterrorism (CT) functions under the Joint Intelligence Task Force for Combating Terrorism (JITF–CT).
5. Consolidate selected DOD Counter Threat Finance (CTF) elements under a new Joint Intelligence Task Force for CTF (JITF–CTF).
6. Track emerging intelligence organizations and develop plans to harvest them as they redeploy from theater.

99. Senator MCCAIN. Secretary Gates, do you agree with the review's overall assessment that many new defense intelligence organizations, created after September 11, have grown too large and have largely duplicated work done elsewhere?

Secretary GATES. The number of defense intelligence organizations has increased since 2001. In the defense arena, large and well-staffed intelligence structures now exist in the military departments, in the defense agencies, in the COCOMs, and in the theaters.

The Intelligence Review Study Group (IRSG) identified areas of major investment and focused on the analytic organizations within the IC. Although the IRSG findings identified areas where efficiencies can be gained by consolidating select functions, such as counterterrorism and CTF, DOD continues to look for areas to increase efficiency and eliminate redundancy. Several efforts are underway to identify Defense Intelligence efficiencies and evaluate the impact on intelligence support to combat operations, if efforts are reduced or eliminated. Ongoing efficiency efforts within

DOD include a working group that is tracking and reviewing intelligence organizations formed to support operations in Afghanistan and Iraq, and to identify which of these would be retained as combat operations draw to a close.

100. Senator MCCAIN. Secretary Gates, you have approved recommendations to roll up various defense intelligence organizations that focus on counter-terrorism and terrorism finance into two separate task forces housed at the DIA. Could these organizations simply be done away with?

Secretary GATES. No, because they provide different specialized intelligence that is critical to the current fight in Afghanistan and U.S. forces deployed in every theater.

My efficiency recommendation regarding JITF–CT at DIA focused on consolidating analytic functions in one organization to use our resources more effectively against adversaries that continue to reinvent themselves and reemerge as threats to U.S. forces around the world, as recently seen with the attacks on the airmen in Germany. Over the past 9 years, JITF–CT provided exceptional support to operational forces in Iraq and Afghanistan. The leadership, tradecraft, and efficiencies gained by consolidating smaller analytic elements with JITF–CT will enhance overall Defense Intelligence capabilities as well as DOD contributions to the national counter-terrorism mission.

Although the Treasury Department has the lead for the overall U.S. Government CTF effort, our efficiency studies identified a requirement for a focal point within DOD to coordinate and lead the disparate CTF efforts that were already in place. Intelligence support to CTF remains a core analytic function. Because illicit finance does not exist as an end in and of itself, the focused work of DIA analysts in Washington and in Afghanistan will continue to assist commanders in the field in understanding how adversaries sustain their efforts and help identify vulnerabilities.

By consolidating the CTF mission within DIA, DOD is improving the efficiency and efficacy of the Defense Intelligence Enterprise. DIA will streamline the CTF mission by consolidating and realigning DOD components into a single organization to support both the warfighter and the policymaker more effectively.

101. Senator MCCAIN. Secretary Gates, what organizations within the defense intelligence enterprise would you recommend significantly reducing or abolishing and what would be the savings to the taxpayer of these cuts?

Secretary GATES. As part of the Reform Agenda, DOD formed an ISRG to conduct an extensive examination of the DOD and IC apparatus. The ISRG identified the DIOCC and JFCC–ISR as redundant organizations that can be eliminated in fiscal year 2012. The ISRG also recommended that the AFRICOM, EUCOM, and SOUTHCOM's JIOCs be "right-sized," commensurate with their current responsibilities for Phase 0/1 operations. These efficiency initiatives will save DOD approximately $32 million in fiscal year 2012.

I continue to look for areas of redundancy within Defense Intelligence. A working group is reviewing existing organizations providing intelligence support to counterterrorism and CTF with the goal of consolidating those functions under the DIA. I am also reviewing intelligence and intelligence-like organizations that have formed to support combat operations to identify which of these organizations should be retained as combat operations draw down. None of these efforts have identified any savings, but savings are possible as additional efficiencies are identified.

102. Senator MCCAIN. Secretary Gates, could further reductions be made without harming intelligence support to warfighters in Iraq and Afghanistan?

Secretary GATES. I continue to look for areas in Defense Intelligence where we can increase efficiency and eliminate redundancy. Several efforts are underway to identify Defense Intelligence efficiencies and evaluate the impact on intelligence support to combat operations, if efforts are reduced or eliminated. Ongoing efficiency efforts within DOD include a working group that is tracking and reviewing intelligence and intelligence-like organizations formed to support operations in Afghanistan and Iraq, in order to identify which of these organizations should be retained as combat operations draw to a close.

I am also reviewing existing organizations providing intelligence support to counterterrorism and CTF, with the goal of consolidating those functions under the DIA. All Defense Intelligence efficiency efforts will ensure that intelligence support to forces conducting combat operations will continue as long as that support is required.

FORT HOOD INVESTIGATION

103. Senator MCCAIN. Secretary Gates, the Senate Homeland Security and Government Affairs Committee recently issued a report on Fort Hood claiming that "DOD and FBI collectively had sufficient information necessary to have detected Hasan's radicalization ... [but failed] to act on it." Do you agree with that conclusion?

Secretary GATES. No. DOD was not notified or otherwise made aware of Major Hasan's contact with extremists until after the incident. In terms of Major Hasan's professional behavior, the Army is conducting an accountability review which will appropriately address what supervisors knew about his job performance and whether they acted according to Army policies and procedures. That report is being reviewed by the Secretary of the Army and should be released in the near future.

104. Senator MCCAIN. Secretary Gates, do you believe that the defense intelligence enterprise has devoted sufficient resources to understanding and countering the threat from homegrown violent Islamic extremists like Hasan?

Secretary GATES. Yes. DOD devotes significant resources to understanding and countering violent extremism among its military personnel. DOD continues to examine how to address the threat originating from disaffected individuals within the U.S. Armed Forces who may commit violent acts, and best apply the resources available. Specifically, the Defense Intelligence Enterprise details personnel to the Federal Bureau of Investigation (FBI) Joint Terrorism Task Forces (JTTFs) to broaden the understanding of the overall threat within the United States to our military forces. DOD also completed a full assessment of newly identified JTTF requirements based on the Fort Hood incident, and is in the process of resourcing those needs.

105. Senator MCCAIN. Secretary Gates, do you believe that defense intelligence organizations are adequately represented on the FBI's JTTF? If not, do you plan to increase that participation?

Secretary GATES. Today, yes. In the aftermath of the shootings at Fort Hood, I determined that DOD's commitment to the JTTFs and guidance for sharing force protection information were inadequate. I directed the Under Secretary of Defense for Policy to lead oversight of DOD's contributions to JTTFs by providing policy guidance, and by developing DOD-wide goals and objectives for DOD's JTTF participation. This has led to an increase in the Department's contributions to JTTFs through the DIA's Joint Intelligence Task Force-Combating Terrorism. This enhancement in analytical capabilities and information sharing plays a critical role in better understanding the terrorist threat to the United States.

106. Senator MCCAIN. Secretary Gates, what other steps do you plan to take to ensure that radicals like Hasan are detected before another tragedy like Fort Hood occurs?

Secretary GATES. On August 18, 2010, I approved Department-wide guidance to familiarize leaders with behaviors that may indicate radicalization or precipitate violence. I also reinforced to commanders that they are expected to exercise sound judgment and consider the full range of disciplinary actions when addressing personnel whose behavior adversely affects good order, discipline, or unit safety.

Current DOD policy prohibits behavior that creates a clear danger to the loyalty, discipline, or morale of military personnel. The Under Secretary of Defense for Personnel and Readiness is revising DOD Instruction 1325.06, Handling Dissident and Protest Activities among members of the Armed Forces, to ensure it effectively prohibits behavior that materially interferes with the accomplishment of the military mission or is incompatible with military service. This policy authorizes commanders to employ a range of administrative and disciplinary actions to stop behavior that is incompatible with military service, regardless of the underlying cause.

DOD made several important steps to improve information sharing and its ability to "connect the dots." DOD has drafted a new, consolidated information sharing agreement with the FBI. This new agreement creates a mechanism for DOD to provide force protection threat information requirements to the FBI, ensures threat information is reported to senior defense leadership, and reaffirms the already excellent working relationships between DOD Provost Marshals and local FBI JTTFs and Field Offices to ensure that threat information gets to the defense installation that is threatened. Additionally, DOD and the FBI established a formal notification process whereby information on all counterterrorism investigations with a DOD nexus is forwarded appropriately. DOD also utilizes FBI's eGuardian suspicious activity reporting system. This secure, unclassified capability enables information sharing

across DOD, as well as with Federal, State, local, and tribal law enforcement partners. This system provides information to the FBI's JTTFs.

In the future, DOD will establish the Law Enforcement Defense Data Exchange (D-DEx) in order to allow our Military Criminal Investigative Organizations to post, query, retrieve, and share criminal investigation and other law enforcement data in one database. Another important step is to supplement military personnel health screenings to include "violence risk assessments" before deployment and three times after deployment. These "violence risk assessments" are conducted person-to-person by a medical provider trained and certified to conduct in-depth evaluations. Finally, I have directed the Military Services and Investigative Agencies to collaborate with Defense intelligence organizations, facilitating access to investigative information on DOD-related counterterrorism cases. To most effectively pool DOD's resources against this threat, the government must overcome information sharing and cultural challenges between investigative and intelligence analysis organizations. The combination of enhanced information sharing and analytic presence in JTTFs plays a critical role in understanding the "homegrown" threat to DOD.

DOD SUPPORT TO COUNTERDRUG ACTIVITIES

107. Senator MCCAIN. Secretary Gates and Admiral Mullen, the budget submission calls for an increased emphasis on DOD support to Mexico in its counterdrug activities—a decision I support fully. What's your assessment of the Mexican Government's current capability to confront the drug cartels and associated illicit organizations?

Secretary GATES. In recent years, Mexico significantly increased its willingness to confront transnational criminal organizations (TCOs) and strengthened capabilities to do so through law enforcement, judicialand military support, and by other means. Mexico also launched initiatives to promote legitimate economic opportunity that help diminish illegal activity. The U.S. Government provides significant support to Mexico through training, equipment, information exchange, and related cooperation, but Mexican authorities' own efforts have achieved most of these improvements. In confronting TCOs, the Mexican people suffer grievously from escalating violence, and I support Mexico's steadfast resolve to further strengthen the rule of law.

Although Mexico's capability to disrupt TCOs is increasing, TCOs adapt quickly by escalating violence, dispersing geographically, and diversifying their criminal activities. As a result, Mexican authorities activated the Mexican Armed Forces to help disrupt TCOs, and buy time for the civilian agencies to build capacity. Mexico is building rule of law capacity through police vetting and training, as well as anti-money laundering, judicial, penal, statutory, anti-corruption and related reforms.

Mexico efforts have produced notable successes, including the arrest or killing of several TCO leaders as well as key members from all seven of Mexico's major drug organizations, while at the same time disrupting the TCOs' business environment. Unfortunately, this led to increased violence, as the criminals fight for territory. As the illegal drug business is disrupted, TCOs are also diversifying into other criminal activities and dispersing geographically, including into Central America.

Despite the Mexican authorities' efforts, the country remains the primary transit route into the United States for illegal drugs of foreign origin, as well as a major supplier of heroin, methamphetamines, and marijuana. Mexico is also the primary destination for weapons and bulk cash smuggled illegally out of the United States. Mexico's sustained interdiction efforts made great progress in reducing cocaine movement directly into Mexico from South America to low levels. Most cocaine now reaches Central America by air or sea, then transits Mexico primarily hidden in private vehicles into the United States over land.

Admiral MULLEN. Mexico has identified TCOs as the principal security challenge we face in the Western Hemisphere. The United States and Mexico understand this is both a shared challenge and responsibility between our nations. In recognition of this need, Mexico has made great strides in its understanding of TCOs and its capability to counter them. However, much work remains as Mexico is yet able to overcome the TCOs' grip on Mexico's citizenry, public security and economy.

In collaboration with Mexico, we continue to work toward improved information sharing which has enabled the Mexico effort. This has manifested itself through the Mexican apprehension of key several TCO senior leaders. Mexican armed forces are making strides with their public security forces to assume the lead role. These short-term gains have not come without a cost; drug-related murders have grown to an annual rate of 15,233—a 61 percent increase from 2009 due largely to TCO-on-TCO violence. As Mexico's armed and public security forces follow and exploit these successes we could very well see violence levels continue to increase as TCOs

are forced to operate at greater risk in an environment increasingly inhospitable to organized crime.

As Mexico consolidates its successes in establishing the rule of law, we must continue to support them as they deal with the TCOs' culture of impunity—namely violent intimidation and corruption. In our daily interactions, we continually stress the importance that Mexico forces integrity must be above reproach. It is these forces that represent the government's legitimacy and garner the trust of the citizens.

Mexico has made progress in its capability to confront TCOs but will require expansion and deepening of their capabilities and institutions as it is anticipated violent intimidation and coercion will worsen.

108. Senator MCCAIN. Secretary Gates and Admiral Mullen, what priorities have you identified for DOD to pursue regarding support to Mexico?

Secretary GATES. U.S.-Mexico relations deepened significantly in recent years, including with respect to security cooperation on matters of mutual concern such as countering TCOs. DOD provides support for cooperation under the State Department-led Merida Initiative (MI) carrying out programs requested by Mexican authorities. DOD executes $415.5 million in MI Foreign Military Financing (FMF) appropriated in fiscal years 2008–2009, including provision of helicopters, maritime surveillance aircraft, handheld drug and explosives ion scanners, and other equipment.

The DOD counternarcotics (CN) program also compliments MI with training, equipment, and information sharing in support of Mexican military and law enforcement forces. The DOD CN program also provides logistical, analytic, radar, communications and other support to U.S. law enforcement agencies' activities. In recent years, DOD's CN support to Mexico has concentrated on helping Mexican forces improve tactical and operational proficiency, as well as their air mobility, maritime law enforcement, communications, and reconnaissance capacities. DOD training and information exchanges emphasize interagency-coordinated operations, and safeguarding human rights. The DOD CN program allocated $51 million in fiscal year 2011 to support Mexico (up from about $3 million per year before 2009), and is working to reinforce this effort. DOD also works with other U.S. agencies and foreign partners to integrate cooperation throughout the Americas, recognizing that TCOs present challenges to all countries in the region.

Admiral MULLEN. DOD conducts programs as agreed upon by both United States' and Mexico's Governments as found in the "Beyond Merida" construct. Principally we seek to support Mexico's efforts to directly confront TCOs and disrupt TCOs' capability to conduct organized criminal activities, thereby helping Mexico to strengthen the capabilities necessary to exploit TCO weaknesses while working to help reduce Mexico's security forces susceptibility to TCO intimidation and corruption.

To expand Mexico's capabilities, DOD will focus on accelerating Merida Initiative equipment in coordination with DOS as we move beyond equipping to truly partnering with our Mexican counterparts to develop a clear strategy of military support to law enforcement activities.

In addition to provision of equipment, DOD will focus on providing Mexico with more information sharing thereby helping them develop the analytical capacity to exploit TCO network vulnerabilities. We recognize that our bilateral efforts with Mexico must be part of a wider collaboration with law enforcement agencies as well as diplomatic efforts.

Beyond these immediate priorities we are simultaneously supporting the sustainment of our coordinated efforts and building partner capacity in all pertinent areas. Our military-to-military efforts must maintain a coherent doctrine, conduct coordinated operations with an interoperable force, and ensure both adequate and appropriate training for the forces committed to the defense of Mexican national sovereignty. Personnel and leader development programs are essential to ensuring that Mexican initiatives are carefully managed and maintained. This type of attention is necessary if we are to capitalize on earlier gains in galvanizing public security institutions' credibility and longevity in what must be a long-term effort to partner with Mexico to defeat transnational organized crime.

109. Senator MCCAIN. Secretary Gates and Admiral Mullen, drug cartels operating from Central and South America have shown an increasing ability to adapt and continue their operations. For example, the Ecuadorians and most recently the Colombians have apprehended fully submersible "narco-subs." Colonel Manuel Hurtado, chief of staff of Colombia's Pacific Command, told the Associated Press that he estimated the captured narco-sub could hold 8 tons of drugs and has the capacity to sail totally underwater and travel to the coast of Mexico without sur-

facing. What trends are you seeing in the region and what priorities have you identified for DOD to pursue with regards to its counterdrug activities and assistance?

Secretary GATES. Ecuadoran and Colombian authorities seized submersible vessels under construction in Pacific coast jungle areas in July 2010 and February 2011, respectively. These authorities cooperated fully with U.S. counterparts in studying the vessels, which appear intended for fully-submerged operations.

TCOs continue to rely principally on "go-fast" boats to smuggle most cocaine from South to North America. Over the last 10 years, however, drug traffickers experimented with self-propelled semi-submersible (SPSS) vessels, also known as low-profile vessels. SPSS vessels achieve considerable stealth by moving very low in the water, but cannot actually submerge entirely. The recent emergence of the self-propelled fully submersible (SPFS) drug-smuggling threat appears to represent a significant evolutionary step.

DOD and other U.S. Government agencies are refining ways to detect, monitor, and interdict SPFS and SPSS craft more effectively. United States authorities are also working with Colombian authorities and those of other countries to locate the sites where the vessels are built, loaded, and launched, as well as to identify the logistical, financial, and associated networks that support them. Likewise, security cooperation programs with South and Central American countries, as well as with Mexico, are critical in strengthening those countries' surveillance and interdiction capabilities and their capacity to cooperate with U.S. counterparts and with one another.

Admiral MULLEN. Ecuadoran and Colombian authorities seized narco-subs in Pacific coast jungle areas in July 2010 and February 2011, respectively. Ecuadoran and Colombian authorities have cooperated fully with U.S. counterparts in studying the narco-subs, which appear to have been intended for limited fully-submerged operations. Drug Trafficking Organizations continue to rely principally on "go-fast" boats to carry over half of all U.S.-bound cocaine. However, the recent emergence of the Self-Propelled Fully Submersible (SPFS) drug-smuggling vessels represents a significant evolutionary step and demonstrates the trafficking organizations' adaptability, resources, and persistence.

As the lead agency of the Federal Government for detection and monitoring of aerial and maritime transit of illegal drugs into the Unites States, DOD continues to refine its technology, tactics, techniques and procedures to adapt to the law enforcement threat narco-subs pose to the United States. Additionally, U.S. authorities are working with Colombian authorities and those of other partner nations to locate where the narco-subs are built, loaded and launched, domains which are much more conducive to intercept. We also partner with like-minded countries to identify the logistical, financial and associated networks which support such illicit activities. Likewise, U.S. security cooperation programs with South and Central American countries, as well as with Mexico, are critical in strengthening those countries' surveillance and interdiction capabilities, including their capacity to cooperate with U.S. counterparts and with each other in the Central American region.

COMPETITION IN CONTRACTING

110. Senator MCCAIN. Secretary Gates, I am concerned about what I see as a movement by DOD away from competition. The most egregious recent example is the Navy's decision to award contracts to both bidders in the LCS program—a decision I still believe was ill-advised. But, there are numerous others—outside the context major systems.

In fact, the Congressional Quarterly recently reported that "according to newly available DOD data ... more than half the Pentagon's total budget obligations for contracting last year were spent without effective competition or with no competition at all." Are you aware of this report?

Secretary GATES. DOD actually employed a very effective competitive procurement strategy in the case of the LCS. The effects of head-to-head competition resulted in competitive pricing from both offerors that had not occurred with any previous strategy. This strategy promotes competition for DOD by establishing multiple options for conducting future competitions. While I have not read the specific "Congressional Quarterly" report, Dr. Ashton Carter, the USD(AT&L), is aware of the issue and made promoting real competition a major component of his Better Buying Power Initiative. As part of this effort, guidance was issued on November 24, 2010 on "Improving Competition in Defense Procurements."

111. Senator MCCAIN. Secretary Gates, how concerned are you about this development and how do you intend to address it?

Secretary GATES. I am concerned about this development and have undertaken a major reform agenda in DOD to improve business processes and change the way it acquires goods and services to generate greater efficiencies and savings. Aspects of this initiative are being implemented in the USD(AT&L)'s September 14, 2010 memorandum for "Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending." The goal of this initiative is to achieve more efficient, effective, and affordable ways of conducting DOD business. Promoting real competition is a focus area within the initiative that requires the Military Departments and Defense Agencies to develop plans to improve overall and effective competition by: reducing the number of single-bid contracts; negotiating better prices on single-bid contracts and task and delivery orders; and reducing the dollar value of sole-source contracts and task and delivery orders. On November 24, 2010 the Director of Defense Procurement and Acquisition Policy issued guidance on improving competition in Defense procurement.

OFFICE OF THE UNDER SECRETARY OF DEFENSE
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ACQUISITION,
TECHNOLOGY
AND LOGISTICS

NOV 24 2010

MEMORANDUM FOR COMMANDER, UNITED STATES SPECIAL OPERATIONS COMMAND (ATTN: ACQUISITION EXECUTIVE)
COMMANDER, UNITED STATES TRANSPORTATION COMMAND (ATTN: ACQUISITION EXECUTIVE)
DEPUTY ASSISTANT SECRETARY OF THE ARMY (PROCUREMENT)
DEPUTY ASSISTANT SECRETARY OF THE NAVY (ACQUISITION & LOGISTICS MANAGEMENT)
DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE (CONTRACTING)
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: Improving Competition in Defense Procurements

This memorandum provides additional guidance for competitive situations in which only one offer is received in response to a solicitation and is based on the direction provided in the USD(AT&L) memorandum "Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending" dated September 14, 2010. To maximize the savings that are obtained through competition, contracting officers will no longer use the standard at FAR 15.403-1(c)(1)(ii) or (iii) to determine that the offered price is based on adequate competition when only one offer is received.

Effective immediately, you will ensure that if a solicitation was open for less than 30 days and only one offer was received, the contracting officer shall re-advertise the solicitation for a minimum of an additional 30 days, unless a waiver is obtained from the head of the contracting activity. Further, if the solicitation was open for at least 30 days, or has been re-advertised and still only one offer is received, the contracting officer shall conduct negotiations with the offeror, unless this requirement is specifically waived by the head of the contracting activity. The basis for these negotiations shall be either certified cost or pricing data or other than certified cost or pricing data, as appropriate. In no event, should the negotiated price exceed the price originally offered.

Contracting officers shall document the results of the negotiations in the Business Clearance/Pricing Negotiation Memorandum in accordance with FAR 15.406-3 and DFARS PGI 215.406-3 in the same manner as any negotiated procurement. Contract Review Boards or other similar review mechanisms should be used to ensure the Business Clearance/Pricing Negotiation Memorandum documents the process and supports the negotiated price as being fair and reasonable. The Peer Reviews conducted post award will be the mechanism for assessing the application of this process.

The intent of this guidance is to ensure more effective competition that will result in more effective use of the Department's resources and savings for the taxpayer. Should you have any questions, please contact Mrs. Susan Hildner at 703-697-0895, or at Susan.Hildner@osd.mil.

Shay D. Assad
Director, Defense Procurement
and Acquisition Policy

112. Senator MCCAIN. Secretary Gates, since this data was taken from DOD sources and should have been available to your staff, why wouldn't increasing completion be the cornerstone of any efficiency initiative announced by DOD to date?

Secretary GATES. Competition is the cornerstone of the acquisition process and its benefits are well understood. Competition was re-emphasized when the USD(AT&L) issued his June 2010 memorandum, "Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending" to underscore the importance of competition. In July 2010, the Director of Defense Procurement and Acquisition Policy established Subcommittee 13 under the Panel on Contracting Integrity to address opportunities for more effective competition. In September 2010, the USD(AT&L) followed his June memorandum with the "Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending" to promote real competition, which was followed by his November 2010 Implementation Directive that requires Military Departments and Defense Agencies to improve the overall rate of competition by 2 percent and the rate of effective competition by 10 percent. Further direction was provided by the Director of Defense Procurement and Acquisition Policy's November 2010 memorandum "Improving Competition in Defense Procurements," which instructs contracting officers to resolicit any solicitation that was open for less than 30 days, and if only one offer is received in the resolicitation, the contracting officer must conduct negotiations to achieve the best value for the DOD.

THE UNDER SECRETARY OF DEFENSE
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ACQUISITION,
TECHNOLOGY
AND LOGISTICS

JUN 28 2010

MEMORANDUM FOR ACQUISITION PROFESSIONALS

SUBJECT: Better Buying Power: Mandate for Restoring Affordability and Productivity in Defense Spending

I have written to you previously to emphasize, with President Obama and Secretary Gates, that your highest priority is to support our forces at war on an urgent basis. Over the last year, the Department has also worked to reform its acquisition system, including implementing the Weapon Systems Acquisition Reform Act. Today I write to give direction on another important priority: delivering better value to the taxpayer and improving the way the Department does business.

We are a nation at war, and the Department does not expect the defense budget to decline. At the same time, we will not enjoy the large rate of growth we experienced during the years after September 11, 2001. We must therefore abandon inefficient practices accumulated in a period of budget growth and learn to manage defense dollars in a manner that is, to quote Secretary Gates at his May 8, 2010 speech at the Eisenhower Library, "respectful of the American taxpayer at a time of economic and fiscal distress."

This reality, combined with a determination to take care of our service members and avoid major changes in force structure, has led the Secretary and Deputy Secretary to launch an efficiencies initiative in the Department. The initiative requires the Department to reduce funding devoted to unneeded or low-priority overhead, and to transfer these funds to force structure and modernization so that funding for these warfighting capabilities grows at approximately three percent annually. This is the rate of growth needed historically to continue to give the troops what they need.

Some of these savings can be found by eliminating unneeded programs and activities; and, indeed, the Department's leadership has already taken strong action in this area and will need to do more. But other savings can be found within programs and activities we do need, by conducting them more efficiently. Deputy Secretary Lynn expects that two-thirds of the savings transferred to warfighting accounts should come about this way. Pursuing this kind of efficiency is the purpose of my message today to the Department's acquisition professionals. We need to restore affordability to our programs and activities. I would like

us to embark upon a process today to identify and then act on steps we can take to obtain two to three percent net annual growth in warfighting capabilities without incurring a commensurate budget increase by identifying and eliminating unproductive or low-value-added overhead; in effect, doing more without more.

The Department is spending approximately $700 billion per year for our nation's defense. Approximately $300 billion of those funds are spent within the Department's walls – on the salaries and benefits of military personnel and civilian employees, and on the buildings and facilities within which they work. But the remainder – $400 billion – is spent on contracts issued to entities outside of the Department of Defense. This $400 billion is divided about equally between products (e.g., weapons, electronics, fuel, and facilities) and services (e.g., IT services, knowledge-based services, facilities upkeep, and transportation). We, the Department's acquisition officials, agree to these contracts on behalf of the taxpayer. Each of these contracts contains a statement of the services or products it is procuring; an arrangement between the government and the contractor for how the costs of those items will be paid; and the overheads, indirect charges, and fees that complete the business transaction and make it possible for the defense industry to be economically viable.

The guidance memorandum I plan to issue will require each of you, as you craft and execute the Department's contracts in coming years, to scrutinize these terms to ensure that they do not contain inefficiencies or unneeded overhead. The guidance will give you specific features to examine and targets to hit in the pursuit of greater efficiency. The guidance will focus on getting better outcomes, not on our bureaucratic structures. But it must also take note of where the government's processes and regulations contribute to inefficiency in our business relationships.

Today I want to share with you the preliminary outlines of this guidance, so that I can have the benefit of your experience and perspective before I issue it in final form. I am also asking our partners in industry for their thoughts and input. I am also sharing these plans with the Congress. A process of analysis and dialogue is necessary to make sure our actions are effective and soundly based.

I want to emphasize two points about this initiative:

First, the savings we are seeking will not be found overnight. It has taken years for excessive costs and unproductive overhead to creep into our business processes, and it will take years to work them out. We will be concentrating on new contracts as they are awarded in coming years, to ensure that they reflect new efficiencies. Some of the targets and objectives we decide to pursue will only be able to be achieved on a timeline of several

years. On the other hand, Secretary Gates has explained clearly why we need to embark now. And the earlier we embark, the easier it will be to succeed.

Second, we in the Department cannot succeed at this task alone. We need the input and involvement of industry, and I will be actively seeking their support and ideas. We do not have an arsenal system in the United States: the Department does not make most of our weapons or provide many non-governmental services essential to warfighting – these are provided by private industry. Our industry partners are patriots as well as businessmen. This initiative should contribute to the continuing vitality and financial viability of the defense industry in the era ahead by aligning the direction and incentives of the Department and industry. It is intended to enhance and incentivize efficiency and total factor productivity. Most of the rest of the economy exhibits productivity growth, meaning that every year the buyer gets more for the same amount of money. So it should be in the defense economy. Increased productivity is good for both industry and government. So also is avoiding budget turbulence and getting more programs into stable production.

We also need the help of Congress. Members of Congress observe with dismay as they are asked to approve ever-increasing funding for the very same product or service. We will need their input and support to make necessary adjustments that will in some cases be difficult.

What is contained in the attached charts is an initial framework for restoring affordability to defense. I will be refining this framework over coming weeks, in full consultation with you, with industry, with Congress, and with outside experts and leaders. I plan to issue a final version of this mandate later this summer.

Realizing the objective of this initiative will be a formidable endeavor. But it is imperative. Secretary Gates, Deputy Secretary Lynn, and I have concluded that we cannot support our troops with the capabilities they need unless we achieve greater efficiency.

Ashton B. Carter

Objectives

- Deliver the warfighting capability we need for the dollars we have
- Get better buying power for warfighter and taxpayer
- Restore affordability to defense goods and services
- Improve defense industry productivity
- Remove government impediments to leanness
- Avoid program turbulence
- Maintain a vibrant and financially healthy defense industry

Obtain 2-3% net annual growth in warfighting capabilities without commensurate budget increase by identifying and eliminating unproductive or low-value-added overhead and transfer savings to warfighting capabilities. Do more without more.

Providing Incentives for Greater Efficiency in Industry

- **LEVERAGING REAL COMPETITION:** Avoid directed buys and other substitutes for real competition. Use technical data packages and open systems architectures to support a continuous competitive environment.
- **USING PROPER CONTRACT TYPE FOR DEVELOPMENT AND PROCUREMENT:** Phase out award-fee contracts and favor fixed-price or cost-type incentive contracts in which government and industry share equally in overruns and underruns, and overruns have analytically-based caps. Use cost-reimbursement contracts only when either government requirements or industry processes cannot be adequately specified to support pricing. Adjust sole-source fixed-price contracts over time to reflect realized costs. Work down undefinitized contract actions. Seek authority for multi-year contracts where significant savings are possible.
- **USING PROPER CONTRACT TYPE FOR SERVICES:** Phase out Time and Material and sole-source ID/IQ contracts wherever possible. Utilize fixed-price performance-based contracts when requirements are firm and can be measured, with payments tied to performance. Utilize fixed-price level of effort or cost-plus-fixed-fee contracts (with profit/fee tied to weighted guidelines) when requirements are still being defined. Award fees should be used only by exception. Maximize the use of multiple-source, continuously competitive contracts.
- **ALIGNING POLICY ON PROFIT AND FEE TO CIRCUMSTANCE:** Align opportunity to earn profits/fees to both value to the taxpayer and risk to the contractor. Apply weighted guidelines to profit/fee levels. Reward higher productivity with higher profits. Incentivize investment in innovation.
- **SHARING THE BENEFITS OF CASH FLOW:** Ensure that taxpayers receive adequate consideration (price reductions) for improved cash flows. Progress payments must reflect performance but can be increased above customary levels in return for consideration by the contractor. Reduce over time the gap between proposed and actual rates in forward price rate agreements.
- **TARGETING NON-VALUE-ADDED COSTS:** Identify and eliminate non-value-added overhead and G&A charged to contracts. Limit fees for subcontractor management to reflect actual value provided (risk assumed by prime and continuous subcontractor risk reduction). Limit B&P allowable costs in sole source contracts and encourage effective use of IRAD.
- **INVOLVING DYNAMIC SMALL BUSINESS IN DEFENSE:** When establishing multiple award contracts for services, make every effort to provide for small business participation. If at least two small businesses are deemed capable of performing on such a contract, consider setting aside that work for competition among them.
- **REWARDING EXCELLENT SUPPLIERS:** Emulate the Navy's pilot program to provide special benefits to consistently excellent industrial performers.

Adopting Government Practices that Encourage Efficiency

- **ADOPTING "SHOULD-COST" AND "WILL-COST" MANAGEMENT:** Use historically informed independent cost estimation ("will-cost" estimates) to inform managing of programs to cost objectives ("should-cost" estimates).
- **STRENGTHENING THE ACQUISITION WORKFORCE:** Achieve SECDEF goal of adding to government acquisition workforce with increased skill levels. Leverage unique qualities of non-profit FFRDCs and UARCs to augment acquisition workforce capability.
- **IMPROVING AUDITS:** Improve consistency and quality of government audits, and focus them on value-added content.
- **MANDATING AFFORDABILITY AS A REQUIREMENT:** In new programs such as the SSBN-X nuclear missile submarine, the Presidential Helicopter, the Ground Combat Vehicle, and the Air Force/Navy Long Range Strike Family of Systems, cost considerations must shape requirements and design.
- **STABILIZING PRODUCTION RATES:** To ensure more programs are in stable, economically favorable rates of production and avoid cost escalation, program managers may not adjust production rates downward without head of component authority.
- **ELIMINATING REDUNDANCY WITHIN WARFIGHTING PORTFOLIOS:** Emulate the Army's Precision Fires Capability Portfolio approach to identify where multiple programs are pursuing similar objectives.
- **ESTABLISHING SENIOR MANAGERS FOR PROCUREMENT OF SERVICES:** Follow the Air Force lead in establishing a Program Executive Officer for services in each DOD component to focus on improving policy and practice in this high-dollar-value area.
- **PROTECTING THE TECHNOLOGY BASE:** Protect the future by sustaining investment while focusing on high value-added work.

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ACQUISITION,
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SEP 14 2010

MEMORANDUM FOR ACQUISITION PROFESSIONALS

SUBJECT: Better Buying Power: Guidance for Obtaining Greater Efficiency and Productivity in Defense Spending

On June 28, I wrote to you describing a mandate to deliver better value to the taxpayer and warfighter by improving the way the Department does business. I emphasized that, next to supporting our forces at war on an urgent basis, this was President Obama's and Secretary Gates' highest priority for the Department's acquisition professionals. To put it bluntly: we have a continuing responsibility to procure the critical goods and services our forces need in the years ahead, but we will not have ever-increasing budgets to pay for them. We must therefore strive to achieve what economists call productivity growth: in simple terms, to DO MORE WITHOUT MORE. This memorandum contains specific Guidance for achieving the June 28 mandate.

Secretary Gates has directed the Department to pursue a wide-ranging Efficiencies Initiative, of which this Guidance is a central part. This Guidance affects the approximately $400 billion of the $700 billion defense budget that is spent annually on contracts for goods (weapons, electronics, fuel, facilities etc., amounting to about $200 billion) and services (IT services, knowledge-based services, facilities upkeep, weapons system maintenance, transportation, etc., amounting to about another $200 billion). We estimate that the efficiencies targeted by this Guidance can make a significant contribution to achieving the $100 billion redirection of defense budget dollars from unproductive to more productive purposes that is sought by Secretary Gates and Deputy Secretary Lynn over the next five years.

Since June, the senior leadership of the acquisition community – the Component Acquisition Executives (CAEs), senior logisticians and systems command leaders, OSD officials, and program executive officers (PEOs) and program managers (PMs) – has been meeting regularly with me to inform and craft this Guidance. We have analyzed data on the Department's practices, expenditures, and outcomes and examined various options for changing our practices. We have sought to base the specific actions I am directing today on the best data the Department has available to it. In some cases, however, this data is very limited. In these cases, the Guidance makes provision for future adjustments as experience and data accumulate so that unintended consequences can be detected and mitigated. We have conducted some preliminary estimates of the dollar savings anticipated from each action based on reasonable and gradual, but steady and determined, progress against a clear goal and confirmed that they can indeed be substantial.

Changing our business practices will require the continued close involvement of others. We have sought out the best ideas and initiatives from industry, many of which have been adopted in this Guidance. We have also sought the input of outside experts with decades of experience in defense acquisition.

Going forward we will need the support of Congress, which will be essential to the success of this endeavor and we have tried to take their concerns fully into account in formulating this Guidance.

A capable, qualified, and appropriately sized acquisition workforce will be key to achieving efficiency. While Secretary Gates has directed a scrub of the oversight staff in OSD and the military commands, he has also determined that the acquisition workforce increases planned last year should proceed, since they are focused on specific skill sets near to the point of execution. You, the acquisition leaders, and your workforce will be essential to the success of this Guidance.

This Guidance contains 23 principal actions to improve efficiency organized in five major areas. Specific guidance is contained in directives I am issuing today or in the near future. Over the coming months, the acquisition leadership will discuss with each of you how you can implement this Guidance and monitor progress against its metrics.

There is every reason to believe the efficiencies we are seeking can be realized. It has taken years for excessive costs and unproductive overhead to creep into our business practices, but over the coming years we can surely work them out again. Those who hesitate to go down the road of greater efficiency must consider the alternative: broken or cancelled programs, budget turbulence, uncertainty and unpredictability for industry, erosion of taxpayer confidence that they are getting value for their defense dollar and, above all, lost capability for the warfighter in a dangerous world. Not only can we succeed: we must.

TARGET AFFORDABILITY AND CONTROL COST GROWTH

Mandate affordability as a requirement. Affordability means conducting a program at a cost constrained by the maximum resources the Department can allocate for that capability. Many of our programs flunk this basic test from their inception. As the Department begins new programs like the Ohio-class SSBN(X) replacement, the new Presidential Helicopter, the Army's Ground Combat Vehicle (GCV), and the joint Family of Systems for long-range strike in the near future, I will require program managers to treat affordability as a requirement before granting milestone authority to proceed with the program. *Specifically, at Milestone A, my Acquisition Decision Memorandum (ADM) approving formal commencement of the program will contain an affordability target to be treated by the program manager (PM) like a Key Performance Parameter (KPP) such as speed, power, or data rate – i.e., a design parameter not to be sacrificed or compromised without my specific authority. At Milestone B, when a system's detailed design is begun, I will require presentation of a systems engineering tradeoff analysis showing how cost varies as the major design parameters and time to complete are varied.* This analysis would allow decisions to be made about how the system could be made less expensive without loss of important capability. This analysis would then form the basis of the 'Affordability Requirement' that would be part of the ADM decision. I will be issuing a directive in the near future to implement this guidance that will apply to both elements of a program's life cycle cost – the acquisition cost (typically 30 percent) and the operating and support cost (typically 70 percent). For smaller programs, the CAEs will be directed to do the same at their level of approval. I recognize that we need to improve the Department's capability to perform this kind of engineering tradeoff analysis, but the ability to understand and control future costs from a program's inception is critical to achieving affordability requirements.

The Navy has been conducting just this sort of analysis in connection with the commencement of the Ohio-class replacement. This submarine will be the bulwark of our survivable nuclear deterrent for the indefinite future as required by the Nuclear Posture Review, but at the price originally estimated, its construction would swamp the Navy's shipbuilding budget during the 2020-2030 periods. By conducting the kind of design tradeoffs I will require at Milestone B and trimming requirements as a result without compromising critical capability, the Navy has reduced the estimated average procurement cost by 16 percent with a goal of fully 27 percent. Over the next five years, the Department expects to begin new programs with acquisition costs in the FYDP of over $50 billion and totaling over $200 billion. If the forecast costs of these new programs can be scrubbed down by even a fraction of that achieved in the SSBN(X) program, billions of dollars just within the FYDP can be reallocated to more productive purposes.

Drive productivity growth through Will Cost/Should Cost management. During contract negotiation and program execution, our managers should be driving productivity improvement in their programs. They should be scrutinizing every element of program cost, assessing whether each element can be reduced relative to the year before, challenging learning curves, dissecting overheads and indirect costs, and targeting cost reduction with profit incentive – in short, executing to what the program *should cost*. The Department's decision makers and Congress use independent cost estimates (ICE) – forecasts of what a program *will cost* based upon reasonable extrapolations from historical experience – to support budgeting and programming. While ICE Will Cost analysis is valuable and credible, it does not help the program manager to drive leanness into the program. In fact, just the opposite can occur: the ICE, reflecting business-as-usual management in past programs, becomes a self-fulfilling prophesy. The forecast budget is expected, even required, to be fully obligated and expended.

To interrupt this vicious cycle and give program managers and contracting officers and their industry counterparts a tool to drive productivity improvement into programs, *I will require the manager of each major program to conduct a Should Cost analysis justifying each element of program cost and showing how it is improving year by year or meeting other relevant benchmarks for value. Meanwhile, the Department will continue to set the program budget baseline (used also in ADMs and Selected Acquisition Reports (SARs)) using an ICE.*
We will use this method, for example, to drive cost down in the Joint Strike Fighter (JSF) program, the Department's largest program and the backbone of tactical air power for the U.S. and many other countries in the future. This aircraft's ICE (Will Cost) average unit price grew from $50 million Average Unit Procurement Cost (APUC) when the program began (in 2002 dollars, when the program was baselined) to $92 million in the most recent ICE. Accordingly, the JSF program had a Nunn-McCurdy breach last year and had to be restructured by the Secretary of Defense. As a result of that restructuring, a Should Cost analysis is being done in association with the negotiation of the early lot production contracts. The Department is scrubbing costs with the aim of identifying unneeded cost and rewarding its elimination over time. The result should be a negotiated price substantially lower than the Will Cost ICE to which the Department has forecasted and budgeted. Secretary Gates indicated in his Efficiency Initiative that monies saved in this way could be retained by the Service that achieved the efficiency; in this case the Air Force, Navy, and Marine Corps could reallocate JSF funds to buy other capabilities.

The Department will obligate about $2 trillion in contracts over the next five years according to Will Cost estimates, so savings of a few percent per year in execution are significant.

The metric of success for Should Cost management leading to annual productivity increases is annual savings of a few percent from all our ongoing contracted activities as they execute to a lower figure than budgeted. Industry can succeed in this environment because we will tie better performance to higher profit, and because affordable programs will not face cancellation.

Eliminate redundancy within warfighter portfolios. The Army recently determined that it could forego the Non-Line-of-Sight Launch System (NLOS-LS) short-range guided missile because it already had weapons that had some (though not all) of the same features as NLOS-LS and because the cost of NLOS-LS – almost $300,000 each – was too high for the narrow capability gap it would fill. This was a classic value decision that could not have been made by looking at the NLOS-LS program in isolation. The Army had to look at the entire "warfighting portfolio" of precision weapons to see that NLOS-LS's cancellation would not, in fact, result in a major sacrifice of military capability.

I intend to conduct similar portfolio reviews at the joint and Department-wide level with an eye toward identifying redundancies. These reviews will initially cover Ground Moving Target Indicator (GMTI) systems and Integrated Air and Missile Defense. *I am directing the components to do the same for smaller programs and report the results.* The savings from these reviews cannot be estimated until they are conducted, but the savings could be substantial.

Make production rates economical and hold them stable. Government and industry both benefit from economic order quantity (EOQ) rates of production, and from stability in production year after year. Unfortunately, quantity cutting and turbulence to meet budget targets is widespread. Production rates are a critical part of any acquisition strategy approved by me. *Therefore, beginning immediately, I will expect production rate to be part of the affordability analysis presented at Milestones A and B. Furthermore, at Milestone C, I will set a range of approved production rates. Deviation from that range without my prior approval will lead to revocation of the Milestone.*

Recent examples where the Department ensured cost savings by implementing economical production rates include the Navy's E-2D Advanced Hawkeye program and the Air Force's Small Diameter Bomb II program. During reviews for initial production for both programs, business case analyses demonstrated significant dollar savings and more rapid achievement of operational capability, with the use of aggressive but attainable production profiles. Those EOQs were directed and are expected to realize savings of $575 million for the E-2D and $450 million for the SDB II as a result.

I expect to see a 5 percent annual increase in the number of ACAT 1D and 1C programs executing at their EOQ level.

Set shorter program timelines and manage to them. The leisurely 10-15 year schedule of even the simplest and least ambitious Department programs not only delays the delivery of needed capability to the warfighter, but directly affects program cost. As all programs compete for funding, the usual result is that a program settles into a level-of-effort pattern of annual funding that does not deviate much from year to year. The total program cost is the level-of-effort times the length of the program. Thus a one-year extension of a program set to complete in 10 years can be expected to result in 10 percent growth in cost as the team working on the project is kept on another year.

Yet managers who run into a problem in program execution generally cannot easily compromise requirements and face an uphill battle to obtain more than their budgeted level of funding. The frequent result is a stretch in the schedule.

An example of the importance of addressing schedule directly as an independent variable is the Army's GCV. An initial acquisition plan had this program taking approximately 10 years to complete a first production vehicle, typical of the normal leisurely pace of programs. (In contrast, the MRAP-ATV began in 2009 and delivered more than 5,700 vehicles to Afghanistan by August 2010.) Given the large investment in ground vehicle technology made in the cancelled Future Combat Systems (FCS) program, there was no need to take this much time, especially if the basic requirements were limited to those essential to an infantry fighting vehicle and incorporating the lessons of recent wars. The Department determined that the GCV program should have a seven-year schedule to first production vehicle. Requirements and technology level for the first block of GCVs will have to fit this schedule, not the other way around. *When requirements and proposed schedules are inconsistent, I will work on an expedited basis with the Services and the Joint Staff to modify requirements as needed before granting authority for the program to proceed. In particular, I will not grant authority to release requests for proposals until I am confident requirements and proposed schedules are consistent. From now on, I will also require as part of the cost tradeoff analysis at Milestone B to support affordability, a justification for the proposed program schedule. This justification will be part of the ADM authorizing the program to proceed. Deviation from that schedule without my prior approval will lead to revocation of the Milestone.*

INCENTIVIZE PRODUCTIVITY AND INNOVATION IN INDUSTRY

Reward contractors for successful supply chain and indirect expense management. The Department pays profit/fee to prime contractors on work they conduct themselves, work subcontracted by the prime contractor to subcontractors, and allowable overhead and administrative costs. All three are appropriate, but in each instance the level of profit should be calculated to reward performance. Profit on subcontracted work is meant to compensate the prime for taking on the burden of managing subcontractor risk and delivering subcontractor value. Otherwise, the government would have to manage the subcontractor itself (an alternative called "breakout"). It follows that higher profit should be awarded to management of higher-risk subcontracts, and higher profit should be given when the prime succeeds in driving down subcontractor costs every year. Likewise, profit on overhead should incentivize control of overhead cost. There is evidence, however, that blanket profit levels are set and, what is more, are not revisited periodically in light of actual performance. This should be done as a matter of course. Additionally, incentives have not kept pace with fundamental changes in the defense industrial environment, among them the growth of services contracts and a shift in the role of prime contractors from manufacturers to integrators of components manufactured by subcontractors.

I am instructing the Director of Defense Procurement and Acquisition Policy (DPAP) to review the Weighted Guidelines for profit with the aim of emphasizing the tie between profit and performance. In the meantime and effective immediately, I expect all managers of ACAT 1D programs to provide to me, as part of their acquisition strategy, the reward and incentive strategy behind their profit policy, including consideration of breakout alternatives where

appropriate. I direct the CAEs to do the same in programs for which they have acquisition authority.

It is important to note that the savings to be expected from this direction will be in cost, not in profit. Savings are not expected in profit per se since in some instances profit will increase to reward risk management and performance. But if profit policy incentivizes reduction in program cost, the overall price to the taxpayer (cost plus profit) will be less.

The value of considering a breakout option is illustrated by the results of a recent review of DDG-51 Destroyer costs. During this review, it was noted that the new cost for the Restart Main Reductions Gears (MRG), previously subcontracted by two construction shipyards as Class Standard Equipment, was now more than three times the previous cost. The incumbent manufacturer had exited the market for MRGs and had sold its intellectual property to another firm. The prime passed on this subcontractor's new bill to the government without aggressive cost management. The PEO broke out the MRG from the prime contract and conducted a full and open competition, which resulted in savings over $400 million to the government for a lot buy of nine ship sets.

Increase the use of Fixed-Price Incentive Firm Target (FPIF) contract type where appropriate using a 50/50 share line and 120 percent ceiling as a point of departure. Choosing contract type is one important way of aligning the incentives of the government and the contractor. One size does not fit all. At one time, the Department attempted to impose fixed-price contracts on efforts where significant invention (and thus unknowable costs) could be anticipated. More recently, Cost Plus Award Fee (CPAF) contracts with subjective measures of award fee not clearly tied to cost control became widespread. In between these extremes is the FPIF contract, which should be the contracting officer's point of departure whenever conditions obtain (or can be created) that make it appropriate. "Fixed Price" is appropriate when the government knows what it wants and does not change its mind, and when industry has good control of its processes and costs and can thus name a price. While these preconditions do not always exist (as in, for example, a risky development where invention is needed), they are certainly desirable, and both parties to the contract should aspire to fulfilling them. "Incentive" is important, since it shares the costs of overruns and rewards of underruns between government and industry, giving both sides of the transaction an incentive for good performance. FPIF will normally be appropriate early in production and in single-source production where year-on-year price improvement can be rewarded.

A 50/50 share line suggests that the government and contractor have a common view of the likely contract execution cost. A 50/50 share line should represent a point where the estimate is deemed equally likely to be too low or too high. A flat or steep share line suggests that the government and contractor do not see project cost the same way. These differences in view should be discussed and considered as the basis for adjusting the target cost before an uneven share line is agreed to in contract. This might occur, for example, earlier in a program where the costs are inherently more uncertain.

A ceiling of 120 percent on an FPIF contract sets a 20 percent limit on the government's liability for overrun of the contract target cost. This is reasonable in view of historical experience in program overruns, and also reasonable because programs that overrun more than this amount in an era of relatively flat defense budgets should face review with an eye to cancellation.

A higher proposed ceiling requires explanation to the relevant head of contracting authority. Likewise, a lower ceiling than 120 percent suggests that perhaps a firm fixed-price contract is appropriate.

I am considering whether to issue more formal guidance on this matter, but effective immediately, I will require a justification of contract type for each proposed contract settlement be made to the relevant acquisition executive before negotiations are concluded. The metric for success of this measure would be fewer programs that overrun their cost targets.

The Navy, for example, recently concluded negotiations for a multi-year procurement of 124 F/A-18 strike fighter and E/A-18 electronic attack aircraft, which will yield over $600 million (greater than 10 percent) savings to the Department and the taxpayer. The F-18 program was able to drive down cost for each lot of aircraft procured in the framework of a fixed-price incentive contract that meets the Department's objectives for realistic costs, reasonable profit, a 50/50 shareline, and a 120 percent ceiling.

Adjust progress payments to incentivize performance. The government is an exceptionally reliable customer in terms of financing. The Department pays up front and regularly, sometimes before products are delivered. The Department also finances most industry investment needed to prepare products for the defense market. The Department can therefore offer its contractors a high cash flow return on invested capital, a feature highly valued by investors. This financial environment in turn offers another opportunity to reward good performance. The Department should take advantage of this circumstance through the use of innovative contract financing methods to incentivize vendors with the time value of money in exchange for lower prices/costs. *As a matter of practice, on all fixed price type contracts, I expect that the basis of negotiations shall be the use of customary progress payments. After agreement on price on the basis of customary progress payments, the contractor shall have flexibility to propose an alternate payment arrangement for the Government's consideration.* By having determined the projected contract cost, the contracting officer should be able to determine the consideration being offered by the contractor for a more favorable payment structure. The benefits of that improved cash flow shall be documented and the contracting officer will clearly identify in the business clearance the amount of consideration the Government received for the use of the improved cash flow opportunity. *I will direct that the Director of DPAP develop for my review a cash flow model to be used by all contracting officers contemplating financing other than customary progress payments and make certain that the guidance is developed to ensure that the improved cash flow opportunities provide benefit to both industry (at both prime and subcontractor level) and the taxpayer.*

Extend the Navy's Preferred Supplier Program to a DoD-wide pilot. The Department should recognize and reward businesses and corporations that consistently demonstrate exemplary performance. The Department has experience with these types of programs in certain parts of our business. For example, the Defense Logistics Agency's Strategic Supplier Alliance (SSA) has established long term relationships with major original equipment manufacturers (OEMs) within commodity groups for parts and supplies, and they are eligible to receive contract awards on a sole source basis. SSA suppliers have their performance tracked via a vendor scorecard tool that reports administrative lead time, production lead time, percent obligations and other measures and are eligible for preferred status based upon these measures.

The Navy has announced a pilot program that would allow contracting authorities to set favorable post-award special terms and conditions that recognize those businesses and corporations that have demonstrated, over time, superior performance in delivering quality products and services, robust subcontracting management, cost containment, and on-time delivery. In the Navy's pilot, the special terms and conditions can, for example, include more favorable progress payments, higher designated ranges in the weighted guidelines, special award fee pools, and other potential post-award advantages. I believe this has significant potential to appropriately reward those corporate/business suppliers that the Department can count on to repeatedly deliver the value that we expect. *I am directing the Navy to continue to lead the pilot program but to immediately include the other Services and DoD components in order to transition to a full DoD program as soon as practical.*

Reinvigorate industry's independent research and development and protect the defense technology base. The Department reimburses industry as an allowable cost over $3 billion annually in "Independent Research and Development" (IRAD). This is one of the Department's principal investments in technology innovation, larger than any single military department's annual Science and Technology (6.1-6.3) program. Yet, we do not have insight into how or where these funds go or if they benefit the Department or promote the technological prowess of our industry. Beginning in the 1990s, the Department reduced its technical exchanges with industry, in part to ensure the "independence" of IRAD. The result has been a loss of visibility into the linkage between funding and technological purpose. Additionally, there is some evidence that the defense industry has reduced its in-house laboratory infrastructure to a point not envisioned in the 1990s.

The capability to perform work in science and technology has increased throughout the world. Data suggests U.S. world share is continuing to decline. In order to maintain our innovative edge, secure the basis for a strong economy, and provide for national security, we must implement new policies to effectively use Department resources and maintain appropriate investment in technology development and lower cost and time required for providing those capabilities.

Understanding that industry needs to maintain independence, but acknowledging that the public funds these investments, I am reviewing how we can work with industry to identify and eliminate impediments to innovation, provide better feedback to industry researchers, and better define the Department's needs to our industry partners.

I intend to take action to align the purpose of IRAD to actual practice. Unfortunately, as noted above, the Department does not have the information about how the program is actually functioning that I would need to undergird a policy change at this time. Accordingly, I am today directing three steps that I will review in six months with the objective of issuing a directive on this subject at that time. First, the Director of Defense Research and Engineering (DDR&E) should engage with the largest of the performers of IRAD to collect data on how they have used these funds in recent years, the resulting benefits to government and industry, and how they obtain insight into technical areas of potential interest to the government. Second, I will ask the Defense Contract Audit Agency (DCAA) to collect and provide to me IRAD financial data from all firms with allowable IRAD costs. Third, I direct the DDR&E to provide to me within 60 days a plan for a pilot program, to improve the return on IRAD investments for industry and

government. The pilot program is to apply to as much as a third of the IRAD allocation, and will reflect early insights from the data we will collect.

PROMOTE REAL COMPETITION

Real competition is the single most powerful tool available to the Department to drive productivity. Real competition is to be distinguished from a series of directed buys or other contrived two-source situations which do not harness the full energy of competition. Competition is not always available, but evidence suggests that the government is not availing itself of all possible competitive situations.

Present a competitive strategy at each program Milestone. Since it is not practical to develop two of everything the Department needs, competition must be found in other forms. Program managers should have a competitive strategy for their program even if they do not have classic head-to-head competition. This might take the form of a related program that could serve as partial substitute for the program in question, a plan to re-gain competition in an unproductive sole source situation, breakout of subcontracted work, adapting commercial products, or other strategies.

I will require a presentation of a competitive strategy for each program at each Milestone and expect the CAEs to do the same at their level.

A highly successful example of a competitive strategy is the Navy's Littoral Combat Ship. This program was in danger of falling into a pattern of directed buys rather than real competition, with the result that the price of an LCS was creeping up towards that of a destroyer. The Navy decided to select only one of the LCS designs for production, doing so in an additional competitive selection. Competition in a different form will then be introduced into the program, as other shipbuilders are provided the technical data to build the same ship design competitively. This strategy is expected to save the Navy over $1 billion over the FYDP, with additional savings expected over the life of the LCS acquisition program.

Remove obstacles to competition. In recent years, the Department has achieved the highest rates of competition in its history. Having said that, the fact is that a significant fraction of those competitive procurements have involved what is termed "ineffective competition," since only one offer to a solicitation was received even when publicized under full and open competition. This occurs in about $55 billion of Department contracts annually. One step the Department can take is to mitigate this loss of savings from the absence of competition. A common practice has been to conclude that either a bid or proposal submitted by a single offeror in response to a full and open competition met the standard for adequate price competition because the bid or proposal was submitted with the expectation of competition. As a result, no certified cost or pricing data was requested, no cost or price analysis was undertaken, and often, no negotiations were conducted with that single offeror. *Henceforth I expect contracting officers to conduct negotiations with all single bid offerors and that the basis of that negotiation shall be cost or price analysis, as the case may be, using non-certified data.*

A more important approach is to remove obstacles to competitive bidding. For example, the Air Force's PEO for Services reviewed the Air Force's Design and Engineering Support Program (DESP) for effective competition. She found 39 percent of the task order competitions under the

Indefinite Delivery/Indefinite Quantity (IDIQ) contract resulted in one bid. The Air Force team undertook an analysis to determine why they were getting the one bid and made two changes. First, they amended their source selection methodology so that technical, cost, and past performance factors were more equally weighted. No one factor can be less than 25 percent or more than 50 percent. This served to lessen the advantage of the incumbent contractor since the technical factor could not overshadow past performance and cost. Second, the team provided a monthly report to all DESP IDIQ holders listing all known requirements in the pipeline. The report includes sufficient information to allow contractors to evaluate whether or not to bid and to start to prepare a bid package. The team has effectively added an additional 45 days to the time a requirement is made known to the potential offerors and the bid due date. These two changes have reduced the percentage of task orders receiving one bid by 50 percent. The team continues to evaluate its processes to further reduce the percentage.

Each service component and agency has a competition advocate. *I am directing each competition advocate to develop a plan to improve both the overall rate of competition and the rate of effective competition. Those plans should establish an improvement rate of at least 2 percent per year for overall competition and an improvement rate of at least 10 percent per year for effective competition. Those plans are to be approved by the CAEs. The Department's competition advocate shall brief me on the overall progress being made to achieve those goals.*

- *Require open systems architectures and set rules for acquisition of technical data rights. At Milestone B, I will require that a business case analysis be conducted in concert with the engineering trade analysis that would outline an approach for using open systems architectures and acquiring technical data rights to ensure sustained consideration of competition in the acquisition of weapons systems.* A successful example of the strategic use of open architecture and buying of appropriate technical data rights is the Navy's Virginia-class SSN program. The Virginia program uses a modular open systems architecture and selective sub-component technical data rights procurement that promotes a robust competition at the component supplier level, while still supporting continual and effective block upgrades to the existing systems that reduces the overall life cycle cost of the system.

Increase dynamic small business role in defense marketplace competition. Small businesses have repeatedly demonstrated their contribution to leading the nation in innovation and driving the economy by their example of hiring over 65 percent of all new jobs and holding more patents than all the nation's universities and large corporations combined.

Our defense industry must leverage that innovation and opportunity into our competitions, as small business representation on programs has demonstrated lower costs to the government. For many small businesses, subcontracting on Department contracts is the first step to becoming a Department prime contractor. Components must understand the small business capabilities within their industry and increase market research and outreach efforts to ensure small business utilization is maximized. In order to remove barriers to small business participation in Department contracts and competition, *I direct the CAEs to institute in all competitive and non-competitive procurement actions emphasis on small business utilization through weighting factors in past performance and in fee construct.*

IMPROVE TRADECRAFT IN SERVICES ACQUISITION

Contract support services spending now represents more than 50 percent of our total contract spending. In 2009, the Department spent more than $212 billion in contracting services, using more than 100,000 contract vehicles held by more than 32,200 contractors — with more than 50 percent of the spend awarded to about 100 contractors.

This contractor support is critical to the Department. For professional services, for example, the Department depends upon three sources: the government workforce, the unique not-for-profit FFRDCs and UARCs, and for-profit professional services companies. Management mechanisms are in place for the first two, but far less for the third.

The Department's practices for buying such services are much less mature than for buying weapons systems. It is critically important that we have a cohesive and integrated strategy with regard to the acquisition of services. This substantial amount of spend demands a management structure to strategically source these goods and services.

Create a senior manager for acquisition of services in each component, following the Air Force's example. In order to achieve efficiencies in services contracting commensurate with the scale of the Department's spend, new governance is necessary. *I am directing the CAEs of the military departments and the commanders and directors of the other DoD components to establish a senior manager for acquisition of services, who will be at the General Officer, Flag, or SES level.* This senior manager will be responsible for governance in planning, execution, strategic sourcing, and management of service contracts. The senior manager will be the Decision Authority for Category I service acquisitions valued at $250 million or less or as delegated and collaborate with requiring activities which retain funding authority on service contract spend.

Adopt uniform taxonomy for different types of services. Today, the Department lacks a standard taxonomy for service contract spend that can be used among the components to understand the Department's aggregate spending and value of specific services contracting. Without a standard approach, the Department has no way of measuring productivity in more than 50 percent of its contracting investment. *I am directing, therefore, each component to use the following primary categories of service spend: Knowledge-based services; Electronics and Communications Services; Equipment Related Services; Medical Services; Facility Related Services; and Transportation Services. These are derived from, and consistent with, Product Service Code (PSC) categories contained in the PSC manual maintained by the General Services Administration, Federal Procurement Data Center, and Office of Management and Budget (OMB). This taxonomy will be used by each component to ensure basic consistency.*

Address causes of poor tradecraft in services acquisition.

- *Assist users of services to define requirements and prevent creep via requirements templates.* The Department has experienced significant increases in mission/requirements creep for services spending, particularly in knowledge management services, which has increased 400 percent in the last decade. These requirements often require the same function or service to be provided but are written uniquely among various commands so that competition is limited. *Therefore, I am directing two initiatives to address mission/requirements creep. First, the Services and DoD components should establish, through their senior managers for services,*

maximum use of standard templates in developing Performance Work Statements (PWS) to improve contract solicitations. Successful examples of the use of standard templates are the Navy's SEAPORT acquisitions and DLA's use of templates to acquire Headquarters support services. *Second, I also expect market research to be strengthened in order to understand industry's capabilities and appropriate pricing within the market in which we are buying. I expect the military departments and DoD components will achieve this by establishing dedicated market research teams at the portfolio management level.*

o *Enhance competition by requiring more frequent re-competes of knowledge based services.* Although 89 percent of the Department's services contracting spend was awarded under competitive conditions, in 24 percent of those cases only one bid was received. This suggests bona fide competition (two or more bids) is not occurring in the $31 billion represented by those cases. To improve competition in services, *I will require the military departments and DoD components to review the length of time that services contracts remain in effect before re-competition occurs.* Single-award contract actions should be limited to three years (including options) unless, by exception, it is fully justified for longer periods by the senior manager for services. Contract length should be appropriate for the activity performed. Knowledge-based services readily meet the three-year limit. Other services such as Performance Based Logistics (PBL), LOGCAP, and environmental remediation, as examples, may not. The intent is that each service requirement will be reviewed by the appropriate official and only those with a sound business rationale will contain longer contract performance provisions. Multiple award IDIQ contracts may be up to five years if on-ramp provisions are included to refresh/update the competitor pool. In addition, *I expect Service components to align contract spend data, to the maximum extent that is practical, to the functional/requirements elements executing the spend.* This will focus all elements of the Department on the importance of achieving improved results.

o In cases where "1-bid" proposals are received, *I will require fully negotiated pricing and cost data as appropriate. Further, I will require solicitations that receive only one bid, and that were open to industry for less than 30 days, to be re-advertised for a minimum additional period of 30 days.*

o *Limit the use of time and materials and award fee contracts for services.* Today, more than 20 percent of the Department's services acquisitions are written using Time & Material (T&M) or Cost Plus Award Fee (CPAF) contract types. At a time when the Department is driving toward more fiscal discipline, we spend about $24 billion in services using T&M contract types, which are the least preferred contract type for understanding costs. Similarly, CPAF contract types provide only limited motivation for cost discipline. The acquisition of services differs greatly from the acquisition of supplies and equipment. The contractor at-risk capital is typically much lower for most service acquisitions and must be factored into the contract decision process. *I will issue further detailed guidance for establishing a taxonomy of preferred contract types in services acquisition, but starting immediately, I expect services acquisitions to be predisposed toward Cost-Plus-Fixed-Fee (CPFF), or Cost-Plus-Incentive-Fee (CPIF) arrangements, when robust competition or recent competitive pricing history does not exist to build sufficient cost knowledge of those services within that market segment. I expect thet cost knowledge gained from those contracts to inform the Should Cost estimates of future price and contract type negotiations. When robust competition already exists, or there is recent competitive pricing history, I expect components to be predisposed toward Firm-Fixed-Price*

(FFP) type contract arrangements. FFP should also be used to the maximum extent reasonable when ongoing competition is utilized in multiple award contract scenarios.

o *Require that services contracts exceeding $1 billion contain cost efficiency objectives.* With large Department outlays of capital for services contracting, it is important that the Department incentivize, achieve, and share in cost improvements over the period of performance for support services acquisitions, including knowledge management services. In acquisitions of material and production end items, we expect the contractor to be on a learning or efficiency curve to drive costs down and value up. We should incentivize and expect similar cost improvement on high-value services contracts. *Beginning immediately, I will require services contracts valued at more than $1 billion to contain provisions in the contract to achieve productivity improvements and cost efficiencies throughout the contract period.*

Increase small business participation in providing services. Small businesses provide the Department with an important degree of agility and innovation, even in support services, and they do so with generally lower overhead structures. To strengthen and improve opportunities for small businesses in the acquisition of services, *I am directing the OSD Office of Small Business Programs to review acquisition plans for services acquisitions exceeding $1 billion, and to be members of the OSD peer reviews of services acquisitions. Additionally, when multiple award contracts are used for services acquisitions, specific tasks suitable for small businesses will be set aside and military departments and DoD components will seek opportunities to compete Multiple Award/IDIQ contracts among small businesses.*

REDUCE NON-PRODUCTIVE PROCESSES AND BUREAUCRACY

Unnecessary and low-value added processes and document requirements are a significant drag on acquisition productivity and must be aggressively identified and eliminated. We cannot achieve Should Cost goals solely by providing incentives to industry to reduce overhead and increase productivity; the government must also eliminate unnecessary and often counterproductive overhead. Some of this overhead is required by statute, and I will work with the Congress to reduce these requirements that neither add value nor improve operational performance. Some of it is imposed by OSD, and is the natural bureaucratic growth in oversight that staffs generate over time and which has to be trimmed back periodically to more effective and productive levels. Secretary Gates has emphasized that the Department's efficiency initiative does not just extend to the $400 billion of contracted work outside the Department's walls, but to the $300 billion spent on the people and facilities that comprise the Department itself. He has reached into his own OSD staff and to senior commands to require greater leanness. Within OSD , he has directed my office (AT&L) to conduct a much-needed bottom-up scrub of process and staffing. Secretary Gates' determination to increase the overall acquisition workforce remains steadfast; however he intends for those additional positions to be filled with specific skill sets in short supply near the point of program execution, not an across-the-board increase or an increase in oversight staff. We must use these, and all our resources, effectively. I am calling on all participants in the acquisition system and all those who affect its processes to work with me to remove non-productive processes and bureaucracy. The following are just some of the steps we can take to address this problem:

Reduce the number of OSD-level reviews to those necessary to support major investment decisions or to uncover and respond to significant program execution issues. The number and

frequency of OSD-level program reviews has increased significantly over the past several years. The year prior to August 2010 showed that over 240 major reviews and significant USD (AT&L)/staff reviews required more than 100,000 labor-hours to complete. This practice has tended to relieve the Senior Acquisition Executives (SAEs), PEOs, and PMs from responsibility and accountability for the programs they are executing. Insight at the AT&L level into program execution performance can generally be achieved through established status reporting mechanisms and informal staff contacts. While I expect a certain level of staff oversight, I expect the staff reviews to be focused primarily on major decision points for which I am responsible and on surfacing and solving execution problems. I also expect the OSD staff in AT&L and elsewhere to remain cognizant of our programs' progress and to identify problems quickly so that they can be dealt with as early as possible. There is a balance between this appropriate level of oversight and that which is excessive and tends to relieve the chain of command from management responsibility. I believe we have tipped the balance too far in favor of additional oversight and need to restore it to a more appropriate and effective level.

o *Realign OSD Acquisition Reviews to add more value.* It is important that we align AT&L resources to address the most significant investment decisions required at the Under Secretary level. Therefore, *I am directing ARA to review the current list of OSD reviews — DABs, Pre-DABs, OIPTs, PSRs, and TRLs etc., to recommend specific realignment of these reviews/meetings to ensure they focus their purpose on the major acquisition investment decisions made by the Department.*

o *Review DAB documentation requirements to eliminate non-relevant content.* Our DAB documents have become bloated and at the same time often fail to provide necessary and important content. A team has already been established to review DAB documents beginning with the Acquisition Strategy Report. *I am directing ARA to complete the review of all DAB documents by March 1, 2011 and to provide me with recommendations for streamlining and focusing these documents on needed content to support AT&L level decisions.*

o *Reform TRL reviews to focus on technology as opposed to engineering and integration risk.* The TRL review and certification process has grown well beyond the original intent and should be reoriented to an assessment of technology maturity and risk as opposed to engineering or integration risk. *I am directing the DDR&E to review this process and to make recommendations to refocus the TRL certification process to be consistent with its original intent.*

Eliminate low-value-added statutory processes. I recognize the importance of keeping programs within cost and schedule and agree on the need to reevaluate the viability of programs that incur large overruns or schedule slips. I fully support the spirit and the intention of the Nunn-McCurdy review process. However, I believe the process can be streamlined in a way that we can make sound decisions about the future of programs and provide Congress with the information and certifications they need without overly burdening programs and, in some cases, without reviewing programs that experience average unit cost growth because of decisions made by the Department, such as changed quantities resulting from requirements changes. As an example of overhead costs, my staff calculated the number of hours and attendant costs for Nunn-McCurdy evaluations that the Department undertook this year for the most recent six programs that breached the critical Nunn-McCurdy thresholds. The estimates for these six evaluations exceeded $10 million and 95,000 hours of overhead labor. Notwithstanding the legal

requirement, two of the six evaluations were for technical breaches since the breaches were the result of production quantity changes or acquisition strategy changes rather than a result of cost growth per se. The knowledge we gained by conducting full evaluations was not significantly greater than what we already knew at the outset and had no effect on the decision to continue the programs. To curb this, *I am targeting specific oversight processes, described below, to reduce or eliminate costs associated with what I believe are unnecessary overhead burdens that add marginal or questionable value to meeting the needs of our warfighters or expectations of the taxpayer. I am also directing the streamlining of some processes that are important to keep, but that require significant efficiency improvement to be effective. The Department will continue to comply with all statutory requirements, but where it makes sense we will tailor how we achieve compliance to be consistent with the circumstances, and we will work with Congress to modify statutory requirements where the intended goal is clearly not being achieved.*

o *Request Nunn-McCurdy Rules for Special Situations. I will work with Congress to eliminate the requirement for the full suite of Nunn-McCurdy assessments and reporting activities in special circumstances where quantity-induced or other external reasons cause critical breaches to occur.*

o *2366a and 2366b Certification Process Review. I will work with OSD staff and the Congress to reassess both the need for and the overall method of implementation we have imposed on ourselves to respond to the requirement for retroactive 2366a/b certifications to ensure objectives are met without burdensome and inefficient bureaucracy.*

o *Congressionally-mandated organizational changes within AT&L.* Congress has correctly identified and mandated some changes to the AT&L organization that are improving our ability to oversee acquisition programs and make better decisions about specific investments and about acquisition policy. It is important, however, that AT&L have the flexibility to balance the internal staff elements in order to effectively execute all the functions for which AT&L is responsible. *I intend to work with the Congress to ensure that all oversight functions are adequately staffed and performed without inserting inefficiencies and unnecessary overhead into the acquisition process at the same time.*

Reduce by half, the volume and cost of internal and congressional reports. The time and resources spent on one-time and recurring internal and congressional reports are costly to the Department and take the acquisition workforce away from executing programs. For internal reports, the Department must suppress its appetite for non-critical information and resist the temptation to become checkers of checkers. For congressional reports, in the past 10 years, the total number levied on the Department has grown from 514 to 719. During that same span, the number of reports assigned to my office (AT&L) grew from 102 to 156. Many of these reports, once they are introduced into legislative language, continue to be required year after year — long after the immediate relevancy and value of the information have passed. None of these reports are free. A conservative cost estimate of the resources consumed in producing the 719 congressional reports is $350 million annually. Consequently, *I am directing my staff to conduct a bottom-up review of all internally-generated reporting requirements and to work with ASD (Legislative Affairs) to conduct a bottom-up review of all congressionally mandated acquisition reports to assess the value of the reports with a goal to eliminate at least 50 percent of the reports and to substantially shorten the ones remaining. I am also tasking ARA to impose*

reasonable page count caps (given the information requested) when reports are assigned for production and to indicate the estimated cost to prepare each report on its cover.

Reduce non-value-added overhead imposed on industry. Industry has its own internal unproductive processes which add to project costs, but these are in some part a reflection of the requirements which the government imposes. A great number of the inputs I received from industry were directed at what was viewed as excessive overhead expenses based solely on non-value-added mandates and reporting requirements which may have been relevant at some point in time, but have little relevance in the world in which we now find ourselves. *In order to identify and reduce these costly requirements, I am directing the Director of Industrial Policy, with support from DPAP, to more fully survey our industrial base to identify, prioritize, and recommend a path forward to unwind duplicative and overly rigorous requirements that add to costs, but do not add to quality of product or timeliness of delivery. As we remove these requirements, I will expect a decline in the overhead charged to the Department by our industrial base that reflects these reduced costs.*

Align Defense Contract Management Agency (DCMA) and Defense Contract Audit Agency (DCAA) processes to ensure work is complementary. It is well known that during the last 20 years, due to budget constraints, DCMA and DCAA have progressively reduced staff and capability. As a result, critical functions they perform have become blurred and require clarification, and where necessary should be de-conflicted to avoid unnecessary overlap and redundancies. In this vein, industry has expressed concern regarding overlapping roles and missions between DCMA and DCAA, resulting in duplication of data requests submitted by contractors and inefficient application of Department resources. Over the past several months, at my direction, the Director of DPAP has been working with DCAA and DCMA to identify areas of potential overlapping responsibility, such as Accounting, Estimating, Purchasing, Financial Capability Reviews, Earned Value Management System (EVMS), MMAS, Property Management, and Forward Pricing, and propose methods to eliminate the duplication. *I am tasking the Director of DPAP to develop guidance that will clearly spell out the roles and responsibilities of each organization in those areas where duplication and overlap occur.*

Increase use of Forward Pricing Rate Recommendations (FPRRs) to reduce administrative costs. Contract negotiations can administratively benefit from the use of Forward Pricing Rate Agreements (FPRAs). Certainly a quality FPRA will result in reduced administrative costs associated with negotiating and managing acquisitions. However, it is also recognized that establishing FPRAs just for the sake of having FPRAs is not beneficial and has been costly to the taxpayer. For multiple reasons, including but not limited to complexity of contractor rate structures and audit process changes today, DCMA has only established 32 percent of expected FPRAs. It has, on the other hand, established 85 percent of the expected FPRRs. Clearly the opportunity exists to re-examine how best to ensure contracting officers obtain the support they need to negotiate rates. We will strive to have FPRAs, when possible, but we will not do so when FPRR's are available if we believe that there is not a legitimate and thoughtful basis for departing from them. *Accordingly, I am tasking DCMA to be responsible for the promulgation of all FPRRs. In those cases, where DCAA has completed an audit of a particular contractor's rates, DCMA shall adopt the DCAA recommended rates as the Department's position with regard to those rates.*

This letter is not the end of a process, but the beginning of vigorous implementation and further refinement. Today I have signed out directive memoranda to my key staff elements, DPAP, ARA, DDR&E, and the leaders of the OIPTs that coordinate the OSD-level oversight of major programs setting those offices on the course to begin implementing this guidance. I have provided the Component Acquisition Executives with a draft directive memorandum that I intend to sign within the next few days for their review and comments. Starting today but extending over the next several months we will be putting the actions I have described in this guidance into more formal direction and practice. Today, however, I am tasking all of you to absorb this guidance memo and begin acting on it within the scope of your existing authority. There is no time to lose.

Ashton B. Carter

Ashton B. Carter

JOINT STRIKE FIGHTER

113. Senator McCAIN. Secretary Gates, soon after you announced that you wanted to restructure the Joint Strike Fighter (JSF) program again, Pentagon officials reportedly said that the program could be delayed by 1 to 3 more years and cost another $5 billion. Is that true?

Secretary GATES. Yes. Following the breach of the Nunn-McCurdy critical thresholds, rescission of the original October 26, 2001 Milestone B decision, and program recertification in June 2010, DOD set out to reestablish a firm foundation for the

JSF program. The new F–35 PEO conducted an extensive bottom-up Technical Baseline Review (TBR) involving more than 120 tactical aircraft experts from both the military Services and DOD to evaluate every aspect of the System Development and Demonstration (SDD) phase of the program. The TBR identified the need for an additional $4.6 billion in resources and schedule duration for execution of the SDD phase. In addition to the TBR, the PEO will perform a schedule risk assessment this summer, will conduct an integrated baseline review, and will prepare the integrated master schedule for the program this fall.

114. Senator MCCAIN. Secretary Gates, what are the new estimates on how much the program and each plane will cost?

Secretary GATES. DOD is currently finalizing its estimates on how much the program and each aircraft will cost. These estimates are being prepared in support of the planned Defense Acquisition Board (DAB) Milestone B recertification review scheduled for May 2011. The cost figures resulting from this review will be reflected in an update to the Selected Acquisition Report which will be provided to Congress this summer, subsequent to the DAB review.

115. Senator MCCAIN. Secretary Gates, will there be another Nunn-McCurdy breach on the program this year?

Secretary GATES. No, there will not be another Nunn-McCurdy breach this year. Although DOD added another $4.6 billion to the development program, and the short-term aircraft price will increase resulting from the reduction of 124 aircraft within the FYDP, I remain committed to procuring 2,443 aircraft in total. I believe that the changes to the development program, together with DOD's long-term commitment to procurement quantities, provide a reasonable baseline and strong foundation for program execution going forward. These changes will not result in a Nunn-McCurdy breach.

116. Senator MCCAIN. Secretary Gates, under your restructure proposal, what is the current estimate for the additional time required to complete developing the aircraft?

Secretary GATES. The development phase of the SDD phase ends with the completion of development testing, now estimated to be completed in fiscal year 2016. This estimate was based on the independent Technical Baseline Review involving 120 tactical aircraft experts from the Military Services and DOD over a period of months.

117. Senator MCCAIN. Secretary Gates, you suspended the Marine Corps version of the JSF, the F–35B, putting the program in a 2-year probationary period—necessary to get the program back on track. At the time you stated if cost, development, and schedule overruns could not be rectified in that 2-year timeframe, you would cancel the program.

However, the PEO of the JSF program, Vice Admiral Venlet, reportedly said, "There is no black and white checklist to weigh the program's performance against." Admiral Venlet reportedly said the future of the Marine Corps version of the JSF will not be judged against a checklist of hard milestones, but rather by a loose-knit series of requirements—ranging from the aircraft's weight, propulsion ratios, its ability to operate in a maritime environment, etc. Do you agree with Admiral Venlet's assertion? If so, please explain, exactly what does probation mean for the Marine Corps version of the aircraft?

Secretary GATES. "Probation" is not a suspension; "probation" is linked to both production and development. First, DOD reduced the production of the F–35B Short Take Off and Vertical Landing (STOVL) variant to three aircraft in fiscal year 2011, six aircraft in fiscal year 2012, and six aircraft in fiscal year 2013. These aircraft numbers are the minimum numbers required to sustain the F–35B production and engineering workforce, as well as to sustain the supplier base of STOVL-unique parts. The F–35A Conventional Take Off and Landing and F–35C Carrier Variant (CV) aircraft are not dependent on the F–35B development and flight test to complete their development.

Cost, schedule, and development progress must balance against warfighter utility. The Commandant of the Marine Corps reviews the F–35B STOVL progress monthly and separately from the monthly Service Acquisition Executive (SAE) reviews of the F–35 program as a whole. These reviews assess metrics ranging from affordability, weight growth, key STOVL performance requirements, technical performance measures, flight test status, and risk burn-down plans. These metrics provide a holistic view of the F–35B progress. None of them provide "black and white" decision criteria. These metrics, taken as a whole, will inform the Commandant of the Marine

Corps and DOD on the continued F–35B progress at the end of the "probation" period.

118. Senator MCCAIN. Secretary Gates, what is success and what is failure that warrants termination?

Secretary GATES. Termination is not a "black and white" decision. It must be viewed from a holistic viewpoint by assessing cost, schedule, warfighter utility in performance being delivered, and risk. The goal of any acquisition program is an affordable system that provides the desired warfighter utility. Warfighter utility is a combination of capability delivered in a desirable timeframe. It is DOD's job to accomplish this at a reasonable level of risk.

The Technical Baseline Review conducted by the new F–35 PEO establishes a more realistic expectation for the F–35 development program. The program is continuing its restructure activities for the SDD phase, production activities, and operations and support. The program will be assessed monthly by the service acquisition executives, the warfighters, and DOD leadership to determine that the balance of cost, schedule, and performance goals do not exceed acceptable risk levels.

119. Senator MCCAIN. Secretary Gates, it appears the program office has not taken any additional steps to refine the criteria on those key goals, or established any further metrics on what needs to be done to remedy the F–35B's serious issues to save it from cancellation, if that is the right thing to do. As those steps are being taken, it seems to me that there should be transparent, clear, and measurable milestones against which performance can be measured against plan. Is that your vision for determining whether the Marine Corps version of the aircraft passes probation?

Secretary GATES. DOD is providing individual attention to the F–35B STOVL variant specific issues to ensure cost and schedule milestones are achieved in delivering required warfighter capabilities.

Specifically, Navy and the Air Force established a battle rhythm of monthly Service Acquisition Executive (SAE) reviews with the F–35 PEO to assess the overall F–35 program, with additional emphasis on F–35B STOVL variant. These monthly SAE reviews examine the F–35 airframe and propulsion SDD, production, and sustainment programs with particular emphasis on cost/affordability, risk, and schedule. In addition, the Commandant of the Marine Corps established a monthly F–35 review focused solely on the STOVL variant. This review is also led by the Navy SAE. The topics and metrics that are assessed include, but are not limited to, the following:

- Cost/Affordability/Earned Value Management (EVM): A review of Acquisition Procurement Unit Cost, Program Acquisition Unit Cost, Operations and Support costs, and EVM cost/schedule indices.
- Risk: Monthly assessment of 'Program Risk' with explanations about each risk item, their interactions, and risk burn-down plans. Assessments include a review of the assumptions and environment used to determine the risk evaluations.
- F–35B weight/weight growth: weight assessments track each pound added to the airframe with an understanding of the underlying reasons for the growth. If there are trades that need to be made to mitigate weight growth, DoN senior leadership/warfighters are to be consulted.
- Key Performance Parameters (KPPs): review of F–35B KPPs with a tracking/trending methodology and monthly discussions of considerations for a Concept of Operations that might help facilitate achievement of F–35 KPPs and program goals.
- Airframe Technical Performance Measurements: Assessments of reliability, maintainability, combat radius, and gross weight (with metrics that indicate the desired value(s), the current status, margin, and trends).
- F–35B Flight Test: review of F–35B flight test data, to include planned/scheduled test points to be flown versus achieved test points flown; scheduled test flights flown versus actual test flights flown (delineated by STOVL variant); and Clean-Wing Flight Envelope coverage (to assess the progress on the envelope cleared for flight as a result of Developmental Test and alignment with software delivery).

As these monthly reviews mature, the Navy will refine key F–35B metrics to ensure this essential capability is delivered to the Marine Corps warfighters and to enable the Department to make a decision on the F–35B STOVL variant probation status.

SHIPBUILDING

120. Senator MCCAIN. Secretary Gates and Admiral Mullen, another area of the Navy's budget that I am very concerned about is the amount of funding needed for ship construction going forward. With about half of the construction and development dollars being needed to build extraordinarily expensive nuclear submarines (for example, right now, *Ohio* class replacement nuclear ballistic submarines are estimated to cost at least $7 billion), I am concerned that our commitment to building new submarines may be crowding out funding needed to modernize the surface fleet. Do you share that concern? If so, how do you intend to address it?

Secretary GATES. DOD recognizes that building the required force structure will largely depend on controlling shipbuilding costs (including combat systems) within an affordable range. I continue to look for further affordability and efficiency opportunities as DOD goes forward with the shipbuilding plan, such as revising the acquisition strategy for the LCS to maximize the advantage of the competitive pricing received and gain a ship within the FYDP. Additionally, prior to Milestone A approval for the *Ohio* replacement submarine, DOD evaluated numerous capability trades to reduce costs. As a result, the Navy made trades in the number of ballistic missile tubes, the diameter of those tubes, the number of torpedoes to be carried, acoustic sensors, and other defensive features throughout the design. These trades made the submarine more affordable, while maintaining the necessary level of capability, resulting in a reduction of the projected cost to a target cost of $4.9 billion (fiscal year 2010 dollars) for the follow on hulls 2–12. These initiatives support DOD's ability to provide the capability and flexibility for meeting the myriad of missions that the Navy is called upon to execute throughout the world every day.

Admiral MULLEN. We developed the shipbuilding plan and this budget based on averages of about $15.9 billion per year for the early years of the plan, and then about $2 billion more on average for the years in the plan when the *Ohio* replacement submarine is being constructed. This will support a force structure of about 313 battle force ships, enabling the Navy to meet its global commitments and to support contingency operations. We will continue to look for efficiency opportunities as we go forward with the shipbuilding plan. This will involve decisions such as we have already made by truncating the DDG–1000 program to three ships and restarting the DDG 51 production line, taking advantage of the aggressive pricing we received on LCS to gain a ship within the FYDP, and pursuing a lower cost alternative for the Mobile Landing Platform.

Prior to Milestone A approval for the *Ohio* replacement submarine, numerous capability trades were evaluated to reduce costs. As a result, the Navy made trades in the number of ballistic missile tubes, the diameter of those tubes, the number of torpedoes to be carried, acoustic sensors, and other defensive features throughout the design. These trades made the submarine more affordable while maintaining the necessary level of capability, resulting in a reduction of the projected cost from $7 billion to about $5 billion per boat.

FINANCIAL MANAGEMENT AND THE NEED FOR AUDITS

121. Senator MCCAIN. Secretary Gates, please explain to me how you can demand fiscal savings and efficiencies across every sector of operations in DOD without the ability to track expenditures in financial statements that can be audited?

Secretary GATES. DOD records and reports expenditures associated with budgeted amounts. While not sufficient to meet audit standards, this longstanding approach proved to be an effective means of responsibly managing public funds entrusted to DOD. There are thousands of well-trained financial management professionals in DOD dedicated to and motivated by their role in providing the resources to warfighters necessary to meet the national security mission of the country. These financial managers know DOD missions cannot be executed without timely and sufficient resources so are able to track expenditures and report to managers with an accurate status. Because of this capability, I feel DOD can demand and track savings from specific operations.

This does not mean that DOD does not take the financial statement audit requirement seriously. Financial statement audits are also a key indicator to the public that we have reliable financial management information. While it is not the intent of financial statement audits they are a signal to the public that DOD manages funds legally, effectively, and efficiently. I am dedicated to having fully auditable financial statements by 2017, the deadline established by Congress.

122. Senator MCCAIN. Secretary Gates, why is this not your highest and most critical efficiency initiative?

Secretary GATES. The highest priority for DOD's business enterprise is to meet the needs of the warfighters executing the national security mission. Due to potential budgetary constraints, I directed DOD to eliminate or reduce overhead tasks and transfer the related resources to meet urgent warfigher needs. In other words, transfer resources from tail to tooth. This initiative to improve financial management is part of that effort. Improved financial management information will help DOD better identify overhead costs and ensure reductions are realized.

123. Senator MCCAIN. Secretary Gates, how can DOD ensure that taxpayer dollars are not being wasted, stolen, or otherwise abused without an audit?

Secretary GATES. I believe that even though DOD cannot currently meet commercial audit standards, the public can have confidence that it is spending dollars responsibly. That is a primary task of DOD's financial management workforce, and DOD has an extensive training program to ensure financial managers know the proper rules and processes. In addition, there are thousands of auditors reviewing programs and payments. These audits find far fewer improper payments and appropriation law violations in DOD than in other Federal agencies, after adjusting for the size of the budgets. This is true even though most other Federal agencies have auditable financial statements.

As mentioned in an earlier question, this does not mean DOD is not fully committed to achieving full financial statement auditability. This demonstrated progress will further reinforce confidence in the positive financial outcomes we already achieve.

124. Senator MCCAIN. Secretary Gates, how will you ensure that the savings you have proposed will be achieved?

Secretary GATES. DOD effectively manages operations by tracking obligations and expenditures against budgeted amounts. The primary control the Department uses to implement savings efforts is to include them in the President's budget request. The efficiencies that DOD defined in response to my initiative have been included in the President's 2012 budget request. DOD has several management controls, including regular reviews of obligation rates and detailed program budget reviews, to ensure it is executing according to the budget. Through these means DOD will ensure that proposed overhead reductions are realized.

125. Senator MCCAIN. Secretary Gates, over the last few years, Congress has pushed DOD to reform its financial management practices, most recently the NDAA for Fiscal Year 2010, requiring DOD to achieve a full, unqualified audit by 2017. The law also requires you to submit to Congress semiannual reports that lay out milestones describing progress over time. Are you on track to comply with this statutory requirement?

Secretary GATES. As you recognize, preparing DOD for financial statement audits is a monumental task, but with leadership focus, accountability, and a streamlined approach, I believe it will succeed. To realize success, DOD is using a streamlined approach that focuses on improving and auditing the information most used to manage. DOD established long- and short-term goals, set up a governance process, and provided funding to the Military Services to make process and system improvements. These system improvements, primarily deploying ERPS, have broad operational improvement goals which include improving business processes in a way to support audited financial statements.

I am dedicated to having fully auditable financial statements by 2017, the deadline established by Congress. The goal is in our Strategic Management Plan and is one of eight high priority items DOD committed to the Office of Management and Budget (OMB) to achieve. While it is still early to definitively predict success, I believe DOD is on track to comply and look forward to reporting progress in the semiannual reports.

126. Senator MCCAIN. Secretary Gates, given the push for savings, can you achieve the audit earlier than 2017? If so, what additional resources would you need?

Secretary GATES. Achieving auditable financial statements is a massive undertaking requiring changes to the capabilities of our people, processes and systems. Like any major change management effort changes take time and a great deal of resources. The extreme size of DOD complicates change further and requires more time and resources. DOD is already investing significant amounts in improving its financial management systems by implementing and integrating ERPS as well as investing over $200 million a year in improving people and processes. I feel that the

resources allocated are appropriate and the significant dependency on systems modernization makes achieving the audit earlier than 2017 impractical.

C–17 GLOBEMASTER

127. Senator MCCAIN. Secretary Gates, under the continuing resolution enacted late last year, has DOD been funding the continued production of C–17 cargo-lift aircraft?

Secretary GATES. No, DOD did not fund the continued production of new C–17 aircraft beyond the 10 aircraft appropriated in fiscal year 2010 by Congress. However, in accordance with Continuing Resolution Authority (CRA) guidelines, DOD funded a total of $12.7895 million in fiscal year 2011 CRA to support transition to sustainment in preparation for shutdown activities.

128. Senator MCCAIN. Secretary Gates, what are DOD's plans for this program in the future under the various appropriations scenarios for fiscal year 2011?

Secretary GATES. DOD determined that the C–17 aircraft already procured are more than sufficient to satisfy airlift requirements. As I have previously testified, I do not support the addition of more C–17s.

129. Senator MCCAIN. Secretary Gates, what is your position on the inclusion of any funding for continued production of C–17s in the 2012 defense bill?

Secretary GATES. Since 2001, DOD conducted four major mobility studies, all of which support the conclusion that the C–17 and C–5 airlift fleet capacity is more than sufficient to meet current and foreseeable demands.

1. Mobility Requirements Study–05 (MRS–05) (completed in 2001)
2. Mobility Capabilities Study (MCS) (completed in 2005)
3. Institute for Defense Analyses (IDA) study conducted in 2009 as required by Section 1046 of the NDAA for Fiscal Year 2008 (Public Law 110–181)
4. Mobility Capabilities and Requirements Study–2016 (MCRS–16) (completed in 2010)

The most recent study, the MCRS–16, identified the requirement for organic airlift as 32.7 million ton miles per day (MTM/D). This level of airlift capacity meets the most demanding scenario consistent with the Defense Strategy. The current programmed strategic airlift fleet of 223 C–17s, and 111 C–5s, provides a capacity of 35.9 million ton-miles per day. The difference (35.9 MTM/D vs. 32.7 MTM/D) is the equivalent of 25 C–17s or 30 C–5As. The MCRS–16 and the aforementioned studies clearly show that the Department has more strategic airlift fleet capacity than needed. Therefore, I believe that it is not in the national interest to include any funds for continued production of C–17s in the 2012 defense bill.

President Obama's comments on releasing his administration's fiscal year 2011 budget request included the following statement:

> "We save money by eliminating unnecessary defense programs that do nothing to keep us safe. One example is the $2.5 billion that we're spending to build C–17 transport aircraft. Four years ago, DOD decided to cease production because it had acquired the number requested—180. Yet every year since, Congress had provided unrequested money for more C–17s that the Pentagon doesn't want or need. It's waste, pure and simple."

In testimony before the Senate Armed Services Committee, I echoed the President, saying that I would not support the addition of more C–17s. My position today remains unchanged.

SAVINGS-AND-EFFICIENCIES INITIATIVES

130. Senator MCCAIN. Secretary Gates, given how inherently unreliable and defective DOD's financial management processes are, I have serious questions about the projected savings of many of the efficiencies initiatives. While I certainly commend your attempt to find $78 billion in cuts over the next 5 years, I have to question how likely is it that DOD will actually realize the savings it says it will get.

What is your assessment of how much of the $78 billion in cuts will result in deferment of bills that must eventually be paid, in contrast to actual savings from an elimination or a reduction in requirements?

Secretary GATES. The $78 billion reduction to DOD's projected budget over the next 5 years is achievable and will be closely monitored and assessed by DOD to ensure savings are fully realized. The efficiency initiatives include actions to reduce overall requirements commensurate with the lower rate of growth after the $78 bil-

lion cut. I remain strongly committed to meeting these goals and finding new ways to improve how DOD conducts business thereby better using the country's scarce resources.

131. Senator MCCAIN. Secretary Gates, which of the elements of savings and efficiencies that you have identified carry the most risk of not being realized? Please explain your answer.

Secretary GATES. Experience tells me that some of these initiatives may not proceed entirely according to plan. DOD has no choice but to strictly monitor and enforce these efficiencies and make adjustments as needed with the understanding that it cannot afford to return to past behavior. At this point, there are no elements that I believe are especially risky.

132. Senator MCCAIN. Secretary Gates, please explain what cost-based analytical processes and methodologies (such as performance-based, mission-based, staffing-profile-based government, military, contractor, etc.) are the efficiencies proposals based on?

Secretary GATES. The majority of these proposals were function or mission-based. The intent was to focus scarce resources on functions/missions associated with the provision of military capability. DOD took an "unsparing" look at reducing functions (and costs) associated with overhead and administrative positions. Even the reductions in contract costs were motivated and enforced with this principle in mind.

133. Senator MCCAIN. Secretary Gates, I understand that the COCOMs and the IC were asked to submit zero-based assessments with accompanying recommendations for gaining 10 percent efficiencies. Exactly how did OSD review assessments or analyses of those submissions?

Secretary GATES. The entire fourth Estate (OSD, the Defense Agencies, Field Activities, and COCOMs), including the IC, conducted a zero-based review to identify opportunities to perform more efficiently, eliminate unnecessary functions, and reduce costs. My Efficiencies Task Force reviewed each of the zero-based submissions with a two-fold purpose:

- Develop a baseline of each organization's missions, priorities, and resource allocation
- Using this baseline, rebalance resources within and across components so that they align better with the most critical challenges and priorities within DOD.

These submissions included a detailed profile of each organization's missions, functions, and resources. The rebalancing process involved the critical review, analytical assessment and evaluation of:

(1) baseline data,
(2) mission and manpower priorities, and
(3) recommendations for organizational restructuring and reallocation of resources.

This process was conducted by members of the Efficiencies Task Force, subject matter experts and analysts from responding organizations, and was reviewed by program, comptroller, and manpower experts.

134. Senator MCCAIN. Secretary Gates, was a broader portfolio review or tradeoff analysis performed to understand and balance cost-savings with mission performance? If so, please explain.

Secretary GATES. Yes, this year's program and budget review process focused on preserving critical capabilities by making very targeted resource allocation decisions. During this cycle, DOD used a series of front end assessments to address a variety of portfolio-type reviews such as airborne ISR, long-range strike, global posture and tactical aviation to better understand the range of options in each area. These analyses guided investment decisions, while the efficiencies initiatives focused on trading administrative and overhead expenses for operational capability—this was a prudent trade.

135. Senator MCCAIN. Secretary Gates, additionally, how were the COCOMs' and the IC's overall annual budget evaluated and compared to their unique ongoing mission requirements—to devise an accurate estimate of actual expected savings versus annual budget?

Secretary GATES. Each of these organizations submitted its own detailed accounting of personnel and missions in priority order. These submissions explicitly considered the organizations' unique and ongoing mission requirements. Additionally,

every organization also submitted its own ideas for how it could operate more effectively and efficiently. In some cases it nominated new and better ways of performing critical functions. In other cases, it nominated functions that were of minimal value for either elimination or downgrading. Such missions were typically either redundant or overhead functions. COCOMs estimated savings in coordination with OSD budgeting, programming, and manpower experts. The IC followed a similar process and considered input from both a supply perspective (analysts from intelligence organizations) and a demand perspective (combatant commanders).

MANAGING FORCE REDUCTIONS

136. Senator MCCAIN. Secretary Gates, reductions in end strength for all the Active-Duty Forces, not just the Army and Marine Corps, appear inevitable due to the declining budgets and the rising cost of personnel. Next month, the Army will begin a year-long plan to cut 7,000 soldiers, and from 2013 through 2014, an additional 14,000. And that's just the beginning. Cuts of 27,000 in the Army and 15,000 in the Marine Corps have been forecast to commence in 2015.

During the force drawdown in the 1990s, the availability of force-shaping authorities, such as early retirement authority and financial incentives for those voluntarily retiring or resigning, were essential tools in equitably achieving force reduction goals. In the current economy, with retention at very high levels, it appears that such incentives will be necessary. Do you plan to submit legislative proposals that will facilitate the kinds of force cuts that are being planned for?

Secretary GATES. Yes. DOD is carefully examining the authorities required to achieve the legislated end strength, while maintaining transparency with regard to future requirements. My goal is to submit legislative authorities that allow targeted reductions and maximum flexibility.

Leadership is the key to ensuring each individual understands the needs of DOD so they can make informed choices. This will be no easy task. But I assure you, DOD will continue to recognize the contributions of the men and women who served throughout numerous conflicts, while ensuring that the military departments and the COCOMs meet their missions in an ever-changing global environment.

137. Senator MCCAIN. Secretary Gates, other than force cuts, and putting aside the Defense Health Program momentarily, do you see any feasible way to control the costs of personnel as a share of the DOD budget?

Secretary GATES. Yes. In order to control total personnel costs across DOD, improvements to the Total Force management of our Active/Reserve military, government civilians and contracts for services must be considered. This is critical to control personnel costs as a share of the budget. To this end, DOD is changing how it strategically views the Total Force—both as it executes the mission and plans across the FYDP. DOD is scrutinizing the meaning of the "demand" for manpower, rigorously determining which should be funded and how (e.g., Active/Reserve military, civilians, or contracts).

Total Force Management requires a holistic analysis and prioritization of work, and the identification and investment in the most effective and efficient component of the workforce to best accomplish a specific task. I believe that our military should not be considered a "free" source of labor by organizations within DOD, while the military services alone "finance" their recruitment, training and development. The true cost of military, government civilians and/or contractors depends greatly on individual facts and circumstances. DOD must do more to objectively analyze not only the demands for manpower but, where appropriate, the best "Total Force solution." The separate decisions that affect each component of the Total Force must be better synchronized to achieve the desired outcomes and to balance operational, fiscal and acquisition risks.

The solution must not only include the development and promulgation of policies, but also ensure that DOD provides managers with the tools, resources, training and information necessary to achieve the desired outcomes. Finally, current business processes must be better synchronized to achieve a more appropriate balance in the workforce, aligning inherently governmental activities to military and civilian workforces, and commercial activities to the most cost effective service provider—be that military, civilian, or contracted support.

NATIONAL GUARD BUREAU

138. Senator MCCAIN. Admiral Mullen, under your leadership, significant changes have been made in the way the National Guard and all the Reserve components

contribute to the decisionmaking process. Designating the Guard Bureau as a joint activity and elevating the rank of the Chief of the Guard Bureau to a four-star general are just two examples of the recognition that the Army National Guard and Air National Guard are vital parts of the Army and the Air Force. Despite this, we continue to see proposals that the Chief of the Guard Bureau be made one of the JCS. What are your views about the proposal to make the Chief of the National Guard Bureau (CNGB) a member of the Joint Chiefs?

Admiral MULLEN. Over the last 10 years, the National Guard has provided crucial elements to our Joint Force and their execution of Army and Air Force missions has been stellar. They are appropriately represented on the JCS by the respective Army and Air Force Chiefs of Staff, so I and the other JCS members unanimously do not support the CNGB being made a member of the JCS. Since the CNGB was elevated to the four-star rank in 2009, we have included him in our meetings and he has contributed valuable perspectives regarding the National Guard, particularly its critical, non-federalized homeland defense mission and forces. This is congruent with the 2008 NDAA promulgating the CNGB fulfilling a statutory role and responsibilities as the principal advisor to the Secretary of Defense through me on these unique matters.

139. Senator MCCAIN. Admiral Mullen, do you think such a change would be harmful? Why or why not?

Admiral MULLEN. Adding the CNGB as a member of the JCS would be redundant and harmful. Like the other Service Chiefs (the JCS members), the Army and Air Force Chiefs of Staff organize, train, and equip their Total Force, including their respective National Guard, to present an integrated Joint Force to the combatant commanders. They maintain the independent departmental authorities and budget with which to do so. Adding CNGB to the JCS would disrupt those lines of authority and introduce representation inconsistencies. Since the CNGB's responsibilities are administrative in nature, making him a member would also create the harmful impression that the National Guard is a separate Military Service.

EARMARKS

140. Senator MCCAIN. Secretary Gates, with the recent pledge for both chambers to enforce a moratorium on earmarks over the next 2 years, there is a renewed concern that Members of Congress with special interests will go underground to pressure program managers within DOD in phonecalls and meetings to steer funds toward their pet projects. What processes do you have in place to protect DOD program managers from this kind of pressure?

Secretary GATES. Program managers and contracting officials' compliance with the United States Code, the Federal Acquisition Regulations, and the President's March 2009 Memorandum for the Heads of Executive Departments and Agencies on Government Contracting all serve to safeguard the acquisition process from underground earmarks and congressional pressure—through requiring competition and transparency.

Compliance with the many requirements in the acquisition process protects program managers from being forced to award contracts noncompetitively or under the table. Furthermore, the Department demands ethical behavior from its program managers and would expect the same of those it deals with in the legislative branch.

141. Senator MCCAIN. Secretary Gates, what can be done to ensure taxpayer funds provided to DOD go to the most critical priorities and are not used to satisfy a specific Member interest?

Secretary GATES. Several actions would provide DOD flexibility to ensure that its appropriations go to the military's most critical needs or can be realigned to fund unforeseen emergent requirements.

- Eliminate section 8006 in Appropriations bills. That section is aimed at ensuring that DOD executes the exact funding for specific programs, projects, and activities—as listed in the tables in the Explanatory Statement (or Committee Print or Conference Report) accompanying a bill.
- Eliminate bill language or General Provisions that specify funding for specific programs, projects, or activities.
- Approve the transfer authority requested in each President's budget to give DOD enough flexibility to reprogram funds to its most critical needs.
- Omit legislative direction that restricts DOD reprogramming, such as prohibiting the reprogramming of funds added by Congress.

- Reform the process by which congressional oversight committees review reprogrammings to facilitate timely approval—such as initiating a time limit for review.
- Increase the amount of funds that can be reprogrammed below threshold within an appropriations.

142. Senator MCCAIN. Secretary Gates, is there an opportunity to make public the specific requests by Members of Congress made to representatives of DOD on issues related to contracts, acquisitions, and fiscal obligations?

Secretary GATES. I believe that would be a counter-productive effort and detracts from executing the mission. For the majority of earmarks, DOD does not place each earmark on a funding document by itself. Most earmarks are incorporated into the funding document for activities related to it. DOD funding is executed at the field activity level, and requiring these activities to collect information related to earmarks would impose a wasteful burden and detract them from focusing on efficient management of funds.

143. Senator MCCAIN. Secretary Gates, in recent years, there has been a proliferation of funding grants and other large amounts appropriated to DOD for vague requirements (to preclude being called an earmark) like $300 million for medical transportation infrastructure in the National Capitol Region, $50 million for private museum construction, $250 million for repairs to local community schools, and $500 million for civilian infrastructure projects on Guam. None of these amounts are included in DOD budget requests, nor are they considered firm DOD requirements. All of them are added as a result of decreases to other DOD accounts. So, it would seem logical that in these times of fiscal austerity where DOD is making hard decisions about savings and efficiencies, there would be strong opposition to congressional efforts to fund them from DOD accounts. But there isn't. What is DOD's position on the use of DOD funds for non-DOD requirements which are not included in a budget request?

Secretary GATES. DOD's position is that the President's Budget requests what is required to meet our mission requirements each year. Upon enactment of an Appropriations Act the Department executes the enacted programs, complying with reprogramming and transfer authorities.

Background

In DOD appropriations bills, Section 8006 and general provisions specifying funding for specific items do not give DOD the flexibility to decide whether congressional adds are the best use of appropriated funds. Congressional adds can only be reduced if they are for Federally Funded Research Development Centers, economic assumptions, or excess cash balances of the Defense Working Capital Funds, by their proportionate share. All other reductions in the DOD appropriations bill result in the President's budget baseline taking those reductions, thus diverting funding from mission requirements.

144. Senator MCCAIN. Secretary Gates, if you are presented a request for a formal position on a particular spending item of this nature, can I expect a firm and unequivocal position from you stating why you either oppose or support the spending?

Secretary GATES. Yes, DOD leaders and I are always prepared to state opposition to unrequested changes to the President's budget because these changes divert funding from DOD's most pressing requirements, as detailed in the budget.

Beyond this straightforward opposition to changes to the President's budget, however, comments on specific congressional adds, or any other legislative positions, are the purview of the White House and OMB, and DOD follows their lead, and does not provide a position on its own.

OKINAWA AND GUAM

145. Senator MCCAIN. Secretary Gates, the road to a reduced U.S. presence on the Island of Okinawa has been paved with quite a few speed bumps. Not only do we have an irate contingent on Okinawa that has already ushered out one prime minister, but the folks on Guam aren't exactly excited about the current plan either. I notice that you have scaled back the request for funds by almost $300 million for Guam construction for fiscal year 2012 from what you had planned last year. This is in addition to the $320 million we have deferred in fiscal year 2011 for a host of reasons.

You mentioned that you expect to see a decision in the spring of 2011 on the final location for the Futenma Replacement Facility (FRF) on Okinawa. Will this decision

be considered the tangible progress required by the formal agreement between our Government and the Government of Japan? If not, when do you expect Japan to demonstrate tangible progress towards completion of the FRF?

Secretary GATES. I see tangible progress on the FRF, not as a single specific event, but rather as a series of steps taken roughly in parallel between Japan and the United States, as spelled out in our bilateral understandings on realignment. As Japan makes progress on the FRF, the United States will take associated steps to move forward on Guam. There are a number of different indicators of this progress, starting with the decision on the runway configuration that is expected at the upcoming two-plus-two meeting with Japan, the issuance of the landfill permit, the construction of the sea wall, and progress on the landfill itself.

An essential point of our realignment understanding with Japan is that preparations for facilities on Guam need to begin well in advance of the actual construction of the replacement facility at Camp Schwab. It is necessary to ensure that when the U.S. is satisfied with the progress Japan has made on the FRF, suitable facilities will be available on Guam allowing the phased relocation of Marines from Okinawa, such that any relocation can be sequenced to maintain unit cohesion and operational readiness.

146. Senator MCCAIN. Secretary Gates, in your view, should the movement of marines to Guam take place without the demonstration of tangible progress regarding Futenma?

Secretary GATES. The realignment of marines to Guam is dependent on tangible progress towards completion of the FRF at Camp Schwab.

An essential point of our realignment understanding with Japan is that preparations for facilities on Guam need to begin well in advance of the actual construction of the replacement facility at Camp Schwab. It is necessary to ensure that when the United States is satisfied with the progress Japan has made on the FRF, suitable facilities will be available on Guam allowing the phased relocation of marines from Okinawa, such that any relocation can be sequenced to maintain unit cohesion and operational readiness.

147. Senator MCCAIN. Secretary Gates, the Navy's Record of Decision related to the environmental impact on Guam released last fall conveniently punted on two major issues—potential damage to coral reefs in the Apra Harbor and the impact to cultural resources from the acquisition of private land for Marine Corps training ranges. Both issues, as well as the adequacy of Guam's civilian infrastructure, are of significant concern to Guam residents and should be of equal concern to DOD. Shouldn't we resolve these issues completely before we continue to invest hundreds of millions of dollars in the construction of a new Marine Corps base on the island?

Secretary GATES. These three issues—the impact to coral reefs associated with dredging for a proposed nuclear powered aircraft carrier transient wharf, the management of cultural resources through a Programmatic Agreement, and the adequacy of Guam's civilian infrastructure—are of significant concern not only to the Guam community but also to DOD. DOD is actively working to address all of these issues, but complete resolution will be an ongoing effort throughout the buildup process and is not required prior to beginning military construction.

The Navy recently completed additional surveys of the marine biology in the alternative sites proposed for the proposed wharf for a transient nuclear aircraft carrier. It is anticipated the results of these surveys will be outlined in a report due in November 2011, allowing for a full assessment of impacts for coral reef resources.

As to the management of cultural resources, DOD and relevant Federal and local regulatory authorities reached agreement on a Programmatic Agreement under the National Historic Preservation Act. This Programmatic Agreement guides how DOD handles impacts to historic properties as the build-up effort moves forward. DOD is requesting $11 million in PB–12 to fund the development of a repository used to meet DOD's commitments for preserving artifacts unearthed during military construction.

Addressing Guam's infrastructure capacity is a priority, as it directly affects the construction program and DOD is taking steps to address this issue. With the application of Japanese-provided financing, Guam's wastewater and power systems will be improved to support the relocating marines, the influx of off-island workers needed for the ramp-up of military construction, and Guam's long-term population growth. DOD contributed $50 million to the Port of Guam and $116 million in Defense Access Road funding ($49 million appropriated in fiscal year 2010 and $67 million authorized for appropriation in fiscal year 2011), both of which contribute to improving infrastructure off-base to address construction capacity requirements. In the longer term, an interagency effort, led by the Economic Adjustment Com-

mittee, will continue working with Guam to assess off-base needs and identify potential Federal funding solutions.

148. Senator MCCAIN. Secretary Gates, what is DOD's plan to rectify these issues with Guam?

Secretary GATES. As for the potential impacts to coral, the Navy recently completed additional marine biology surveys regarding the alternative sites for a transient nuclear aircraft carrier proposed wharf. It is anticipated that the results of these surveys will be outlined in a report due in November 2011, allowing for a full assessment of impacts to coral reef resources.

Following significant public comments, discussions with Guam's leaders, and 3 years of consultations with the Guam State Historic Preservation Officer (SHPO), I understand and appreciate the concerns regarding cultural resources, and in particular, the potential impact to Pagat village and cave from the preferred alternative site for a live fire training range complex discussed in the Final Environmental Impact Statement. On March 14, 2011 DOD, Guam SHPO, and Advisory Council on Historic Preservation successfully reached agreement on the Programmatic Agreement that will guide how DOD deals with impacts to historic properties as the build-up effort moves forward. As part of the Programmatic Agreement, DOD committed that access to Pagat village and cave will remain unfettered and that these sites would not be within the footprint of the live fire training range complex, should the Navy select the Route 15 site in a forthcoming Record of Decision for training on Guam. DOD is requesting $11 million in PB–12 to fund the development of a repository used to meet the Department's commitments for preserving artifacts unearthed during military construction. As the military build-up continues, DOD will remain engaged with these stakeholders to avoid, protect, and mitigate impacts to cultural resources.

Improvements to Guam's infrastructure are necessary to support the relocating Marines, off-island workers needed to ramp up the construction program, and Guam's long-term civilian population growth. Japan-provided financing will be applied to make improvements to off-base power and wastewater systems, and to the Navy's water system on-base. In its fiscal year 2011 budget, Japan requested $415 million of its required $740 million contribution in utilities financing. The projects funded by the fiscal year 2011 financing include upgrades to the Northern District and Hagatna wastewater treatment plants, and water production, treatment and transmission on-base. In the meantime, efforts to address improvements to Guam's roadways and port are underway. Through the Defense Access Road program, DOD will fund improvements to Guam's public roadways ($49 million appropriated in fiscal year 2010 and $67 million authorized for appropriation in fiscal year 2011). DOD also contributed $50 million to the Port of Guam, which, when coupled with $54 million in financing from the U.S. Department of Agriculture, will improve the port's capacity to support the needs of the buildup. DOD continues to work with other Federal agencies through the Economic Adjustment Committee to identify and assess Guam's needs and look for Federal funding solutions to address the island's infrastructure issues.

149. Senator MCCAIN. Secretary Gates, we have been asking DOD for a master plan of the details of construction projects and total costs for 3 years, to no avail. Can we get that masterplan, a revised timeline, and a total estimate cost to complete the move of 7,000 marines and their families to Guam?

Secretary GATES. I understand Congress's concerns regarding the total cost of the Guam realignment and DOD is committed to providing an accurate picture of current costs. DOD is currently working to develop an updated estimate, and this estimate will be provided to committee staff prior to mark-up.

KOREA

150. Senator MCCAIN. Secretary Gates, on September 23, 2010, you directed U.S. Forces Korea and the Services to proceed with full tour normalization for Korea, as affordable, but not according to any specific timeline. You stated that "full tour normalization in Korea will further our long-term commitment to support our forward stationed troops and their family members." Do you have an estimate of the total costs required to implement this decision? If so, please provide it.

Secretary GATES. I understand the importance of tour normalization from an operational and quality of life perspective and DOD is working to better understand the costs of tour normalization. As the costs come into better focus, DOD will determine the timing for moving forward.

151. Senator MCCAIN. Secretary Gates, is DOD on track to provide a plan by March 31, 2011, detailing schedules and costs?

Secretary GATES. Yes.

152. Senator MCCAIN. Secretary Gates, on November 23, 2010, an unprovoked and premeditated artillery barrage by North Korea on a South Korean island killed two South Korean marines, wounded at least 19 other people, and set buildings and forests ablaze, the first time in years that North Korea has trained the firepower of its 1.1 million-strong military on South Korea's civilian population. This attack, coupled with a new revelation about the North Korean nuclear program, prompted one media outlet to call Korea "a massive strategic challenge in one of the most dangerous corners of the world." Given the increase in uncertainty surrounding the security environment on the peninsula, are you still committed to stationing U.S. military family members in Korea?

Secretary GATES. DOD is committed to stationing U.S. military family members in Korea under the Tour Normalization Initiative. DOD intends to proceed as affordable, but not according to any specific timeline. Tour Normalization in Korea will further DOD's long-term commitment to provide greater stability for forward stationed servicemembers and their families. U.S. Forces Korea, in coordination with U.S. Pacific Command, the military departments, CAPE, and other relevant OSD organizations, are working to provide a feasible, affordable and secure plan to continue toward full Tour Normalization.

153. Senator MCCAIN. Secretary Gates, would families have the option of not being stationed in Korea? If so, would they incur any personal expense?

Secretary GATES. If Korea Tour Normalization is fully implemented, the assignment tour length for a majority of the locations will be 36-months accompanied and 24-months unaccompanied. Military families will still have the option of not accompanying their sponsor to Korea. In this case, the family can remain where they currently reside, or move to a place they designate in the United States at government expense. If the family does not reside in government housing and is entitled to housing allowance, their housing allowance will be as authorized for the locality where they have chosen to reside.

QUESTIONS SUBMITTED BY SENATOR SCOTT P. BROWN

NATIONAL GUARD BUREAU

154. Senator BROWN. Secretary Gates and Admiral Mullen, what are your thoughts on providing to General McKinley, CNGB, a three-star position to serve as his deputy?

Secretary GATES. This matter will be under review until the fall 2011.

Admiral MULLEN. I fully support re-establishing the Vice CNGB at the rank of lieutenant general. Doing so would enable the CNGB to better administer his diverse duties and expansive portfolio that includes the unique non-federalized homeland defense equities of the National Guard. This action would be more purposeful to the National Guard than making CNGB a member of the JCS.

CYBERSECURITY CAPABILITIES

155. Senator BROWN. Secretary Gates, you have proposed $2.3 billion to support improved cybersecurity capabilities within DOD and greater joint planning efforts between the military and DHS. Are we dangerously vulnerable to cyber intrusions and cyber attacks as a result of our dependence on critical infrastructure?

Secretary GATES. The United States is vulnerable to cyber intrusions and potential cyber attacks on its critical infrastructure. The capabilities of state and nonstate actors to exploit, disrupt, or even destroy our critical information systems are increasing.

Almost every aspect of civilian life depends on access to the Internet and other data-transmission networks. With our reliance on cyberspace comes vulnerability. Because so many of our civilian and military functions depend on computer networks, any large-scale interference with our networks represents a potentially significant threat to national security.

DOD has invested heavily in information technology—$38.4 billion requested for fiscal year 2012—because information technology is a force multiplier for military, intelligence, and business operations. DOD has more than 15,000 networks and seven million computing devices, across hundreds of installations in dozens of coun-

tries around the globe. Our networks are attacked thousands of times each day, and scanned for vulnerabilities millions of times each day. We know that more than one hundred foreign intelligence agencies are attempting to get into DOD's networks.

The departments and agencies of the public sector, as well as the private sector, rely upon cyberspace to accomplish their missions successfully. Because of the cross-cutting nature of the cyber threat, U.S. Government departments and agencies must work together to protect U.S. networks and systems. Our cybersecurity initiatives and investments will enable DOD to protect its networks more effectively and to support DHS and other agencies in achieving their cybersecurity missions. (As a point of clarification, when we consider the full range of DOD's cybersecurity investments, including CYBERCOM, the Defense Cyber Crime Center, and the $2.3 billion requested for information assurance, our comprehensive request for fiscal year 2012 is $3.2 billion.)

Cybersecurity is a top-tier national security issue for the United States. We have made progress in strengthening our cybersecurity, but more must be done. DOD looks forward to working with DHS and other interagency partners, and with Congress, to improve the protection of U.S. networks and systems.

156. Senator BROWN. Secretary Gates, if the United States is hit by a catastrophic cyber attack—as Central Intelligence Agency (CIA) Director Panetta described as the next Pearl Harbor—are we prepared to respond?

Secretary GATES. DOD is prepared to protect defense critical infrastructure/key resources from a catastrophic cyber attack and to respond should such an attack occur. As described in the 2010 Quadrennial Defense Review Report, DOD is taking several steps to strengthen capabilities in cyberspace, including:

(1) developing a more comprehensive approach to DOD operations in cyberspace;
(2) developing greater cyber expertise and awareness;
(3) centralizing command of DOD cyber operations; and
(4) enhancing partnerships with other agencies and governments.

Pursuant to Homeland Security Presidential Directive–7 (Critical Infrastructure Identification, Prioritization, and Protection), DOD is working with its private sector partners in the DIB to facilitate vulnerability assessments and to encourage risk management strategies to protect against and mitigate the effects of attacks.

DOD is also working closely with its Federal partners to assist in ensuring the protection of critical infrastructure and the preparedness of the national cyberspace response system to deal effectively with cyber attacks. DHS developed a National Cyber Incident Response Plan, in which DOD is a key partner, to help ensure resiliency in the face of changing threats and associated technologies. In general, DOD defers to the DHS to evaluate the current preparedness of the national cyberspace response system.

157. Senator BROWN. Secretary Gates, from your perspective, do we have the necessary resources to prevent such an attack and who would be in charge of such a response?

Secretary GATES. The United States possesses capabilities to help prevent a major cyber attack, but they must be enhanced significantly to cope with a rapidly advancing threat from both state and non-state actors. DOD continues to work with DHS and others in the U.S. Government to leverage existing authorities and develop new interagency processes and capabilities to prevent a cyber attack. DOD is also working with DHS and other agencies to identify additional authorities that may be needed to defend the Nation against cybersecurity threats most effectively.

In the event of an attack, the President has emergency authorities to direct a unified, national response. Outside of emergency Presidential authorities, DHS is responsible for coordinating the national effort to improve the cybersecurity of U.S. critical infrastructure. DOD is responsible for the security of its networks, is assigned additional responsibilities for all national security systems, and is the Federal agency responsible for coordinating with the DIB to identify and defend against cybersecurity threats. If directed by the President, DOD can use its capabilities to support DHS and to protect U.S. Government systems, as well as the private sector systems on which the U.S. Government relies.

IRANIAN NUCLEAR CAPABILITY

158. Senator BROWN. Secretary Gates, today Iran is producing higher enriched uranium and is moving closer to possessing the weapons-grade uranium needed for a nuclear weapon. What is your assessment of Iran's nuclear intentions?

Secretary GATES. The Iranian nuclear program and Iran's intentions remain issues of paramount interest and concern, and we continue to watch them very closely. At this time, DOD believes that Iran is not nuclear weapons capable. DOD also assesses that Iran is keeping open the option to develop nuclear weapons, in part by developing various nuclear capabilities that bring it closer to being able to produce such weapons, should it choose to do so. We do not know, however, if Iran will eventually decide to build nuclear weapons. As new information becomes available, and as the Iranian nuclear program evolves, we will reevaluate and reassess Iran's ultimate intentions and potential capabilities.

159. Senator BROWN. Secretary Gates, do you agree that a nuclear-armed Iran poses an unacceptable risk to the United States?

Secretary GATES. A nuclear-armed Iran is unacceptable. I remain committed to preventing Iran from acquiring a nuclear weapon. A nuclear-armed Iran would be highly destabilizing to the Middle East, and could have significant implications for U.S. interests. However, no one can say with certainty how the situation might unfold. A nuclear-armed Iran could provide other States in the Middle East with the impetus to pursue nuclear programs. Iran also could become more emboldened in its actions throughout the region, most notably by expanding its support for proxies. A nuclear-armed Iran could also cause strategic instability that could eventually lead to a regional conflict.

QUESTIONS SUBMITTED BY SENATOR ROB PORTMAN

ALTERNATE ENGINE

160. Senator PORTMAN. Secretary Gates, with the recent vote against funding the JSF second engine, the House moved a step closer to awarding one company a sole source contract for $100 billion lasting 30 years. This seems remarkably shortsighted and this fight for a competitive process is not over. The Government Accountability Office (GAO) has stated that: "DOD experience with other aircraft engine programs, including the F–16 fighter in the 1980s, has shown competitive pressures can generate financial benefits of up to 20 percent during the life cycle of an engine program and/or improved quality and other benefits." In other words, by funding the JSF competitive engine, we have the chance to save about $20 billion over time. I am concerned that the short-term financial benefits of terminating the alternative engine will be dwarfed by the long-term costs of a sole-source contract for an engine that is 50 percent over budget.

I believe the F–35 will replace five aircraft currently in the Navy and Air Force fighter fleet (F–16, F/A–18, AV–8, A–10, and F–117). It is my understanding that by 2030, the F–35 will make up about 90 percent of the U.S. tactical fighter force. Would you please comment on whether or not there is historical precedent for being so dependent on one aircraft?

Secretary GATES. Being a tri-service program with eight international partners, the scope of the JSF program is without precedent. While the scope and number of tactical aircraft the JSF program represents is large, having a single type model series aircraft to fulfill a mission requirement is not without precedent.

For example, the Air Force will gradually replace the legacy fleet of F–16s and A–10s as it transitions to a predominantly 5th Generation fleet. In the 2030 timeframe, the Air Force will still operate a significant number of legacy tactical assets. Assuming the Air Force maintains its current fighter force levels, only 58 percent of the Air Force tactical fighter force will be F–35As in 2030; combined with the F–22 fleet, 63 percent of the Air Force fighter inventory will be 5th Generation platforms. The Air Force continues to assess its fighter force structure and will evaluate alternatives to replace additional legacy platforms as they reach the end of their service lives.

The Navy's mission of airborne command and control is fulfilled solely by E–2D/E–2C while search and rescue, anti-submarine, and anti-surface warfare are fulfilled by MH–60 variants. The Navy's tactical aviation projected aircraft inventory in 2030 will be comprised of six Type Model Series (TMS) aircraft: F/A–18E/F, F–35C, F–35B, EA–18G, the next generation air dominance aircraft, and the replacement for the EA–18G. Of these aircraft, F–35s are expected to comprise roughly 65 percent of the Navy tactical aircraft inventory.

161. Senator PORTMAN. Secretary Gates, given our future dependence on the F–35, does the failure to have a back-up engine present a risk to our forces?

Secretary GATES. I believe that the interests of the taxpayer, the military, our partner nations, and the resource integrity of the overall F–35 program are best served by not pursuing a second engine. The benefits which might accrue with a second engine are offset by additional cost. Additionally, logistics complexity will divert precious modernization funds from more pressing developmental priorities.

The F135 engine program completed over 12,000 hours of engine ground testing, more than 4,300 hours of engine specific flight testing, and over 850 hours of aircraft flight tests on three variants. As in any development program, there were technical challenges and those that have arisen are understood and modifications are in progress. Throughout SDD, the engine continues to be monitored and any necessary modifications to ensure safety, reliability, and specification deficiencies will be made. Dedicated F135 flight testing will demonstrate performance throughout the flight envelope.

Continued funding for the F136 engine carries cost penalties to both the F135 and F136 engines in the form of significant upfront investment cost, reduced production line learning curves, and less efficient economic order quantities. DOD concluded that maintaining a single engine supplier provides the best balance of cost and risk. I believe the financial risks associated with a single source engine supplier are manageable, and are less than the investment required to fund a competitive alternate engine.

162. Senator PORTMAN. Secretary Gates, in your testimony you state that in regard to funding the second engine, "the Department has been operating this fiscal year under ambiguous guidance at best." And that given the situation you "decided to continue to fund the JSF extra engine effort during this interim period to give Congress the opportunity to resolve this matter as part of its ongoing debate on the budget." But isn't it the case that OMB concluded that the F–35 alternate engine funding must be funded in fiscal year 2011 even under the temporary continuing resolution?

Secretary GATES. On December 21, 2010, OMB Director Lew did inform Senator Brown of Ohio that the then in-effect CR "would continue fiscal year 2010 funding, terms, and conditions for the entire Federal Government." Subsequent CRs also continued extending the funding, terms, and conditions of the 2010 appropriations. However, consistent with standing OMB guidance on the point, Director Lew also indicated that DOD was expected to not impinge on congressional full-year funding prerogatives for fiscal year 2011. Because funding need not be made available in the course of any single period covered by a continuing resolution if sufficient opportunity to fully execute would be available upon the enactment of an appropriation act at the end of a CR period, the protection of the Congress's fiscal prerogatives does not require funding in any single CR.

163. Senator PORTMAN. Secretary Gates, do you believe that you have a choice as to whether or not to fund the alternate engine under a continuing resolution?

Secretary GATES. During the period of the existing CR, I believe that DOD has the discretion to issue a stop work order on the alternate engine program, and given the circumstances the department may determine that it should issue a stop work order. A stop work order is temporary in nature and may not exceed 90 days unless extended by agreement between the government and the contractor.

QUESTIONS SUBMITTED BY SENATOR SUSAN COLLINS

U.S. FAMILY HEALTH PLAN RESTRICTIONS

164. Senator COLLINS. Secretary Gates, the President's budget request precludes enrollment in the U.S. Family Health Plan (USFHP) for beneficiaries who reach 65 years of age. According to the transcript I saw and the budget briefing, it is my understanding that DOD is committed to working with the impacted hospitals on this issue to ensure that the quality of care is not impacted. I also understand that no current enrollee in this plan would be affected in terms of their quality of care or health care costs. Are these accurate characterizations of DOD's position?

Secretary GATES. Yes. Current enrollees are not affected by this change.

The Department continues working with the six health plans to ensure that quality of care is not affected for current or future enrollees. Upon reaching age 65, USFHP enrollees may opt to enroll in Medicare Part B and receive the TRICARE for Life (TFL) benefit as a supplement to their Medicare coverage. The proposal does not result in a beneficiary's loss of provider access, as long as the USFHP providers continue to accept Medicare patients. This proposal provides equitable treatment for

all Medicare-eligible retirees by offering a nationwide uniform plan. Most retirees do not live in one of the USFHP service areas, and their only option for health care is Medicare and TFL (requiring payment of their Medicare Part B premium). They and all others enrolled in USFHP will be taken care of.

SHIPBUILDING INDUSTRIAL BASE

165. Senator COLLINS. Admiral Mullen, separate from the concerns about the continuing resolution in the short-term, I noticed in your written testimony that you raised concerns about maintaining the capability of the shipbuilding industrial base in the long-term. Clearly, stability in requirements, procurement plans, and buying ships at cost-efficient rates go a long way to achieving the necessary force structure and save money. I am also encouraged that a second DDG–51 ship was included in the fiscal year 2014 budget as I had recommended to sustain a DDG–51 procurement rate of at least two ships per year, which should be closer to three ships per year. DDG–1000's construction is also proceeding very well at Bath Iron Works, and I look forward to Admiral Roughead's visit on the 23rd of February to see first-hand the ship's and yard's progress. Please elaborate on the specific concerns you have for the shipbuilding industrial base.

Admiral MULLEN. As I stated last year, I am concerned about the capabilities of our DIB, particularly in shipbuilding and space. Our ability to produce and support advanced technology systems for future weapon systems may be degraded by decreasing modernization budgets as well as mergers and acquisitions. Left unchecked, this trend will impact our future warfighting readiness. To ensure that DOD can continue to rely on a dynamic defense market to meet shifting requirements, robust competition is vital for producing high quality, affordable, and innovative products.

My other concern regarding the shipbuilding industrial base has to do with ship design and production. Six major U.S. shipyards build nearly all of the Navy's warships, and while they consistently build extremely capable ships, their production rate pales in comparison with production rates of leading international shipyards. This places U.S. shipyards at somewhat of a disadvantage because serial design and stable production are critical factors to the incorporation of leading shipyard technologies and decreased cost for DOD. The *Virginia* class submarine and the T–AKE auxiliary program show the benefit these factors can have on shipbuilding cost. Both programs enjoyed significant cost reductions and improved production schedules as a result of serial production and a stable design.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

INSTABILITY IN MEXICO

166. Senator CORNYN. Secretary Gates, last month, General Michael Hayden, a former CIA Director, described the crisis next door in Mexico as one of six national security challenges that would "keep him awake at night" if he were still in government. At this time, the U.S. Government does not seem to have a coherent, meaningful strategy in place to help the Mexican Government regain control over its country and defeat the drug cartels. What do you see as the risks to our own national security if the Mexican drug cartels are not defeated?

Secretary GATES. In 2008, the U.S. Government began coordinating assistance to Mexico under the Merida Initiative with the goal of supporting Mexico's efforts to build capacity to combat TCOs, strengthen the rule of law and respect for human rights, reduce violence, and stem the flow of drugs north and arms and illicit money south. We recognize that, moving forward, U.S. efforts should:

(1) reinforce progress made in disrupting cartels;
(2) begin institutionalizing Mexican capacity to act on public safety and security issues;
(3) help Mexico meet the challenges of securing its borders while facilitating trade and travel; and
(4) promote respect for human rights, the rule of law, and a culture of lawfulness. Although none of these are easy, we know we are making slow but steady progress.

I admire President Calderon's government for the brave stand taken against TCOs that seek to operate with impunity inside Mexico. Although Mexico increased efforts to counter the TCOs, TCOs responded with increased violence as they fight for turf and attempt to intimidate law enforcement officers and the Mexican public. Although I am concerned about the escalating violence in Mexico, I am confident

that Mexico's democracy is strong and that the government maintains control over its territory.

As DHS Secretary Napolitano noted recently, we do not have evidence that TCO violence is spilling across the border into the United States. Still, these dangerous organizations have linkages to illicit groups operating inside the United States, including drug traffickers and gangs that pose health, law enforcement, economic, and security challenges to cities and towns throughout our Nation. Although Mexico called upon its armed forces to support Mexican law enforcement efforts to combat TCOs, it continues to see the problem as a law enforcement issue, as do I. DOD, along with interagency partners, is working closely with Mexican counterparts to support its efforts to dismantle TCOs, and DOD will continue to provide assistance as requested by Mexico.

167. Senator CORNYN. Secretary Gates, the Mexican government reports that over 34,600 people have been killed in drug-related violence in Mexico since December 2006, including 15,000 deaths in 2010 alone—representing a 60 percent increase over 2009. What common threads do you see between the cartel-driven unrest in Mexico and the insurgency-driven violence in Iraq and Afghanistan, which our troops have been battling for most of the past decade?

Secretary GATES. The challenges facing Mexico are quite different from those confronting Iraq and Afghanistan. Specifically, the TCOs operating in Mexico are not attempting to overthrow the Mexican Government, but instead are fighting for turf and to create a space in which to carry out their illicit activities. As such, Mexico is dealing with a law enforcement challenge; DOD is providing support to Mexico as well as U.S. law enforcement entities in their unprecedented efforts to confront this challenge, but is not directly engaged in the fight.

168. Senator CORNYN. Secretary Gates, in your opinion, how can the U.S. Government, and in particular DOD, better support our Mexican partners?

Secretary GATES. Under President Calderon's leadership, Mexico is bravely confronting the grave security threats posed by TCOs operating within Mexican territory. At Mexico's request, through the Merida Initiative and complementary programs, the U.S. Government, including DOD, is providing support to Mexico to face these challenges.

Under Merida and other cooperative programs, DOD provides training, information sharing, and operational support to Mexican military and other security forces, as well as to U.S. law enforcement agencies' activities with regard to Mexico. DOD is working with Mexican partners to find areas in which to increase cooperation. In recent years, DOD concentrated on assisting Mexican forces to improve tactical and operational proficiency, as well as air mobility, maritime law enforcement, communications, and reconnaissance capacities. DOD provided non-intrusive inspection equipment for mobile checkpoints and eight Bell 412 transport helicopters for the Secretaría de la Defensa Nacional. Also, DOD is working to deliver three UH–60M Blackhawks and four Construcciones Aeronáuticas SA (CASA 235) maritime surveillance aircraft. DOD support focused on helping Mexican security forces learn to mount intelligence-driven and interagency-coordinated operations, as well as on safeguarding human rights in the context of military operations in support to law enforcement.

Moving forward, I believe the Department can best support our Mexican partners by preparing to respond quickly to requests for continued assistance from Mexico. Domestically, the United States must also commit to confronting issues on our side of the border that contribute to the challenges facing Mexico—namely the illicit trafficking of arms from the United States into Mexico and our country's demand for illegal drugs. The United States and Mexico have a shared responsibility in the fight against TCOs, and our success will depend on our continued partnership.

INTERAGENCY COORDINATION ON NATIONAL SECURITY

169. Senator CORNYN. Admiral Mullen, in your written testimony, you asked for Congress's help in modifying the laws and regulations surrounding security cooperation to create an approach that better integrates our defense, diplomacy, development, and intelligence efforts. In terms of geographic organization, DOS has six regional bureaus and DOD has six different regional COCOMs, which are not demarcated along the same lines on the map. At the same time, the IC defines world regions utilizing a third set of lines on the map. In your opinion, does this lack of common demarcation of the world's regions by these Federal agencies hamper effective interagency cooperation and coordination on national security?

Admiral MULLEN. It is true that there is not a common demarcation of the world's regions among Federal agencies. Many of these differences are the result of historic ties and relationships, and the unique focus of each agency. While these differences may create some challenges, they do not hamper effective interagency cooperation and coordination on national security. In some cases, the different regional demarcations are beneficial to interagency cooperation and coordination. Whenever lines of demarcation are created or utilized on a map, issues may be created or exist that affect both regions, but are missed due to their cross-boundary nature. By utilizing differing lines of demarcation between the agencies, the impact of these seams within an organization is minimized by working with other agencies to formulate a cohesive foreign policy.

Additionally, I have a statutory responsibility under Title 10 U.S.C. 161 to review the Unified Command Plan (UCP), which includes the COCOM areas of responsibility, not less than every 2 years, and recommend any changes to the President through the Secretary of Defense. This is a thorough review that includes inputs from Office of Secretary of Defense, combatant commanders, and the Services. The draft UCP is then reviewed by the interagency via the National Security Staff prior to receiving Presidential approval. In this process, I have not received any indication that I should recommend a change to the President to more closely align our regional designations with that of other Federal agencies or that such a realignment would overcome any existing shortfalls in interagency coordination.

INDIA AND AFGHANISTAN

170. Senator CORNYN. Secretary Gates and Admiral Mullen, India has committed some $1.3 billion and 3,500 Indian personnel to relief and reconstruction efforts in Afghanistan to date, in recognition of the fact that stability in Afghanistan is crucial to its own security. As noted in Admiral Mullen's testimony, the enduring success of our military operations in Afghanistan is dependent on the ANSF being able to provide security to the Afghan people. However, reports indicate that NATO still faces a shortage of 740 trainers needed by this summer in order for the ANSF to be ready to take the lead by 2014. Given the clear and immediate demand for more trainers and training options in Afghanistan, as well as India's willingness to provide substantial support to stability and security efforts in the region, should we encourage India to expand its role and help train the Afghan security forces?

Secretary GATES. The United States and India have shared interests in a stable and prosperous South Asia region and in preventing Afghanistan from again becoming a safe haven for terrorists.

In the past, India provided scholarships for ANSFs personnel to study in India, and is currently exploring options to train Afghan women police in India.

I welcome these efforts, and encourage India to consider further assistance in Afghanistan through priority infrastructure projects, additional training and education assistance, and technical assistance to the agriculture sector. I also encourage India to continue to engage the Afghan government to identify further areas of cooperation.

During President Obama's visit to India in November 2010, he and Prime Minister Singh committed to intensify consultation, cooperation, and coordination to promote a stable, prosperous, and independent Afghanistan. They agreed to collaboratively assist the people of Afghanistan by identifying opportunities to leverage our relative strengths, experience, and resources, including joint projects on agriculture and women's economic development. Eighty-five percent of Afghans derive their income from agriculture, and Afghan women continue to lack economic, social, and political opportunities.

The shortfall of 740 trainers currently identified by the NATO NTM–A for filling the NATO's Combined Joint Statement of Requirements includes a number of specific capabilities that only certain allies and partners possess. DOD is currently working to match these specific capacities with the NTM–A requirements.

Admiral MULLEN. India already plays a role in training the ANSF. They have provided training in India to over 400 ANA personnel, are currently training 90, and have offered training for another 192 this year. Expansion of further training efforts must be closely coordinated with NTM–A and Afghanistan to ensure it meets the needs of the ANSF. Regional political military considerations should be carefully weighed when considering any expansion of an increased role for the Indian military in the development of the ANSF, especially the introduction of Indian Trainers to Afghanistan.

F–35 JOINT STRIKE FIGHTER

171. Senator CORNYN. Secretary Gates, the fiscal year 2012 DOD budget request includes a major restructuring of the F–35 program that cuts 124 aircraft from the FYDP, postponing production of these aircraft until after 2016. I am concerned with the resulting impact to unit cost to the remaining aircraft in the FYDP, and I believe this poses the most immediate problem to our Services and our international partners. What actions will you take to ensure that the restructuring of this critical fifth-generation fighter program does not itself lead to a substantial spike in unit cost?

Secretary GATES. In the short-term, I acknowledge there will be an increase in unit costs as a result of the reduction of 124 aircraft within the FYDP. DOD is currently assessing the magnitude of this increase in support of the DAB review scheduled for May 2011, and will report these figures as part of an update to the Selected Acquisition Report this summer following completion of the DAB review. Despite the reduction of aircraft within the FYDP, DOD remains committed to procuring 2,443 aircraft in total, and this commitment will serve to lessen the short-term spikes in unit procurement costs. The reduction of aircraft procurement within the FYDP is prudent given the extension of the development program, and the need to properly manage the risks of concurrent development and procurement.

172. Senator CORNYN. Secretary Gates, were our international partners consulted on the announcement surrounding the restructuring of the F–35 program? If so, what has been the reaction of our allied partners, and do you believe this decision will impact when or how many F–35 aircraft our international partners will ultimately buy?

Secretary GATES. The international partners in the JSF F–35 Program are integral to our collective effort and were consulted prior to the announcement regarding the restructuring of the program. The partners' reaction to the announcement was positive. They appreciated the fact senior leadership in DOD took the time to contact them ahead of the formal announcement. There is no indication at this time that the decision to restructure the JSF F–35 Program will affect the number of aircraft the partners will ultimately buy or when the buys will occur.

B–1 FLEET

173. Senator CORNYN. Secretary Gates, how are your fiscal year 2012 proposed budget cuts to the B–1 bomber fleet consistent with your message about the need to sustain the current military force structure during a time of war?

Secretary GATES. The B–1 fleet faces potential grounding due to diminishing manufacturing sources and other sustainability issues. Taking a minimal reduction in fleet size garners savings to increase B–1 fleet viability through modernization efforts.

The Air Force conducted a review of current bomber force structure, existing capabilities, and future power projection requirements in determining the risk associated with a B–1 fleet reduction. The results of this review, combined with high-fidelity modeling and simulation analysis conducted by Air Force Studies and Analysis, indicate a reduction of six B–1 aircraft leaves a more capable fleet that meets the requirements in currently approved OSD analytic agenda scenarios.

A modest B–1 reduction, while modernizing the remaining fleet, is a wise reinvestment strategy providing a capabilities-based bridge to the future long range strike platform.

174. Senator CORNYN. Secretary Gates, how much of the savings obtained from this cut will be reinvested in sustaining and improving the current B–1 fleet, to include enhancements such as a new radar system?

Secretary GATES. The retirement of six B–1s provides a total savings of $61.9 million in fiscal year 2012 and $357.3 million over the FYDP in procurement and sustainment funding. Of these savings, the Air Force is reinvesting $32.9 million in fiscal year 2012 and $125.4 million over the FYDP, into critical B–1 sustainment and modernization programs to ensure the health of the remaining fleet. These programs include procurement and installation of Vertical Situation Display Upgrade and Central Integrated Test System sustainment efforts, Fully Integrated Data Link capability upgrade and procurement of critical initial spares for these modifications.

The ongoing Radar Maintainability and Improvement Program will replace two unsupportable Line Replaceable Units within the current radar system. The Air Force is assessing the remaining components of the B–1 radar with consideration

to both supportability and performance. DOD applied the remainder of the savings from the B–1 reduction to other Air Force and DOD priorities to include continuing to strengthen the nuclear enterprise and investing in Building Partnerships capacity.

175. Senator CORNYN. Secretary Gates, the B–1 bomber has repeatedly been cited by senior U.S. military commanders as the premier bomber in Afghanistan. General David Petraeus has emphasized that, "The B–1 is a great platform in at least two respects. First, it carries a heck of a lot of bombs, substantial ordnance. Second, it has very good intelligence, surveillance, and reconnaissance capabilities. And it can loiter for a good time, when it's not being used to drop bombs . . . " How will the proposed cuts to the B–1 fleet impact B–1 operations in Afghanistan in the years to come?

Secretary GATES. There will be no negative impact to operations in the Afghanistan theater. The fiscal year 2012 budget request reduces the B–1B force structure by six primary aircraft authorizations leaving 60 B–1Bs in the Air Force inventory. This provides additional funds to improve the existing B–1B fleet, including the central integrated test system, fully integrated data link, and vertical situation display unit. These initiatives will help bridge the gap until the next generation strike aircraft is operational. However, investing in a new penetrating bomber is critical to maintaining our long-range strike capability in the face of increasing risk associated with anti-access and area-denied environments.

176. Senator CORNYN. Secretary Gates, why was the B–52 fleet, which currently numbers 76 aircraft and does not provide nearly the utility of the B–1 in current operations in Afghanistan, not similarly reduced?

Secretary GATES. The answer is two-fold. First, the dual missions of conventional and nuclear capabilities of the B–52 provide the flexibility to meet COCOM requirements that the conventional-only B–1 does not provide. Second, the B–52 fleet maintains better maintenance statistics and requires fewer operational upgrades than the B–1; therefore, the Air Force was able to provide those upgrades without sacrificing force structure to pay for sustainment and upgrades.

LONG-RANGE STRIKE

177. Senator CORNYN. Secretary Gates, the fiscal year 2012 DOD budget request includes $197 million in Air Force RDT&E funding to begin development of a new long-range bomber (Long-Range Strike) that we are told would be penetrating, carry precision-guided conventional weapons, and be nuclear-capable. Yet last month, Secretary of the Air Force Michael Donley told reporters that while the new bomber would be able to carry nuclear weapons, it would not be immediately certified for nuclear missions.Why will the new bomber not be certified at the outset to carry nuclear weapons?

Secretary GATES. The new bomber will be nuclear capable. The Air Force will design and build the system to balance capability priorities with the need to responsibly and affordably mature a new system. Detailed timelines for certification will be developed as the program matures.

178. Senator CORNYN. Secretary Gates, what plans, if any, are being made to enable the B–2 to be certified to deliver a nuclear ALCM?

Secretary GATES. The Air Force is planning to integrate the LRSO weapon, which will replace the current nuclear ALCM, on the B–2.

GROUND-BASED MIDCOURSE DEFENSE SYSTEM

179. Senator CORNYN. Secretary Gates, there are now 30 Ground-Based Interceptors (GBI) deployed in Alaska and California to defend against Iran and North Korea, but the administration has purchased only 52 GBI missiles. Following the last two Ground-based Midcourse Defense (GMD) system flight test failures, the MDA is down to only 20 GBI missiles, which is not enough to continue development and improvement of the GMD system, to conduct annual reliability flight testing, and to maintain spare missiles for emergency deployment. Yet the fiscal year 2012 budget includes a reduction of $186 million to the GMD system from fiscal year 2011 levels, while the proposed 5-year funding for GMD is $1 billion less than that proposed in the fiscal year 2011 budget request. Given the administration's commitment to continue development and improving this important capability, how are these reductions justified when additional testing and GBI missiles are needed?

Secretary GATES. The change from fiscal year 2011 to fiscal year 2012 in the President's 2012 budget of $185 million reflects efficiencies introduced by the Department and the MDA. One of the focus areas of the efficiencies is cost savings through contract competition in the Ground-Based Midcourse Defense program. Another key efficiency was the consolidation of test events to achieve stated test objectives with fewer events. These efficiencies execute the same program scope with fewer program dollars, while continuing to meet the strategic goals and timelines laid out in the BMDR to ensure the United States has a reliable and proven system for homeland defense.

IRAQI AIR FORCE

180. Senator CORNYN. Secretary Gates, in your testimony, you cited the Iraqi Air Force's ability to protect its own air space as one of three primary areas of U.S. concern with Iraqi military capabilities as DOD prepares to withdraw the last U.S. troops at the end of 2011. What steps have you taken to enable the Iraqi Air Force to take over this key mission, including training and equipping efforts?

Secretary GATES. The Iraqi Air Force is on track to achieve minimal essential capabilities by the end of 2011 in all mission categories except airspace control; intelligence surveillance and reconnaissance; and fixed-wing airlift. With continued support from U.S. advisors and adequate resourcing from Iraq, improvements in accessions, airlift, flying and technical training, air staff effectiveness, combat support, and command and control should demonstrably contribute to internal security while setting the stage for contributing to external defense as well.

Iraq funded several Foreign Military Sales (FMS) cases that provide both fixed and rotary wing pilot and ground crew training, including training to prepare pilots for a fourth generation fighter aircraft. Additionally, Iraq funded FMS cases that are currently providing aircraft as well as air surveillance radars.

181. Senator CORNYN. Secretary Gates, the Iraqi Government had clearly been preparing to purchase 18 American-made F–16s until this week, when they announced they would postpone their planned purchase in order to shift funding to other non-military priorities. What steps are you taking to complete this critical F–16 purchase to help bring the Iraqi Air Force's air defense capability to proficiency?

Secretary GATES. GoI requested the purchase of 18 F–16s. However, due to a number of competing priorities that must fit into a limited Iraqi budget, the Iraqis were not able appropriate funds for an F–16 procurement program in the 2011 budget that was recently approved by the Council of Representatives. Funds initially earmarked in the 2011 budget request to buy F–16s were shifted to provide critical human services in the final Council of Representatives approved budget.

The most recent F–16 Letter of Offer and Acceptance tailored to meet Iraqi funding constraints expired on January 31. USF–I leadership continues to engage in discussions with Iraqi leadership on the details of a possible F–16 sale. This continues to remain a top U.S. Government and Iraq priority.

NATIONAL DEBT

182. Senator CORNYN. Admiral Mullen, in your written testimony, you state: "I believe that our debt is the greatest threat to our national security." Reckless fiscal policy is not the typical focus of our military's threat analyses but, frankly, I could not agree more with your assessment. Last Congress, I introduced a bill called the Foreign-Held Debt Transparency and Threat Assessment Act, which would have required regular assessments from the GAO on the national security risks of the ballooning national debt. In addition to the sheer size of our national debt (now more than $14 trillion), I am also deeply concerned about our clear dependence on foreign governments such as China to fund our deficit spending, so my bill would also require the President to report quarterly to Congress on the national security risks posed specifically by foreign holdings. Do you agree that having this type of analysis is critical to both our fiscal and national security policies?

Admiral MULLEN. The ties between the strength of our economy and our Nation's security are inseparable and incontrovertible. We need a vibrant, growing economy to exert influence internationally and to provide for our military and other defense capabilities. In turn, we need the security provided by our national defenses to underwrite our economic endeavors and our livelihoods. But today we find both our economy and our security threatened by our burgeoning national debt.

In my position, my concerns about our debt stem from its long-term effects on our Nation's fiscal standing and the difficult trade-offs associated with restoring our fis-

cal health, rather than the holders of our debt. As such, I have taken no position on the nature of the holders of this debt.

QUESTIONS SUBMITTED BY SENATOR DAVID VITTER

MISSILE DEFENSE BUDGET

183. Senator VITTER. Secretary Gates, on February 16, 2011, you testified before the House Armed Service Committee: "I do know that the overall budget for missile defense is going from $10.2 billion to $10.7 billion, so we're putting another $500 million into it. And there is money for more—more Aegis ships, more of the transportable radars like we have in Egypt—like we have in Israel and Japan right now, and—and then there are also continuing investments in the Ground Based Interceptor system."

Of the $500 million increase for missile defense, only $219 million is going to the MDA, whose budget increases from $8.4 billion in fiscal year 2011 to $8.6 billion for fiscal year 2012. Despite the $200 million increase for MDA, 5-year funding for MDA declines by $2.6 billion between fiscal year 2011 and fiscal year 2015, as compared to last year's budget request. Funding for the GMD in fiscal year 2012 is reduced by about $185 million, as compared to fiscal year 2011. Funding for the GMD program over fiscal years 2012 to 2015 is reduced by approximately $590 million, as compared to last year's budget request. Why does the MDA budget decline by $2.6 billion between fiscal years 2011 and 2015?

Secretary GATES. The MDA budget for 2011 through 2015 is based on the missile defense priorities set forth in the BMDR. The MDA budget strategy in fiscal year 2012 identified efficiencies and balanced personnel, budgetary and management resources within and across its components. In instituting efficiency initiatives MDA will make greater use of competition across its acquisition programs and will realize savings through a refined approach to service contracting.

184. Senator VITTER. Secretary Gates, why does the GMD budget decline by $185 million in fiscal year 2012 and by $2.6 billion between fiscal years 2011 and 2015?

Secretary GATES. The change from fiscal year 2011 to fiscal year 2012 in the PB12 budget of $185 million is reflective of efficiencies introduced by the Department and MDA. One of the efficiencies focus areas is cost savings through contract competition in the GMD program. Another key efficiency was the consolidation of test events, achieving stated test objectives with fewer events. These efficiencies execute the same program scope with fewer program dollars, while continuing to meet the strategic goals and timelines laid out in the BMDR to ensure the United States has a reliable and proven system for homeland defense.

The $2.6 billion change between fiscal years 2011 and 2015 reflects the change in funding for MDA as a whole, not GMD specifically.

The MDA budget for 2011 through 2015 is based on the missile defense priorities set forth in the BMDR. The MDA budget strategy in fiscal year 2012 identified efficiencies and balanced personnel, budgetary and management resources within and across its components. In instituting efficiency initiatives MDA will make greater use of competition across its acquisition programs and will realize savings through a refined approach to service contracting.

MEADS AIR AND MISSILE DEFENSE SYSTEM

185. Senator VITTER. Secretary Gates, I applaud you for your decision not to proceed to procurement of the Medium Extended Air Defense System (MEADS) air and missile defense system. As noted in the DOD memo, the program is substantially over budget and behind schedule; and it would take an extra $974 million to $1.16 billion just to complete the design and development. But I understand that the decision is to still proceed to spend approximately $804 million to implement a proof-of-concept effort. I am concerned that this would mean spending hundreds of millions of limited dollars on a system that we will not procure. What is the basis for continued funding on a program that DOD will ultimately not procure?

Secretary GATES. Although the DOD has decided not to procure MEADS, the Department determined the technology being developed in the program will be useful for other DOD programs. The DOD explored viable potential courses of action, including:

(1) Terminating the program immediately, if the DOD could obtain the required consent of the other Participants in the MEADS program under the legally binding Memorandum of Understanding (MOU) among the Federal Ministry

of Defense of the Federal Republic of Germany, the Ministry of Defense of the Republic of Italy, and the Secretary of Defense of the United States of America on behalf of DOD concerning Cooperation on a Project for Design and Development (D&D) of a MEADS (D&D MOU);

(2) Working with the other D&D MOU Participants to continue MEADS development within the agreed funding limits set forth in the D&D MOU; or

(3) Working with the other MEADS D&D MOU Participants to complete the planned D&D phase by amending the D&D MOU to add the additional funding and time required to develop and test the system fully for production and fielding.

The DOD decided that the best option available under the MOU is to continue to participate in the D&D phase within the funding limits set forth in the D&D MOU. This decision ensures the DOD: will fulfill its obligations under the D&D MOU; will avoid a situation where the DOD may be viewed as reneging on its international obligations; will avoid requiring the DOD to pay termination costs we expect would be comparable to the cost of completing the "proof of concept" effort under the D&D MOU; and, will facilitate the maturation of key technologies useful to the DOD in other programs.

186. Senator VITTER. Secretary Gates, I applaud you for your decision not to proceed to procurement of the MEADS missile defense system. As noted in the DOD memo, the program is substantially over budget and behind schedule. It would take an additional $974 million just to complete the design and development of the program. It does not make sense to continue to waste $800 million on a system we are not going to procure. Will DOD go back to the drawing board and try to find a way to ring out some additional savings out of this $800 million for MEADS?

Secretary GATES. The DOD will continue to explore opportunities to minimize cost. The Department explored viable potential courses of action, including:

(1) Terminating the program immediately, if the DOD could obtain the required consent of the other MEADS partners under the MOU among the Federal Ministry of Defense of the Federal Republic of Germany, the Ministry of Defense of the Republic of Italy, and the Secretary of Defense of the United States of America on behalf of DOD concerning Cooperation on a D&D Project of a MEADS (D&D MOU);

(2) Working with the other D&D MOU Participants to continue development of MEADS within the agreed funding limits set forth in the D&D MOU; or

(3) Working with the other MEADS D&D MOU Participants to complete the planned D&D phase by amending the D&D MOU to add the additional funding and time required to develop and test the system fully for production and fielding.

The DOD decided to continue to participate in the D&D phase within the funding limits set forth in the D&D MOU. This decision ensures the DOD: will fulfill its obligations under the D&D MO; will avoid a situation where the DOD may be viewed as reneging on its international obligations; will avoid requiring the DOD to pay termination costs we expect would be comparable to the cost of completing the "proof of concept" effort under the D&D MOU; and, importantly, will facilitate the maturation of key technologies useful to the DOD in other programs.

187. Senator VITTER. Secretary Gates, DOD's memo indicates that it will be necessary to allocate funds for Patriot upgrades. At a minimum, will DOD work to reallocate funds for design and development for upgrades to the Patriot system?

Secretary GATES. Yes. The Army is working to determine specific actions to mitigate the loss of MEADS. The Army will then reallocate funds originally programmed for MEADS beginning in fiscal year 2014 to improving the Patriot system.

188. Senator VITTER. Secretary Gates, in the memo accompanying your recent decision not to proceed to procurement of MEADS, you specifically highlighted the Army's inability to afford to procure MEADS and make required Patriot upgrades as rationale for the decision. In light of your decision, can you provide your assurance that DOD will accelerate Patriot modernization efforts?

Secretary GATES. Yes. The Army is working to determine specific actions to mitigate the loss of MEADS. The Army will then reallocate funds originally programmed for MEADS beginning in fiscal year 2014 to efforts accelerating improvements to the Patriot system.

CONVENTIONAL PROMPT GLOBAL STRIKE

189. Senator VITTER. Admiral Mullen, you recently stated, "U.S. senior military leaders monitored very closely all provisions related to conventional prompt global strike (CPGS) throughout the recent START treaty negotiation process". Do you believe there is a current clear commitment to deployment that allows for adequate U.S. missile defenses?

Admiral MULLEN. Yes. The START treaty allows for deployment and further development of conventional strike weapons, which are designed to hit targets any place in the world in 60 minutes or less. Any warhead—nuclear, high explosive, or high speed kinetic—on an ICBM or submarine-launched ballistic missile (SLBM) would be counted under the New START treaty central limits. However, deployment of CPGS does not impede our ability to provide for adequate U.S. missile defenses.

190. Senator VITTER. Admiral Mullen, additionally, condition 6 of the New START Resolution of Ratification called on the President to clarify its planning and intent in developing future conventionally-armed, strategic-range weapons systems (aka, CPGS). The February 2, 2011, report on CPGS, pursuant to Condition 6, lists three efforts under development (hypersonic technology vehicle (HTV), advanced hypersonic weapon (AHW), and conventional strike missile CSM)), at a cost of some $2 billion between now and 2016 for research and development. Is it still the policy of the administration, as per the 2010 NPR, to develop and field CPGS capabilities? If so, is it the intent of the administration to make a deployment decision anytime soon?

Admiral MULLEN. Our plan is to continue to strengthen our conventional capabilities as we reduce the role of nuclear weapons in deterring non-nuclear attacks. We are continuing to plan for and develop contributions by non-nuclear systems to U.S. regional deterrence while preserving reassurance goals by avoiding limitations on missile defenses and maintaining options for using heavy bombers or long-range missile systems in conventional roles. The success of a CPGS fielded capability will be dependent on progress made through the continued RDT&E of critical technologies, formal establishment of follow-on Service acquisition programs, and a concurrent effort to improve the Nation's ISR capabilities.

191. Senator VITTER. Admiral Mullen, the February 2 report states that "conventionally armed SLBM and conventionally armed ICBM concepts with traditional ballistic trajectories are not currently being pursued," and that "DOD at present has no plans to develop and field these systems." Given that these are the most mature technologies, why isn't the administration pursuing conventionally armed SLBMs and ICBMs as a near-term CPGS option?

Admiral MULLEN. While CPGS capabilities are currently limited, the current RDT&E approach is consistent with the department's vision of developing enhanced conventional technologies and capabilities that will minimize political and operational risks associated with fielding and employment in the future. The HTV –2 and AHW technology experiments along with the CSM demonstration are expected to provide more flexible operational characteristics that will not count (New START treaty) against a smaller triad of strategic nuclear capabilities. It will also be important to discriminate these capabilities from current ICBM or SLBM employment.

[Whereupon, at 12:42 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, MARCH 1, 2011

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

U.S. SPECIAL OPERATIONS COMMAND AND U.S. CENTRAL COMMAND

The committee met, pursuant to notice, at 9:34 a.m., in room SD–106, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Nelson, Webb, Udall, Hagan, Manchin, Shaheen, Blumenthal, McCain, Inhofe, Wicker, Portman, Ayotte, and Cornyn.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Jonathan D. Clark, counsel; Jessica L. Kingston, research assistant; Michael J. Kuiken, professional staff member; Jason W. Maroney, Counsel; William G.P. Monahan, counsel; Michael J. Noblet, professional staff member; and William K. Sutey, professional staff member.

Minority staff members present: David M. Morriss, minority staff director; Adam J. Barker, professional staff member; Christian D. Brose, professional staff member; and Lucian L. Niemeyer, professional staff member.

Staff assistants present: Christine G. Lang, Hannah I. Lloyd, and Brian F. Sebold.

Committee members' assistants present: Vance Serchuk, assistant to Senator Lieberman; Carolyn Chuhta, assistant to Senator Reed; Ann Premer, assistant to Senator Nelson; Gordon Peterson, assistant to Senator Webb; Jennifer Barrett and Casey Howard, assistants to Senator Udall; Roger Pena, assistant to Senator Hagan; Lindsay Kavanaugh, assistant to Senator Begich; Joanne McLaughlin, assistant to Senator Manchin; Ethan Saxon, assistant to Senator Blumenthal; Anthony Lazarski, assistant to Senator Inhofe; Lenwood Landrum, assistant to Senator Sessions; Clyde Taylor IV, assistant to Senator Chambliss; Joseph Lai, assistant to Senator Wicker; Charles Prosch, assistant to Senator Brown; Gordon Gray, assistant to Senator Portman; Adam Hechavarria, assist-

ant to Senator Ayotte; Ryan Kaldahl, assistant to Senator Collins; and Dave Hanke, assistant to Senator Cornyn.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody.

The committee meets this morning to receive testimony from Admiral Eric Olson, Commander, U.S. Special Operations Command (SOCOM), and General James Mattis, Commander, U.S. Central Command (CENTCOM).

Today's hearing continues the committee's review of the missions and operational requirements of our combatant commanders in light of the priorities set out in the President's fiscal year 2012 budget request.

Nowhere will the President's budget priorities have a greater impact than with the soldiers, sailors, airmen, and Marines in the CENTCOM area of responsibility (AOR). The men and women of CENTCOM and SOCOM have been engaged in major military operations for nearly a decade. Yet, in Afghanistan and Iraq, our troops' morale is high. They are dedicated to their mission and serving with courage and distinction.

We have asked so much of them. They have done everything we have asked and more. That includes not just the servicemembers themselves, but the families who have served our Nation at home while their loved ones serve overseas. Admiral Olson and General Mattis, on behalf of this committee, please pass along our gratitude to the troops serving under your commands.

Admiral Olson, it is my understanding that you plan to retire this year after an exceptional career in which, among other things, you became the first Navy SEAL to attain the rank of four-star admiral, and you have led SOCOM with great distinction. Thank you for your outstanding service and that of your family.

The Department of Defense (DOD), as are all Federal agencies, is currently operating under a Continuing Resolution (CR) that expires in a few days. Last week, Secretary Gates described this as a crisis on his doorstep.

I hope that we will soon be in a position to enact a full-year appropriation at an appropriate level. I hope, General Mattis and Admiral Olson, that you will help the committee better understand the impact of proceeding by CR on the forces operating under your command.

In Iraq, CENTCOM is continuing to oversee the drawdown of U.S. forces, as agreed upon by President Bush and Prime Minister Maliki in the 2008 security agreement, which requires all U.S. forces to be withdrawn from Iraq by December 31st of this year. Because of the ongoing reduction of our general-purpose forces in Iraq, the importance of the role performed by our Special Operations Forces (SOF) as a force multiplier, continuing to build the capacity of Iraqi counterterrorism forces and enabling their operations against al Qaeda in Iraq and other terrorist groups, is even more important.

As we reduce our presence, we must make sure that our special operators receive adequate support, including intelligence, medical evacuation, and quick-reaction forces. The transition in Iraq also means that the State Department will take over the lead for nu-

merous activities in Iraq previously implemented by DOD, including training the Iraqi police.

We would be interested in hearing from our witnesses this morning your views on the importance of providing adequate resources to the State Department and other civilian agencies to the success of that transition.

In Afghanistan, it is essential that President Obama holds to his decision to set July 2011 as the date for the beginning of reductions in U.S. forces in Afghanistan.

Secretary Gates told this committee a few weeks ago that he supported the decision to set the July 2011 date because it was necessary to "grab the attention of the Afghan leadership and bring a sense of urgency to them of the need for them to step up to the plate to take ownership of the war and to recruit their own young men to fight."

Admiral Mullen said at the same hearing that the July 2011 date "has given the Afghans a sense of urgency that they didn't have before the decision was made."

The Afghan National Army (ANA) and Afghan National Police (ANP) have added 70,000 Afghan National Security Forces (ANSF) over the last year and will meet the current target of 305,000 ANSF by October of this year. A large, capable, effective Afghan security presence is what the Taliban fears the most because it would demonstrate that—contrary to the Taliban's propaganda, the war against the Taliban and al Qaeda is a war the Afghan people believe in and it is being fought by an Afghan security force that they believe in, rather than a war waged by foreign occupiers, as Taliban propaganda would have it.

The administration is now considering a request to grow the ANA and ANP by between 45,000 and 70,000 people, which would bring the total ANSF levels to a range of 352,000 to 378,000 by the end of 2012. I have twice recently urged President Obama to approve this request for additional Afghan troops.

It is a key to the success of our mission and to faster reductions of U.S. troops. It is also far less costly in terms of U.S. casualties and taxpayer dollars than keeping large numbers of U.S. forces in Afghanistan. I hope our witnesses this morning will tell us whether they support the request to build the ANSF by up to an additional 70,000 personnel.

The presence of safe havens for terrorists across the Afghanistan border in Pakistan continues to pose a security threat to Afghanistan and to the region. While U.S.-Pakistan military cooperation has improved in some respects, the Pakistani army has not yet gone after the sanctuaries for the Haqqani network in North Waziristan or the Afghan Taliban in and around Quetta, Pakistan.

Over the past month, the status quo in the CENTCOM AOR has changed dramatically, and this change appears to be ongoing. The protests in Egypt, Bahrain, Jordan, Iran, Yemen, and other countries are examples of what President Obama has correctly called a "hunger for freedom."

Many in the Middle East have been denied their democratic and human rights for too long, and the past month is a clear demonstration of the people there demanding those rights. The United States needs to make constantly clear it supports those seeking to

exercise their fundamental rights in the Middle East and around the world.

The committee looks forward to hearing from General Mattis on his assessment and views on these protest movements, how our security, how our counterterrorism operations, and how our strategic goals are impacted by the events in the Middle East, and how, if at all, the nature of our military-to-military relationships might change in the region as a result of these events.

In the waters off the coast of Somalia, the flow of international commerce continues to be impacted by the threat of increasingly aggressive pirates. Just last week, four Americans were murdered at the hands of more than a dozen pirates bent on extracting ransoms in exchange for their lives. The committee looks forward to hearing from our witnesses about their assessment of this threat and about ongoing U.S. anti-piracy operations.

Iran provides the greatest challenge to the United States and the international community. While continuing to profess that its nuclear activities are for peaceful purposes, its actions indicate otherwise. The sanctions that have been imposed by the United States and most of the international community under the United Nations (U.N.) sanctions resolutions as well as domestic laws seem to be having some effect, but they need to be maintained and ratcheted up.

Admiral Mullen's guidance for 2011, which states that DOD would "continue to plan for a broad range of military options should the President decide to use force to prevent Iran from acquiring nuclear arms," needs to be reiterated. While not the preferred option, it is important that Iran understand that military actions remain on the table.

I am concerned about the fraying of our SOF, as you have put it, Admiral Olson. While our SOF have seen rapid growth over the past decade, the demand for such forces and their unique skills will continue to outpace supply for the foreseeable future.

This committee stands prepared to support SOCOM's efforts to provide the best-trained and best-equipped special operators to our combatant commands, and we look forward to hearing from you on this matter.

Thank you again, both of you, for your testimony today.

Let me now turn this over to Senator McCain.

STATEMENT OF SENATOR JOHN McCAIN

Senator McCAIN. Thank you, Mr. Chairman.

Let me thank our witnesses for joining us this morning.

Admiral Olson, thank you for your many years of courageous and outstanding service to the United States Navy and to the Nation.

General Mattis, as always, we look forward to your straight talk and candid views on the issues that are so important to us.

This hearing couldn't come at a more important time. Senator Lieberman and I have spent the past several days visiting some key countries within the CENTCOM AOR, including Lebanon, Jordan, and Egypt, as well as some equally critical countries that influence events within the AOR, such as Morocco, Tunisia, and Israel.

In addition, we are all, obviously, focused on the tectonic changes that are shaking countries and governments in Yemen, Bahrain, Iran, and, of course, Libya. That is to say nothing of Iraq, Afghanistan, and Pakistan, which remain the focus of our military and diplomatic efforts.

Not since the fall of the Soviet Union have we seen a wave of change destabilize more critical countries all at once than we are now witnessing. Indeed, the old bargains that have defined regional order in the Middle East for the past several decades are now collapsing in front of us.

This is, of course, deeply unsettling, but it is also an unprecedented opportunity to support the people of the Middle East in shaping a new regional order that is all at once reflective of their aspirations, conducive to our interests, and consistent with our values. The people of the Middle East are playing the leading role in this historic endeavor, but America's Armed Forces are playing an indispensable role, strengthening and defending our friends while deterring and defeating our enemies.

2011 will be a consequential year for CENTCOM and SOCOM. Among the vital strategic issues that were in play this year, we face the beginning of the North Atlantic Treaty Organization's (NATO) transition of responsibility for security in Afghanistan to local and national Afghan forces amid strained and even deteriorating U.S.-Pakistani relations.

We face hard choices about the future of U.S. defense assistance to Lebanon after Hezbollah's use of coercion to become the dominant actor in the government. We face the Iranian regime's desires to develop a nuclear weapons capability and to exploit the current regional instability to expand its hegemonic ambitions.

We face the destabilization of critical counterterrorism partners like Egypt, Jordan, Yemen, and Bahrain, where the headquarters of U.S. Fifth Fleet is now caught up in the broader debate over the people of Bahrain's political future. Of course, we face the prospect of a complete withdrawal of all U.S. troops from Iraq by the end of the year, despite increasing evidence and recent testimony by the Secretary of Defense suggesting that such a plan is not consistent with Iraq's continuing security needs or our enduring interests at this time.

Amid these and other challenges, this year will also require increased vigilance on the part of our SOCOM, for the changes sweeping across North Africa, the Middle East, and South and Central Asia may open up new ungoverned spaces that could be exploited by our enemies. While our special operators continue to perform with remarkable resilience and success, the effects of nearly 10 years of sustained operations and repeated deployments appear to be straining this elite force.

Admiral Olson, as the chairman has said, we are concerned by your recent comment that our SOF are showing signs of "fraying around the edges." It is important that you lay out today what steps are being taken or need to be taken to mitigate this strain. We are also interested in SOCOM's progress in meeting growth targets mandated by the Quadrennial Defense Review, as well as any associated issues, such as training or facility constraints that you are facing.

We continue to see al Qaeda and affiliated movements attempting to expand their reach through the Maghreb, the Horn of Africa, the Arabian Peninsula, Central Asia, and beyond. We are all eager for the assessments of both our distinguished witnesses about the capabilities of these groups to threaten America's friends, allies, interests, and Homeland.

What is critical to note is that the historic changes now reshaping the broader Middle East are a direct repudiation of al Qaeda and its terrorist allies. The people of this dynamic and crucial region are rising up to change the character of their governments, but the revolutions they are making are largely defined not by violence, but by peaceful protests.

They are inspired not by intolerant and extremist ideologies, but rather by demands for greater freedom, democracy, opportunity, and justice. More than any weapon of war with which this committee must concern itself, it is these principles and the changes they are inspiring that will ultimately defeat our terrorist enemies.

If only for that reason alone, these universal values and those now struggling for them deserve our full support.

Thank you, Mr. Chairman.

[The prepared statement of Senator McCain follows:]

PREPARED STATEMENT BY SENATOR JOHN MCCAIN

Thank you, Mr. Chairman. Let me thank our distinguished witnesses for joining us this morning. General Mattis, Admiral Olson, thank you for your many decades of faithful service to our Nation, and on behalf of our entire committee, please convey to the brave men and women you lead how grateful we are for their sacrifice, and that of their families.

This posture hearing could not come at a more important time. I have spent the past several days visiting some key countries within the U.S. Central Command (CENTCOM) area of responsibility, including Lebanon, Jordan, and Egypt—as well as some equally critical countries that influence events within the AOR, such as Morocco, Tunisia, and Israel. In addition, we are all obviously focused on the tectonic changes that are shaking countries and governments in Yemen, Bahrain, Iran, and of course Libya. That is to say nothing of Iraq, Afghanistan, and Pakistan, which remain the focus of our military and diplomatic efforts.

Not since the fall of the Soviet Union have we seen a wave of change destabilize more critical countries all at once than what we are now witnessing. Indeed, the old bargains that have defined regional order in the Middle East for the past several decades are now collapsing in front of us. This is of course deeply unsettling, but it is also an unprecedented opportunity to support the peoples of the Middle East in shaping a new regional order that is, all at once, reflective of their aspirations, conducive to our interests, and consistent with our values. The people of the Middle East are playing the leading role in this historic endeavor, but America's Armed Forces are playing an indispensable role—strengthening and defending our friends, while deterring and defeating our enemies.

2011 will be a consequential year for CENTCOM and Special Operations Command (SOCOM). Among the vital strategic issues that are in play this year, we face the beginning of the North Atlantic Treaty Organization's transition of responsibility for security in Afghanistan to local and national Afghan forces, amid strained and even deteriorating U.S.-Pakistani relations.

We face hard choices about the future of U.S. defense assistance to Lebanon after Hezbollah's use of coercion to become the dominant actor in the government.

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Of course, we face the prospect of a complete withdrawal of all U.S. troops from Iraq by the end of the year, despite increasing evidence and recent testimony by the Secretary of Defense suggesting that such a plan is not consistent with Iraq's continuing security needs or our enduring interests at this time.

Amid these and other challenges, this year will also require increased vigilance on the part of our special operations command—for the changes sweeping across North Africa, the Middle East, and South and Central Asia may open up new ungoverned spaces that could be exploited by our enemies.

While our special operators continue to perform with remarkable resilience and success, the effects of nearly 10 years of sustained operations and repeated deployments appear to be straining this elite force. Admiral Olson, I am concerned by your recent comment that our Special Operations Forces are showing signs of "fraying around the edges." It is important that you lay out today what steps are being taken to mitigate this strain. We are also interested in SOCOM's progress in meeting growth targets mandated by the Quadrennial Defense Review, as well as any associated issues such as training or facility constraints that you are facing.

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What is critical to note, however, is that the historic changes now reshaping the broader Middle East are a direct repudiation of al Qaeda and its terrorist allies. The people of this dynamic and crucial region are rising up to change the character of their governments, but the revolutions they are making are largely defined not by violence, but by peaceful protests. They are inspired not by intolerant and extremist ideologies, but rather by demands for greater freedom, democracy, opportunity, and justice. More than any weapon of war with which this committee must concern itself, it is these principles, and the changes they are inspiring, that will ultimately defeat our terrorist enemies, and if only for that reason alone, these universal values and those now struggling for them deserve our full support.

Chairman LEVIN. Thank you very much, Senator McCain.

Admiral Olson, let us start with you.

STATEMENT OF ADM ERIC T. OLSON, USN, COMMANDER, U.S. SPECIAL OPERATIONS COMMAND

Admiral OLSON. Good morning, Chairman Levin, Senator McCain, and other distinguished members of the committee.

I do thank you for this opportunity to appear before you to present the current posture of SOCOM.

We, at SOCOM, recognize that we were created by Congress and that our ability to meet our Nation's high expectations is due, in large part, to this committee's continued strong support.

I am especially pleased to share this hearing with my friend and teammate, General Jim Mattis. General Mattis' headquarters and mine are coincidentally located on the same base in Tampa, and we and our staffs work together quite closely.

With your permission, I will submit my written posture statement for the record and open with some brief remarks.

Chairman LEVIN. It will be made part of the record in full.

Admiral OLSON. The lingering threat of violence in Iraq, the fragility of the progress in Afghanistan, the complexity of our relations with Pakistan, the decentralization of al Qaeda's network, the revolutionary activity across the Maghreb and into the Middle East, the various destabilizing elements in Latin America, Africa, and Southeast Asia, the increased intertwining of violent extremism and criminality, and the persistence of piracy are all among the many daily reminders that we live in a world that poses many security challenges and some opportunities.

The SOF are universally recognized as key to our Nation's ability to address all of these and others. As the Commander of SOCOM, I am responsible and accountable for the readiness of all Army, Navy, Air Force, and Marine Corps SOF.

With a dedicated budget and through my component commanders, I select, organize, train, equip, and deploy these forces to serve all of the Geographic Combatant Commanders. Though with 85 percent of our deployed forces currently in the CENTCOM area of operations, my colleague to my left is, by far, the largest customer of our product.

We include many forces of legend: Green Berets, SEALs, Rangers, Air Force Air Commandos, Army Night Stalker Aviators, Combat Controllers, Pararescue Jumpers, Combatant-craft Crewmen—today's version of Marine Raiders—and others. The active duty practitioners of Civil Affairs operations and Military Information Support Operations are also in our ranks. These are special operations careerists.

But they are backed by a magnificent assortment of administrative, intelligence, communications, engineering, logistics, and other specialists who serve in special operations units on a less permanent basis. At our various headquarters, we also include over 300 representatives from at least 15 other agencies within and beyond DOD, providing a senior-level counsel and staff-level expertise that significantly broadens and deepens us.

I am convinced that the forces we provide to the Geographic Combatant Commanders are the most culturally attuned partners, most lethal hunter/killers, and most responsive, agile, innovative, and efficiently effective advisers, trainers, problemsolvers, and warriors that any nation has to offer. In fact, we have become the model for many others.

Our value comes from both our high level of skills and our nontraditional methods of applying them, which is to say that our principal asset is the quality of our people. Whether they are conducting a precision raid, organizing a village police force, arranging for a new school or clinic, or partnering with counterpart forces, they do so in a manner that has impressive effects.

In Afghanistan and Iraq especially, it is undeniable that they have had impact far above their relatively small numbers. They are in dozens of other countries every day, contributing to regional stability by training and advising counterpart forces. This balance of direct and indirect operations must be carefully managed. But because SOF live in both of these worlds, we become the force of first choice for many missions. As Admiral Mullen said a couple of weeks ago, SOF are typically first in and last out.

I am very proud of these forces, as we all should be. But I also acknowledge there are challenges. Key among them is how to meet the increasing global requirement for their capabilities.

We can't grow them more than a very few percent per year, but the demand is outpacing the supply. Since September 11, our manpower has roughly doubled, our budget has roughly tripled, and our overseas deployments have quadrupled.

I have said that this great force is beginning to fray around the edges. The fabric is strong. The weave is tight. It is not unraveling, but it is showing signs of wear.

Partial solutions include finding a process that will habitually assign units from the Services to train and deploy with SOF, ensuring that our needs for local training ranges are fully met, providing buildings and facilities at the standard that our force needs and de-

serves, investing more broadly in the types of enabling capabilities that will relieve SOF from sending our own people to perform functions that could be performed by others, and expanding the Services' inventory of specific assets that are so essential to today's complex and irregular warfare.

We must ensure that our force has the specialized equipment and advanced training that they need to survive and succeed in the complex, ambiguous, and often violent environments in which we ask them to serve.

Underlying all of it is the need to look after our people and their families. We must rehabilitate and return to duty those of our wounded who can, care for those of our wounded who can't, along with their families and caregivers, and provide enduring support to the families of those who have died in action.

I ask for your action to approve a defense budget for fiscal year 2011 and for your support for the fiscal year 2012 budget proposal. I also ask that you fully fund the special operations budget, particularly as conventional forces begin to draw down from major operations, because our forces will most likely be reallocated at the same levels to areas with pent-up demand for our unique capabilities.

Thank you for the opportunity to appear before you today. You have reason to take great pride in what the men and women of SOF are accomplishing around the world, today and every day.

I remain humbled by my opportunity to command this formidable force and to provide it to answer our Nation's most daunting security needs. As I appear before you in this capacity for the fourth and very likely the last time, I thank you for affording me the profound honor of serving my country in this way.

I stand ready for your questions.

[The prepared statement of Admiral Olson follows:]

PREPARED STATEMENT BY ADM ERIC T. OLSON, USN

Mr. Chairman and distinguished members of the committee, thank you for this opportunity to provide an update on the U.S. Special Operations Command (SOCOM). Our Special Operations Forces (SOF) give us much cause for great pride and it is my deep privilege to represent them to you, and especially to do so for the fourth time as their commander.

My intent today is to describe the current status, activities and requirements of SOF. I'll begin by briefly describing SOCOM and its assigned SOF.

As many of you know, SOCOM is a creation of Congress, legislated into being in 1986. A relatively small number of Army, Navy, and Air Forces units designated as SOF were assigned to SOCOM, with Marine Corps forces joining the Command just over 5 years ago.

Before the establishment of SOCOM, the Nation's SOF had generally not been treated as a top priority. They now thrive under the focused attention of a single headquarters and a dedicated budget. In the 24 years since SOCOM was established, SOF have repeatedly proven their value, often under extraordinarily demanding conditions.

In many ways, SOCOM is a microcosm of the Department of Defense (DOD), with ground, air and maritime components, a global presence, and authorities and responsibilities that mirror the Military Departments, Military Services, and Defense Agencies. We take pride in the diversity of our people and our mission.

One of our headquarter's functions is to synchronize DOD planning against terrorists and their networks globally. This is complex work that connects us across DOD and into other U.S. Government departments and other nations' military forces. The effects of this are manifested in a series of planning documents that guide specific actions by the Services and combatant commands.

Primarily, SOCOM organizes, trains and equips SOF and provides those forces to the Geographic Combatant Commanders under whose operational control they serve. The Command also develops special operations strategy, doctrine and procedures for SOF employment and develops and procures specialized equipment for the force.

Our key subordinate commands are U.S. Army Special Operations Command, Naval Special Warfare Command, U.S. Air Force Special Operations Command, Marine Corps Forces Special Operations Command, and Joint Special Operations Command. Within these commands are the legendary Special Forces or Green Berets, SEALs, Air Commandos, Rangers, Night Stalker helicopter crews, and the modern version of yesterday's Marine Raiders. Our force also includes the active duty practitioners of Civil Affairs Operations and Military Information Support Operations, and all of the instructors, logisticians, administrators, analysts, planners, communicators, doctrine writers, and other specialists who are key to our ability to meet our Nation's needs. Most are active duty military, but we depend heavily on our Guard and Reserve units and the government civilians and contractors who perform duties that don't require a uniformed servicemember.

We now total close to 60,000 people, about a third of whom are career members of SOF, meaning those who have been selected, trained, and qualified to earn the Military Occupational Specialty or skill code identifier of a SOF operator.

The activities of the force are as varied as its character. From high-risk, high-intensity counterterrorist raids; to meticulous intelligence analysis; to providing first response during a natural disaster; to launching from submerged submarines; to training and accompanying foreign counterparts; to working with local leaders to determine what will bring value to their village; to providing supporting precision fires to fighting troops from orbiting aircraft—SOF personnel are in vital roles, in key places, performing essential tasks.

Our presence is generally small and agile, inherently joint and persistent. Our formations normally include an array of attached capabilities that are necessary to optimize the force—including female Cultural Support Teams, Tactical Air Controllers, Military Working Dogs, interpreters, maintenance and repair personnel, Explosive Ordnance Disposal technicians and others. SOF rarely dominate an area with their mass, so they must work with indigenous forces and the local civilian population to accomplish their missions. This is often complicated, demanding and high-risk.

Each of the Geographic Combatant Commanders who will appear before you is well served by the SOF that are deployed to his region, although the balance is heavily weighted towards U.S. Central Command (CENTCOM). In fact, about 85 percent of deployed SOF are directly engaged in Operations New Dawn and Enduring Freedom. I will defer to the regional commanders to highlight the contributions of SOF in their theaters. I will just say here that, although the precision counterterrorism missions certainly receive the most attention, SOF are conducting a wide range of activities in dozens of countries around the world on any given day—at the request of the host government, with the approval of the U.S. Ambassador and under the operational control of the U.S. Geographic Combatant Commander.

To support these forces and activities, SOCOM invested in many specialized programs and equipment. As the commander responsible for the preparation and readiness of SOF, I focus on developing and sustaining operational skills and capabilities, training and maintaining the quality of the force, caring for its families, and ensuring that our people have the right equipment in sufficient quantity. I also carefully monitor global military and political trends in my role as the senior advisor on the employment of SOF.

Among SOCOM's most important functions is the management of Major Force Program-11 (MFP–11). MFP–11 is provided to the Commander of SOCOM to address requirements that are "SOF-peculiar" in nature, and it is the essential fuel that enables SOF to meet the Nation's needs. It provides for the conduct of advanced and unique training, the timely and flexible fielding of equipment, and the capability to rapidly and effectively project our force. In fiscal year 2012, the request for MFP–11 funds totals $10.5 billion in baseline and Overseas Contingency Operations (OCO) funding. This is an increase of 7 percent over the fiscal year 2011 request, and every dollar is necessary to meet the ever-increasing demands placed on our SOF.

At the forefront of budget discussions is the acknowledgment that many of the current expenditures funded by OCO are, in fact, part of SOCOM's baseline requirement in the "new normal." This was highlighted by the Department last year when a commitment was made to eventually move funding required to execute OCOs into the baseline as part of the Secretary of Defense's initiative to "rebalance" the force. However, SOCOM will continue to rely on OCO funding over the next few years as the phased transfer to the base budget occurs. For example, in the fiscal year 2012

budget submission 34 percent of the total MFP–11 request is OCO funding. For some higher intensity SOF elements, the OCO percentage is greater than 75 percent. SOCOM will carefully prioritize and manage the OCO to base transition. Overall, we are in a fiscally satisfactory condition, but the force requires continued support. The President's budget request for fiscal year 2012, if approved, is an essential step towards meeting the growing demand on our force by providing SOCOM the resources required to sustain critical programs and initiatives. Now, I would like to highlight some of these key efforts.

PROGRAMS

SOCOM continues to expand and recapitalize its rotary and fixed-wing aviation fleets. This year we began modification of the last of the originally planned 61 MH–47G helicopters, while starting procurement of 8 additional MH–47Gs. We are also fielding the first of 72 planned MH–60M helicopters as part of our recapitalization of MH–60 K/L platforms. The tilt-rotor CV–22, having demonstrated its capabilities on multiple deployments, must remain on plan to ensure enhanced future mobility capabilities for SOF. SOCOM's MC–130Ws, rapidly modified with a Precision Strike Package utilizing SOF's Joint Acquisition Task Force (JATF), are providing armed overwatch and mobility to deployed SOF as an interim augmentation to our Vietnam-era AC–130 gunship fleet. We are on a path to ultimately recapitalize the gunships with AC–130J models. The MC–130J program is on track to replace our aging MC–130Es and MC–130Ps. Our Non-Standard Aviation Program is delivering a variety of smaller aircraft to provide intra-theater airlift capacity and we continue to grow our aviation foreign training capability in support of the Geographic Combatant Commanders' engagement plans.

SOCOM is also modernizing its maritime mobility systems. We will award competitive prototype contracts later this year for Combatant Craft-Medium as replacements for the Naval Special Warfare Rigid Hull Inflatable Boat. We have realigned resources from the Advanced SEAL Delivery System and the Joint Multi-Mission Submersible to fund the development of a family of Dry Submersibles as part of our undersea mobility strategy. These will be launched from surface ships or Dry Deck Shelter-equipped submarines. As part of this modernization program, we will explore expansive and flexible approaches that are supportive of the Secretary of Defense's intent to streamline acquisition processes and accelerate delivery times.

SOF continue to rely on a wide range of ground mobility vehicles, often leveraging Service and Department investments. Modified to meet the wide variety of SOF mission sets and provide enhanced crew protection, vehicles such as the MRAP have been essential to SOF teams operating in dispersed and rugged terrain throughout the CENTCOM area of responsibility (AOR). These vehicles, as well as our other ground mobility systems, will remain relevant well into the future as we synchronize our long-term sustainment strategy with the Services.

We continue to invest in airborne manned and unmanned Intelligence, Surveillance, and Reconnaissance (ISR) programs, relying heavily on the Services to expand capabilities and capacity that benefit DOD across the board. SOCOM is moving toward a relatively small number of manned and unmanned ISR systems; essential processing, exploitation, and dissemination (PED) capabilities; and supporting communications architectures.

One of the most noteworthy improvements within special operations over the last few years has been the growth of advanced communications and networking capabilities through our expeditionary SOF Information Enterprise (SIE). As our portion of the Department's Global Information Grid, the SIE provides network independence while maintaining connectivity into the global interface, and links SOF across the globe into a common network. This connectivity shortens the decision cycle for SOF operators worldwide and allows more rapid information sharing. The research and rapid development of these types of technologies is an inherent strength of special operations.

SOCOM, inherently joint in all it does, is in a unique position to leverage and apply Service and Department Science and Technology (S&T) efforts to rapidly field new technologies on the battlefield. SOCOM's "Rapid Exploitation of Innovative Technologies for SOF" program, enables innovative new capabilities to be developed and inserted quickly into the battlefield-advanced "talk and jam" capabilities for SOF vehicles; mobile repair and maintenance "shops in a box"; to solar panel energy technology that supports SOF in remote locations. SOCOM also seeks to expand its biomedical research and development activities. To date, SOCOM has pushed "state-of-the-art" combat medicine with modest resources through the Tactical Combat Casualty Care program. However, we also have great need to explore innovative

methods of treating our wounded members so that they may be reintegrated and returned to duty as rapidly as possible.

As a force that operates from the tropics to the Arctic regions, from under water to high elevations, and from peaceful areas to violent combat zones, SOF serve as an ideal "control group" for Service R&D investments that can result in significant benefits across DOD.

SOCOM's development of the JATF concept enabled accelerated acquisition and fielding of urgent SOF capabilities. First demonstrated on the MC–130W Dragon Spear program, SOCOM expanded use of the JATF concept to address many emerging requirements of SOF warfighters. Innovative approaches such as the JATF, coupled with a professionally trained and certified SOF acquisition corps that stays in close and frequent contact with the operators, continue to ensure that SOCOM remains as a vanguard of rapid acquisition within DOD.

SOCOM's acquisition planning, collaboration, and continuing dialogue with the Services continues to improve as we become more efficiently effective while rapidly moving capabilities to the warfighter. SOCOM, in conjunction with the Under Secretary of Defense for Acquisition, Technology, and Logistics initiated a series of Acquisition Summits with the Military Department Acquisition Executives to minimize programmatic disconnects and to better align requirements, co-sponsorship opportunities, funding efficiencies, and contracting actions among MFP–11 programs and Service-related/dependent programs. These periodic meetings offer a level of transparency among all our accounts that enables us to seek common solutions for Service-wide requirements and to better invest in SOF-peculiar modifications or special capabilities. This forum identified several opportunities, which if supported by Congress, would enable more efficient execution of SOF unique acquisitions.

SOCOM is making a significant investment in Military Construction (MILCON) to address shortfalls resulting from fielding new capabilities, a growing force structure and aging infrastructure that was inherited without a future recapitalization budget. To address the shortfall, the Command's 2012 budget submission is based on a MILCON roadmap that identifies over 300 prioritized requirements valued at more than $5 billion between 2012 and 2025. Specifically, our fiscal year 2012 submission includes 33 of these projects, valued at $631 million across 8 States and representing 9 percent of the Command's projected base budget request—a near record level. This investment demonstrates a commitment to addressing our critical infrastructure needs. To continue this effort, the Command's new Strategic Planning and Programming Guidance raised the MILCON funding minimum from 4 to 6 percent to support this priority in future budgets.

A congressional action that enhanced the effectiveness of our force is our Section 1208 authority. This authority to reallocate limited MFP–11 funds remains a key tool used by widely dispersed SOF to leverage indigenous forces in support of counterterrorism operations. SOCOM is appreciative of the increase to $45 million provided by Congress in the National Defense Authorization Act for Fiscal Year 2011, as it provides us the ability to support ongoing operations with a measure of flexibility should a contingency arise. Continuation of Section 1208 authority provides enhanced effectiveness to our force both strategically and tactically.

INITIATIVES

Our primary challenge is the need to carefully manage the growth of SOF, even in these periods of high demand, in order to ensure the continued quality the Nation expects. I have stated in my last three posture hearings that SOF's organic manpower growth should be in the range of 3–5 percent per year. That is the pace we have sustained to great effect over the past several years and our fiscal year 2012 budget submission continues this pace. But 3–5 percent growth within SOCOM will not answer the increasing demand for our force unless it is matched by the Military Services' commitment to attach supporting and enabling forces at a commensurate rate. SOF units must include a limited amount of these enabling forces to ensure rapid response to emerging requirements, but we were designed and intended to rely on the Services to meet most of our combat support and combat service support requirements. In order to establish a predictable demand signal for these Service-provided capabilities, SOCOM is proposing changes to the way we build, train, deploy, and sustain a fully enabled force.

To better build the SOF team, we are developing a force generation system that engages the existing Service systems. In 2011, SOCOM will strive to create a SOF Force Generation system that will be synchronized with the Services, matching their capabilities with our Special Operations core units in time to provide fully optimized force packages to the Geographic Combatant Commanders. For elements organic to

SOF, such as our Civil Affairs and Military Information Support Operations, we will expand their capacities to meet the increasing demand for their capabilities.

Another challenge we face is how to effectively prepare and train the force to achieve enhanced interoperability with the General Purpose Forces (GPF). Currently in the CENTCOM AOR, SOF is executing the counterterrorist strike mission and the Village Stability Operations mission; two of the primary lines of operation underpinning the Afghanistan strategy. SOF's key role in both is creating opportunities for enhanced interoperability with the GPF such as the deployment of the 1ST Battalion, 16TH Infantry, now assigned to the Combined Joint Special Operations Task Force-Afghanistan; a sea change in SOF–GPF relations. Currently, we are developing initiatives that will increase inter-operational effectiveness prior to the deployment phase of the operation.

In 2011, we will continue to review and coordinate changes to Service personnel policies to further incentivize language pay for key languages such as Pashto, Dari, and Arabic. We will work to develop courses of action that allow SOF reliable and predictable access to Service resources such as training ranges for our ground and aviation elements. The shortage of readily available, local ranges currently hampers SOF's ability to meet deployment training timelines and causes our operators to "travel to train," further increasing their already excessive time away from home.

Understanding the operational context of the environments in which we operate is a hallmark of SOF. Developing this knowledge and experience within our force, and understanding the value of "micro-regional" expertise allows SOF to conduct its activities with more predictable outcomes. While immersion opportunities enhance our regional sophistication, our training can never develop the level of nuanced understanding possessed by indigenous populations. To gain this high level of cultural knowledge, SOCOM will continue to strongly support DOD's Military Accessions Vital to the National Interest and the Army's Intermediate and Advanced Language Programs to recruit and access the requisite expertise provided by native speakers. Additionally, our attached female Cultural Support Teams (CSTs) allow us to reach key elements of the population in some environments which was not previously possible. This concept of attaching females to SOF units is effective and long overdue; we are urging the Services to recognize the capabilities of CSTs as essential military skills.

Finally, our efforts to become more innovative include studying the best practices of other organizations. For example, we are inspired by the ability of the World War II's Office of Strategic Services to rapidly recruit specialized talent, develop and acquire new technologies and conduct effective global operations within the period of its relatively brief existence.

To further our engagement with our international allies and partners, and within the U.S. interagency community, SOCOM will continue to expand the Special Operations Liaison Officer (SOLO) and Special Operations Support Team programs. Both of these outreach efforts provide SOF experts to support and enhance their host organizations while serving as SOF liaisons. Our priority is to assign SOLO officers wherever a foreign partner has, or is planning to establish, a SOCOM-like headquarters.

Joint operations and special operations are two growing trends in many of our partner nation military forces. One manifestation is the recent establishment of the NATO SOF Headquarters. In accordance with the 2010 National Defense Authorization Act, the Secretary of Defense designated SOCOM as the lead component for this Headquarters—a role we will embrace and expand in an effort to advise and assist an interoperable network of global SOF.

Importantly, we remain committed to caring for our servicemembers and their families. I am concerned about the effects of 9 years of focus on combat operations on the well-being of our extended special operations community. To support the wounded and injured and their caregivers, the Command remains committed to our Special Operations Care Coalition and the Tactical Human Optimization, Rapid Rehabilitation and Reconditioning Program. Both programs are focused on long term care, rehabilitation and reintegration of our warriors. In an additional effort to be predictive and preventive, I established a "Pressure on the Force" Task Force to survey and analyze the effects of repetitive combat deployments over nearly a decade. Necessarily relying on soft data, collective experiences and commanders' instincts, it will try to determine what initiatives might help ease the strain and contribute to long-term retention and force stability. I expect to receive the recommendations from this team within 90 days.

In conclusion, I will reinforce what I believe are the top challenges to the Command. As the Chairman of the Joint Chiefs of Staff recently stated, " . . . the first forces in are typically Special Forces. The last ones out are going to be Special

Forces." As we expect to remain the force of first choice for many military operations, SOCOM must:

1. Carefully and deliberately meet the ever-increasing demand for SOF.
2. Improve and expand our tactical and operational level skills, equipment and systems.
3. Preserve our proposed budget levels and authorities.
4. Find better structures and processes to obtain Service-provided capabilities.
5. Continue to improve our acquisition speed and agility.
6. Better understand the people and conditions in the places we go, whether to assist or fight.
7. As our most solemn duty, look after the health and well-being of this magnificent force from whom we ask so much.

Today's SOF are the most capable, best prepared SOF in history. Their ingenuity, perseverance, spirit and skill continue to inspire and amaze. In significant ways, they have emerged from the shadows to make visible and dramatic impacts of great magnitude. It is my honor to have served within SOF for the last 37 years and to represent this extraordinary force today before this committee.

As always, our success is only possible because of your continued support and advocacy. Your approval of the President's budget request will help ensure our continued ability to address some of our Nation's most daunting security challenges.

Chairman LEVIN. Thank you so much, Admiral.

We, again, are grateful to you, the men and women you command, for all that you and they do. We have that pride, which you made reference to at the end of your statement, in them and in you.

General Mattis.

STATEMENT OF GEN. JAMES N. MATTIS, USMC, COMMANDER, U.S. CENTRAL COMMAND

General MATTIS. Thank you, Mr. Chairman, Senator McCain, distinguished members of the committee.

I appreciate the opportunity to discuss the posture and priorities of CENTCOM, testifying alongside a friend and shipmate of many years, Admiral Eric Olson, Commander of SOCOM.

I have submitted a written statement and request it be accepted into the record.

Chairman LEVIN. It will be made part of the record.

General MATTIS. Thank you for supporting our troops and their families who carry the brunt of the physical and the emotional burden in this 10th year of war. Our forces today are among the most dedicated and skilled professionals I have served alongside in my 39 years in uniform, and they constitute a national treasure.

I also recognize the commitment and sacrifices of our international partners, who operate with us from the waters off Somalia to the mountains of Afghanistan, where the largest warfighting coalition in recent history is engaged with troops from 49 nations united in the fight against our common enemy.

The strategic landscape of the broader Middle East has been altered by recent events in Tunisia, Egypt, Libya, and elsewhere. We see pressure on government institutions from the aspirations of people seeking improved economic and social conditions. Young people born in the information age are exchanging ideas in real time.

While the long-term impact of this unrest is unknown, it presents as many opportunities as it does challenges. The changes that we are seeing will manifest differently in each country. People

are seeking their rights and, for the most part, doing so peacefully and bravely.

It is too early to say how it will all turn out. It is important that we work today with the people and the governments throughout the region. We don't want to see this change slide into a new form of authoritarianism.

So while there is both opportunity and danger, it requires unrelenting engagement by our Nation. The central challenge for us, I believe, is how to make common cause with our friends throughout the region.

There is one clear lesson we can draw from the dramatic changes underway. Now, more than ever, we must remain relentlessly engaged with our military partners in this region. While we know each country is different, we remain committed to strengthening our military bonds and advancing our mutual interests in peace and opportunity for all.

Notably in Egypt, we have clearly seen the benefit of mature military-to-military relationships. The Egyptian armed forces continue to demonstrate exceptional discipline and restraint under trying circumstances.

As Admiral Mullen recently noted, our assistance has helped the Egyptian military become the professional force that it is today, just as our military has learned a great deal from our Egyptian counterparts, who have contributed a stabilizing influence in this time of transition.

Of course, we cannot achieve our broader objectives in the region through military means alone. Our efforts require coordination and a spirit of collaboration between highly integrated civilian military teams. Our civilian colleagues need your full support, even in this difficult fiscal environment, to undertake their essential role in today's complex environment.

Robust resourcing for the State Department's mission is one of the best investments for reducing the need for military forces to be employed. Together, our military leaders and our diplomats not only represent a symbol of America's enduring commitment to the region, but they also build trust through partnerships that have an important stabilizing effect when trouble looms.

CENTCOM's main effort is in Afghanistan, where, along with our Afghan and coalition partners, we are making undeniable progress, though some of our gains at this time remain fragile and yet reversible. Al Qaeda in the border region between Afghanistan and Pakistan is under the most pressure they have experienced since 2001. Over the past year, our enemies have lost leaders, battle space, maneuver room, and the initiative.

The enemy's strategy has been undercut by the clear commitment of the international community and the Afghan Government to begin this summer a process of fully transiting responsibility to Afghan lead by 2014. I support the ongoing analysis for further growth for the ANSF, the greatest success of our last year their quantifiable and qualifiable growth in capability.

The range of growth being considered is from 45,000 to 70,000. With the improving quality in combat performance by the ANSF, we are seeing the enemy's worst nightmare coming of age.

The transition process will start with a limited conditions-based withdrawal this year. Our overall campaign is on track in Afghanistan. Our successes, as General Petraeus has stated, entailed hard fighting and tough losses. I am sure that there will be tough fighting ahead as the enemy tries to regain the initiative.

Finally, we must also redouble our efforts to address challenges in the areas of governance and development in Afghanistan.

Turning now to Pakistan, we are strengthening and deepening our security partnership with Islamabad, even as we work to overcome years of mistrust and misunderstanding on both sides. The Pakistanis have shifted a quarter of their army, 140,000 troops, to their western border, and we are now conducting hammer and anvil operations in close coordination with them on opposite sides of the border.

Pakistan's military has conducted significant counterinsurgency operations in the past decade and especially the past 2 years, and they have suffered 2,757 troops killed and 8,549 wounded while also responding to urgent humanitarian needs following devastating floods in 2010.

In Iraq, we are helping a new, more stable country emerge in a turbulent region. Our commitment there is transitioning from a military to a civilian-led effort. I will note that the transition underway in Iraq has been enabled in large part thanks to the vital commitment and support of Congress for our troops on the ground, and I want to personally offer my thanks to you.

As we transition to civilian lead in Iraq, it is essential that the State Department be sufficiently resourced to solidify relationships between the United States and Iraq for the future. At CENTCOM, we need congressional authorities that enable us to continue advising, training, and equipping our Iraqi partners through the new Office of Security Cooperation-Iraq.

Looking ahead, we will redeploy our military forces from Iraq this year, unless asked to stay by the Iraqi Government and the U.S. Government concurs. I anticipate al Qaeda in Iraq and Iranian-sponsored proxies will attempt to attack us and detract from this milestone by executing sensational attacks in the coming months.

Next, Iran. The greatest threat to long-term regional security is a defiant Iran in its current state. We are countering the malign activities of the regime while bolstering relationships with our partners.

Iran continues to rebuff international efforts for engagement. It continues to coerce its own population and pursue activities disruptive to regional peace and stability, including supplying arms to militant proxies in Iraq and Afghanistan and supporting Hezbollah in Lebanon.

But for the vibrant people of Iran, the regime is no giant. The regime's actions have thrown the economy into disarray, destroyed rapport with the bulk of the world, and spread hate and discontent across the region, steadily eroding any international support the regime could once muster.

Despite the shrinking nature of the regime, I have no reason for optimism about Iran's pursuit of nuclear weapons capability, its growing ballistic missile arsenal, and present destabilizing course.

Across the region, we are disrupting al Qaeda and other violent extremist organizations. We are actively focused on the threat of extremism in Yemen, especially al Qaeda in the Arabian Peninsula (AQAP), the group that has twice attempted to attack our Homeland in recent years.

With our international partners, our SOF are putting our most violent enemies and related networks under increasingly intense pressure. At the same time, the populist-inspired changes that are taking place across the region undercut the message of al Qaeda and other extremist groups, highlighting the bankrupt philosophies of terrorists who use violence and contribute nothing but mayhem to the innocent.

As Senator McCain just noted, the populist-inspired changes are a direct repudiation of the violent extremists because these young folks today have achieved more change in 10 weeks than 10 years of al Qaeda's murderous campaign.

That is a snapshot of our major ongoing operations. We are focused on a number of other important mission areas to include countering piracy. There can be no more stark reminder about the need for more proactive diplomatic, legal, and military efforts against pirates than the brutal murder of four Americans by pirates last week.

This is a defining moment for the people of the region and, by extension, a critical moment for CENTCOM to remain engaged with our partners and to clear away obstacles to peace and prosperity. On that note, while Israel and the Palestinian territories are not in my assigned theater, lack of progress toward a comprehensive Middle East peace affects U.S. and CENTCOM security interests in the region.

I believe the only reliable path to lasting peace in this region is a viable two-state solution between Israel and Palestine. This issue is one of many that is exploited by our adversaries in the region, and it is used as a recruiting tool for extremist groups.

The lack of progress also creates friction with regional partners and creates political challenges for advancing our interests by marginalizing moderate voices in the region. By contrast, substantive progress on the peace process would improve CENTCOM's opportunity to work with our regional partners and to support multilateral security efforts.

We recognize you face tough decisions in this constrained fiscal environment. In all of our activities at CENTCOM, we honor the obligation to be the best stewards possible of our Nation's monetary resources. CENTCOM has established stringent control mechanisms to execute our fiscal authorities and to apply increasingly effective oversight of all programs.

Finally, Mr. Chairman, Senators, we must never forget the families of those who gave their last full measure in defense of liberty.

Thank you once again for your support of our men and women serving in the CENTCOM AOR, and I am prepared to answer questions.

[The prepared statement of General Mattis follows:]

PREPARED STATEMENT BY GEN. JAMES N. MATTIS, USMC

INTRODUCTION

A Command at War

U.S. Central Command (CENTCOM) oversees operations alongside our allies, partners, and friends in a critically important region of the world. CENTCOM is engaged throughout the greater Middle East and South Central Asia across the full spectrum of warfare, standing against violent aggression and the tyranny of militant extremists, while contributing to the broader conditions for peace, stability, and prosperity.

Recognizing our Troops, Civilians, and Partners

Our troops and their families carry the brunt of physical and emotional burdens in this 10th year of war. Today, over 200,000 American troops and tens of thousands of civilians are deployed to the CENTCOM area of responsibility (AOR). These men and women—all volunteers, no less—defend our freedoms with great courage in the face of a murderous enemy on harsh terrain. Our troops stand together with tens of thousands of our international partners, conducting coalition operations from the waters off Somalia to the mountains of Afghanistan, where the largest warfighting coalition in recent history is engaged.

Operating in a Dynamic Region

The CENTCOM AOR is more dynamic than I have seen it since first serving there in 1979. Across our theater, we are required to maintain a degree of military flexibility such as we have seldom seen before. At the same time, given the financial realities in Washington, we require ourselves to exercise the utmost degree of stewardship over every penny we spend. To operate in this context successfully, we seek to build strong military-to-military relationships with our partners, recognizing that CENTCOM's actions represent a tangible signal of America's continued, long-term commitment to the security and prosperity of this area.

Throughout the region, we see institutions of government responding to the aspirations of youthful populations. As the people in the region have made their voices heard, regional militaries have so far demonstrated their professionalism, exercising a capability that did not arise by accident or overnight. The strong security relationship between the United States and our partners is decades in the making and has helped them become the professional forces they are today—and in the process made our forces better as well. While we seek to understand the unique circumstances that our partners confront, CENTCOM remains committed to supporting the efforts of our military counterparts and to strengthening the security partnerships that have proven critical during this period of political unrest. We do this first by listening, learning, and understanding, and continue by engaging with our partners based on mutual respect and shared interests.

Our Mission

Overall, amidst these conditions, we remain committed to carry out our mission:

> With our national and international partners, CENTCOM promotes security cooperation among nations; responds to crises; deters or defeats state and non-state aggression; supports development and, when necessary, reconstruction in order to establish the conditions for regional security, stability, and prosperity.

Snapshot of Operations

Our main effort is Afghanistan—and progress there is indisputable, even if some of our success is fragile and reversible. We and our North Atlantic Treaty Organization (NATO) and coalition partners are conducting a comprehensive yet focused counterinsurgency campaign to ensure Afghanistan does not once again become a sanctuary for transnational extremists. Our forces are part of a 49-nation international coalition, led by the NATO International Security Assistance Force (ISAF), and united behind President Karzai's goal of transitioning the lead of security tasks from the international community to Afghan security forces by the end of 2014. In full partnership with the Afghan Government, we are inflicting unprecedented damage on al Qaeda (AQ) and associated extremist groups—a reality recently affirmed by President Obama's Afghanistan-Pakistan Annual Review. Moreover, we confound our enemies by demonstrating our unambiguous commitment to our long-term strategic partnership with Afghanistan.

Meanwhile, in Pakistan, we continue supporting Pakistan's military efforts against extremists operating from and threatening that country and Afghanistan, while contributing to the broader U.S. goal of growing our strategic partnership

with Islamabad. The recent U.S.-Pakistan Strategic Dialogue and a number of development assistance programs sponsored by the Department of State are good examples of how the United States is attempting to build trust with the Pakistani people and government.

In Iraq, following 7 years of hard fought gains, we are drawing down our troops as we transition full security responsibilities to our Iraqi partners. The enemy in Iraq is capable of dramatic attacks but has proven unable to muster a significant threat to the Iraqi Government. In coordination with the U.S. Department of State, CENTCOM is standing up the Office of Security Cooperation-Iraq to conduct sustained security assistance and cooperation activities with the Government of Iraq. We are planning an organization manned and positioned to support the long-term U.S. objectives in Iraq as determined by the Iraqi and American Governments, in order to best advance our civilian-led relationship for the future.

In the broader CENTCOM region, our forces are conducting a theater-wide campaign alongside our partners in pursuit of AQ and its extremist allies. Meanwhile, we remain continuously poised and postured to respond to crises and to conduct contingency operations, while continuing to forge partnerships in the region and increase the security capacity of our partners. We continue to rely on our capable and flexible amphibious forces. For example, over a 36 hour period last September, the 15th Marine Expeditionary Unit delivered aid to the flood-ravaged people of Pakistan, provided close air support from the skies over Afghanistan, and rescued pirated crews in the Gulf of Aden. Three months later, two-thirds of our Marines Expeditionary Unit deployed to Afghanistan on 3 day's notice.

OVERVIEW OF THE CENTCOM AOR

Nature of the AOR

The CENTCOM AOR is comprised of 20 countries spanning over 4 million square miles in 3 diverse subregions from Egypt and the Levant, to the Arabian Peninsula (including the Gulf nations), and Central and South Asia. These regions are home to a half-billion people practicing all of the world's major religions and speaking more than 18 major languages. Several countries with economic challenges have burgeoning populations—184 million people in Pakistan, 80 million in Egypt, and 77 million in Iran. In 12 of the 20 countries in the region, 30 or more percent of the population is between the ages of 15 and 24 (at 39 percent, Yemen ranks at the top in this category). In most of those countries, another 30 percent of the overall population is under 15. This youth bulge represents tomorrow's future leadership and the region's greatest challenge in terms of education, employment and expectations.

The CENTCOM AOR is a region of rich history, distinct culture, and great potential, encompassing the proud traditions of a wide variety of ethnic groups, including: Arab, Azeri, Baluch, Gilaki, Hazara, Kurd, Lur, Mazandarani, Qashqai, Pashtun, Persian, Talysh, Turkmen, and Uzbek, among others. The AOR contains more than half of the world's proven oil reserves and nearly half of its natural gas. As a result, the region contains some of the world's busiest trading routes linking Europe, Africa, and East Asia to the Gulf. This trade is essential to continued global economic prosperity and growth. The region's trading routes contain three of the world's major maritime choke points, including the Strait of Hormuz, the Suez Canal, and the Bab al Mandeb Strait joining the Red Sea to the Gulf of Aden. But while the region contains abundant energy resources, supplies of water and the availability of arable land are limited and increasingly scarce.

External Influences on the CENTCOM AOR

The region retains its historical tradition as a social, economic, and cultural crossroads, attracting nations and non-state actors seeking to advance their interests and influence regional events. Among a host of external influences on the CENTCOM AOR, the most significant include:

- Middle East Peace: Lack of progress in achieving comprehensive Middle East peace affects U.S. and CENTCOM security interests in the region. It is one of many issues that is exploited by our adversaries in the region and is used as a recruiting tool for extremist groups. The lack of progress also creates friction with regional partners and creates political challenges for advancing our interests by marginalizing moderate voices in the region. As Secretary Gates noted in July 2010, "the lack of progress in the peace process has provided political ammunition to our adversaries in the Middle East and in the region, and ... progress in this arena will enable us not only to perhaps get others to support the peace process, but also support us in our efforts to try and impose effective sanctions against Iran." In December

2010, Secretary Clinton observed "the conflict between Israel and Palestine and between Israel and its Arab neighbors is a source of tension and an obstacle to prosperity and opportunity for all of the people in the region." By contrast, substantive progress on Middle East peace would improve CENTCOM's opportunities to work with our regional partners and support multilateral security efforts. Speaking about the need for Middle East peace at the Manama Dialogue in December 2010, King Abdullah of Jordan observed "Our region will not enjoy security and stability unless we solve the Palestinian-Israeli conflict, and Arabs and Israelis find peace. The stakes are high. As a solution continues to elude us, faith in negotiations, as the only path to peace and justice, is eroding. If hope is killed, radical forces will prevail. The region will sink into more vicious warfare and instability . . . threatening security far beyond the borders of the Middle East."

• Bordering Powers. China, Russia, Turkey, and India—each of which lie outside but border the CENTCOM region—represent four great gravitational forces influencing various countries in the AOR. China pursues its many energy-related interests throughout the region, extending influence from its traditional partnership with Pakistan, to a $3.5 billion investment in Afghanistan's Aynak Copper Mine, to building pipelines for oil and gas from Kazakhstan to Turkmenistan. Chinese activities in the region may begin to compete with the regional interests of Russia, which maintains a network of security, economic, and social ties with Central Asian nations and beyond. India's influence impacts the strategic calculations of Pakistan and, to some extent, virtually every other country in the CENTCOM AOR. Turkey increasingly asserts its interests in the region in keeping with its emergence as a considerable force within the international community. All four of these nations have unique relations with Iran, affecting the international approach to the Iranian situation. We remain attentive to these dynamics as we seek to ensure that we work effectively across U.S. Government and combatant command seams to improve our unity of effort.

• Somalia. State failure in Somalia has enabled extremist and criminal elements to proliferate and spread northward into the Horn of Africa and Yemen and other areas of the CENTCOM AOR. At the same time, widespread poverty in Somalia creates incentives for young men to pursue the lucrative enterprise of piracy. Additionally, lack of governance permits extremists to freely migrate to Yemen, providing opportunities to al Qaeda in the Arabian Peninsula (AQAP). In the past year, the Somalia-based terrorist group al-Shabaab successfully maintained control of most of southern Somalia and radicalized factions of this group have sought alignment with AQ in the Arabian Peninsula and in Pakistan.

U.S. Interests in the Region

Given the centrality and volatility of the CENTCOM AOR, the United States and nations around the world retain significant interests in the region. Among others, significant U.S. interests in the region include:

• Security of U.S. citizens and the U.S. Homeland
• Regional stability
• Promotion of effective and legitimate governance, human rights, the rule of law, and sustained economic growth and opportunity, and
• Free flow of commerce and trade within the region, through strategic maritime chokepoints, and via land-based trade routes to international markets

Threats to U.S. Interests in the Region

Violence, instability, and underdevelopment represent the primary threats to U.S. interests in the region. Some areas face uneven or even dismal economic development, often coupled with endemic corruption. Social and economic friction have led to or exacerbated a number of deep-rooted and longstanding disputes over territory, resources, and power, many of which remain unresolved due to a lack of adequate security arrangements on the local or national level. Some areas will face increasing competition for food, water, mineral deposits, oil, and other natural resources. The region is also defined by tensions and sectarian rivalries between many ethnic, tribal, and religious groups. Such conditions create the potential for broader violence, particularly in the absence of effective governance and indigenous security forces, ultimately giving rise to violent extremist organizations that have attacked us and our friends. We have seen the dangers present within a security vacuum, where institutions fail to facilitate mediation, partnership-building, and open dialogue between feuding groups, or to put down violent extremists.

Connecting Our Strategic Challenges

The challenges of the CENTCOM AOR are inextricably linked and mutually reinforcing—and thus cannot be treated separately. We have seen a symbiosis, for example, between extremist groups and other factions that, in aggregate, tend to strengthen each other and which, if left unchecked, tend to threaten wider areas of territory and the stability of civilian governments. Areas in the CENTCOM region, especially those with a rapidly expanding population of youth, are left vulnerable to (and often become the victim of) a worsening spiral of conditions, whereby young people forego meager, but legitimate opportunities for employment and turn, instead, to a range of criminal activities, including piracy, arms smuggling, human trafficking, and narcotics—fueling violent extremist organizations bent on destroying the lives of innocent people. State and non-state actors operating with malign intent can readily exploit such conditions, with the most dangerous scenarios involving a mix of insufficient governance, weapons proliferation—especially Weapons of Mass Destruction (WMD)—the influence of hostile states, and the free flow of extremist elements across national borders as well as free range in cyberspace. In some cases, disenchantment with globalization's efforts coupled with a desire to belong to a movement with a clarion call of purpose can provide the excitement for young men (and increasingly women) to take on a violent role in an extremist organization.

PRINCIPAL TASKS

In light of these many challenges, we continuously assess our strategic and operational approaches in order to achieve our desired national interests of security, stability, and prosperity in the CENTCOM AOR. CENTCOM is focused on the following tasks:

- Supporting the Mission in Afghanistan
- Partnering with Pakistan
- Countering the Destabilizing Activities of Iran
- Enabling Transition in Iraq
- Strengthening Partnerships in Central Asia
- Building Partner Capacity and Pursuing Cooperative Activities
- Disrupting Violent Extremist Organizations
- Combating Weapons of Mass Destruction
- Countering Piracy

Supporting the Mission in Afghanistan

Instability in Afghanistan and Pakistan

Afghanistan and Pakistan are inextricably linked, connected by a porous border region historically providing free movement and safe haven to groups traversing the Durand Line. The senior leadership of AQ and associated extremists groups—groups that are intent on carrying out attacks on innocent civilians worldwide—plan, prepare, and direct operations from this region, making it of critical interest to the security of the United States and our allies. Currently AQ in the border region is under the most intense pressure they have experienced since 2001.

A Clear Objective and a Sound Strategy

With our NATO and coalition partners, we are working to achieve our core goal of preventing Afghanistan from once again becoming a sanctuary for al Qaeda and associated transnational extremist groups. President Obama's Afghanistan-Pakistan Annual Review affirmed the core elements of our strategy in Afghanistan, the first imperative of which is to improve the overall security environment and to reduce violence levels in Afghanistan. After regaining the initiative from the enemy, our forces act as a bulwark behind which the Afghan National Security Forces (ANSF) and the roots of Afghan governance can grow.

Aiming Toward a Common Strategic Vision

Our military objectives and strategy in Afghanistan support the developing strategic vision between the political leadership of the United States and Afghanistan, as reflected in Vice President Biden's comments alongside President Karzai in January: "It is not our intention to govern or to nation-build. As President Karzai often points out, this is the responsibility of the Afghan people, and they are fully capable of it. We stand ready to help you in that effort. We will continue to stand ready to help you in that effort after 2014." Success in Afghanistan is an Afghan security force able to protect the people with a government that meets the needs of the people and prevents safe haven for international terrorists.

The Campaign Plan

We have increased efforts in virtually every facet of the comprehensive yet focused civil-military campaign in Afghanistan. As one part of that effort, we have executed an unprecedented pace of counterterrorist operations to capture or kill insurgents using enhanced intelligence largely enabled by conventional ground forces. Our efforts range from major combat operations (in Helmand and elsewhere, for example), special mission unit operations allowing no safe haven to the enemy, and concurrent bottom-up and top-down initiatives (exemplified by expanding Village Stability Operations).

The breadth of our current operations squelches the enemy's ability to recuperate and threaten the Afghan people. Our forces have partnered with the Afghan security forces to increase their capabilities; to expand border security; to conduct robust detainee operations and rule of law activities; to address and counter corruption by working with the Afghan Government to target criminal patronage networks; and to interdict the flow of illegal weapons and narcotics to deny criminals and insurgent groups a critical source of their operational revenue. We are capitalizing on our expanded security footprint in the winter months to retain the initiative, suffocate the enemy, and increase momentum into the start of the traditional fighting season. Ultimately, we are working to create an Afghanistan that is hostile to our enemies and denies them the support of the population, making it untenable for insurgents to return from their winter safe havens. This is the essence of counterinsurgency operations. While we will face tough fighting this spring, the enemy's situation continues to worsen day-by-day.

The Right Inputs

The overall international effort in Afghanistan has transformed from an economy of force mission 3 years ago to a focused and reinforced civil-military counterinsurgency campaign, largely assuming its full strength in September 2010. U.S., coalition, and partner nations have worked hard to apply the right mix of organizations, approach, and resources in Afghanistan. Last year at this time, we had less than 270,000 American, coalition and Afghan forces on the ground in Afghanistan. This year, we have more than 370,000 total security forces (American, coalition and Afghan) in the fight, and 109,000 Afghan security forces are projected to be added by this time next year. Beyond the additional organizations put in place on the ground in Afghanistan, the Pentagon's Joint Staff Pakistan Afghanistan Coordination Cell and CENTCOM's Afghanistan Pakistan Center of Excellence are better organizing our resources at home and providing mission-critical reach-back support to deployed forces. The CENTCOM Center of Excellence will provide the cadre of regional experts for the long haul as we transfer to Afghan lead in 2014 and commit to a long-term partnership with Afghanistan and Pakistan.

Enemy Violence and Coalition Progress

Despite the enemy's efforts to disrupt progress in Afghanistan, we have achieved the major military objectives we set out to accomplish in 2010 and made considerable progress with respect to governance and development. As Secretary Gates noted after his December 2010 trip to Afghanistan: "The bottom line is that in the last 12 months, we have come a long way. Frankly, progress—even in the last few months—has exceeded my expectations." We recognize, however, that progress and violence coexist in this type of war. Our enemies continue to conduct attacks heavily focused on non-combatants and to intimidate the population and maintain relevancy, albeit decreasing, in newly-cleared areas. Enemy-initiated violence is increasingly localized. From November 2010 until 31 January 2011, 57 percent of the violence in Afghanistan has been concentrated in 12 of 401 districts. Notably, the key districts of Maiwand in Kandahar Province and Lashkar Gah in Helmand Province—which are critical to our efforts to link the Helmand and Kandahar security bubbles—are no longer among the top-12 most violent districts. The elevated levels of violence is less a reflection of increased insurgent capability and more the result of increased Afghan and ISAF operations in areas previously considered insurgent strongholds. The enemy is not adapting well to this development. While we make progress, our enemies continue to make grievous mistakes, to include: purposefully killing innocent Afghans; leaders fleeing into Pakistan and leaving subordinates to fight; and killing nearly 5,000 Afghans in the first 10 months of 2010 (more than three quarters of all civilian casualties in that period). We highlight the ruthless actions of the enemy, and in recent months Afghan leaders and human rights groups have stepped forward to condemn insurgent-initiated violence.

Road to Transition in 2014

We and our North Atlantic Treaty Organization (NATO) and other Coalition and ANSF partners are improving security for the Afghan population, increasing the size and quality of the ANSF, and supporting efforts to improve governance and development throughout Afghanistan. At last November's NATO Summit in Lisbon, we undercut a key pillar of the Taliban's strategy by affirming the long-term resolve of the United States and international community to accomplish the mission in Afghanistan. We are united in support of President Karzai's goal of Afghan forces assuming security responsibilities from the international community by the end of 2014. In partnership with the Afghan Government, we are working toward President Obama's goal of beginning a drawdown of U.S. forces from Afghanistan beginning in July of this year at a pace determined by conditions on the ground. The process for identifying, assessing, and transitioning areas of Afghanistan is based on recommendations from the Joint Afghan-NATO Inteqal (Transition) Board (JANIB) to the Government of Afghanistan. ISAF is working closely with JANIB as we begin the process of transition and methodically move forward in our campaign.

ANSF Support

Most importantly in the security arena, our investment in the ANSF is working and the growth of the force is on track. The remarkable quantity growth of ANSF (rising by an unprecedented 70,000 personnel while facing a determined enemy) is now being matched by quality improvements in the force. NATO Training Mission-Afghanistan is supporting the efforts of the Afghan Government to build leaders at all levels, to increase literacy, and to improve capability and training capacity. Combined, these programs increase the quality of the force, ultimately helping to reduce attrition, enhance recruitment, and contribute to sustainability. Meanwhile, we are helping the ANSF to overcome remaining challenges in the recruitment of medical staff and other enablers, as well as increasing the participation of females and recruiting more southern Pashtuns. In league with Admiral Stavridis (Commander, U.S. European Command and Supreme Allied Commander Europe), we are trying to reduce our shortage of trainers.

ANSF in the Lead

The ANSF is increasingly in the lead of operations in many areas of Afghanistan. In southern Afghanistan, the ANSF took the lead in mid-2010 for an operation in Malajat, Kandahar City—with support from ISAF for additional combat power, close air support and other enablers—resulting in the capture or killing of several dozen insurgents and the establishment of a new model for Afghan-led operations. The ANSF also provided well over half of the combat power for the latter phases of Operation Hamkari, clearing the insurgency's most vital safe havens in southern Afghanistan. In northern Afghanistan, Afghan National Army and Police conducted joint operations throughout December 2010 with ISAF forces in northern Balkh Province, and Afghan National Police have demonstrated considerable capacity by capturing insurgents and discovering caches of weapons in U.S.-Afghan partnered operations in Kunduz Province. Additionally, ANSF now leads security efforts in 14 of 15 of Kabul's districts, and have executed coordinated security plans for several events, including the June Consultative Peace Jirga, the July Kabul conference, August Independence Day events and the January seating of the Parliament all without incident, at odds with the insurgents' claims that it would seek to disrupt them.

Local Security Initiatives

Beyond national level security efforts, the Afghan Government has steadily expanded the local security initiatives designed to squeeze extremist elements from their traditional safe havens and cut off their lines of communication. Clearing operations in key terrain districts have shifted operational-level momentum and altered village-level calculus in remote areas. Local elders in dozens of villages throughout Afghanistan have conducted jirgas to assume increased responsibility for their own security, and U.S. and coalition forces have supported the Ministry of Interior's efforts to fortify Afghan villages. The Afghan Local Police (ALP) program represents one of the most promising endeavors to wrest local areas from insurgent influence. The ALP and other Village Stability Operation initiatives work from the bottom-up and the top-down, connecting the support of local communities with the capacity of the central government and coalition partnerships. The Taliban has revealed their concerns that the ALP represents a direct threat to their existence and operational ability. Today, there are a total of 63 ALP sites—24 of which the Ministry of Interior has site validated—and approximately 4,000 ALP are now assigned. These local efforts buttress security in areas with limited ANSF presence, complementing the progress made elsewhere (and in ALP locations) by conventional ISAF and ANSF.

Given the initial success of the ALP program, the Ministry of Interior wants to increase the program beyond the current projected number of 10,000 with our reinforced special operations forces providing oversight and mentoring.

Popular Support

Since 2003, AQ and the Taliban have tried with some success to expand their strength and influence in much of the country. In 2010, coalition and Afghan forces applied additional resources in all aspects of the campaign to change the security landscape in much of the country. As security improves in key areas and we are better able to protect the people, Afghanistan's population has increasingly supported efforts to bring development and basic services to their areas. In recent months, in particular, Afghan security forces have assumed more of the load in the fight, village elders have encouraged young men to join the Afghan police, and insurgents in several areas have begun to put down their weapons and integrate into society. Reintegration efforts are bearing fruit due to the concerted effort of the Afghan Government both at the local and national level and the support of coalition forces (aided, of course, by the momentum in our campaign). In terms of reconciliation, the process is led by Afghans, with ISAF partnering with ANSF to set security conditions and dash the enemy's hopes of victory. These are progressive steps toward building irreversible momentum in our overall campaign.

Rule of Law Progress

Unlike our enemies, we continue to support the legitimate efforts of the Afghan Government to improve the Rule of Law for Afghanistan's more than 29 million inhabitants. U.S. Forces-Afghanistan's Joint Task Force/Combined Interagency Task Force 435 and our Afghan partners have achieved considerable progress in the last year: transferring detainees to the state-of-the-art detention facility in Parwan; implementing transparent and robust internment processes; strengthening judicial guarantees for detainees; and expanding robust reintegration programs that include literacy and vocational training. Moreover, we have established robust efforts to combat corruption at all levels, even as we implement best practices to reduce the challenge of corruption in contracting and in every aspect of our campaign.

Infrastructure Initiatives

We are also pursuing infrastructure initiatives—for example, building roads, rail, and installing electrical grids and transmission lines—to capitalize on Afghanistan's potential as a Central Asian economic hub. A regional transport network facilitates the creation of private sector jobs and provides additional incentives for reconcilable elements of the insurgency to abandon the fight. Ultimately, such economic development reduces the need for U.S. forces and underpins long-term transition activities and is fundamental to a sound counterinsurgency campaign.

Congressional Support

Congressional leadership continues to play a critical role in enabling our efforts in Afghanistan, including the Afghanistan Security Forces Fund (ASFF), the Commander's Emergency Response Program (CERP), the authorization of an infrastructure program, and the Afghanistan Reintegration Program (ARP). Above all, we rely on the ASFF to enable the eventual full transition of security tasks to a robust, trained ANSF capable of preventing the resurgence of insurgent safe havens in Afghanistan. In terms of the CERP, our Commanders on the ground continually comment that the CERP funds are invaluable in carrying out operations toward our strategic objectives in Afghanistan, undercutting the enemy's information operations and legitimacy. In 2010, CERP funded more than 8,300 projects, including, for example, transportation initiatives to improve freedom of movement throughout Afghanistan; agriculture production across Afghanistan involving the repair and improvement of irrigation canals and wells and providing farmers with higher-quality seeds and fertilizers; education projects such as the services of more than 200 local Afghan education outreach coordinators; and water and sanitation projects to install three high-production groundwater wells that will increase the accessibility of potable water to over 850,000 Afghans in Kandahar City. Apart from CERP, the new Afghanistan infrastructure program enables us to work together with the U.S. State Department to undertake high-priority infrastructure projects to address critical needs for Afghan security, governance, and development. The Afghanistan Infrastructure Fund will be the vehicle for the Defense Department's contribution to this integrated program. To enable our reintegration efforts, we continue to execute the ARP using funds in support for the Government of Afghanistan's Peace and Reintegration Program.

Challenges Ahead

Much work remains to achieve our goals in Afghanistan. We face a resilient and determined enemy. The United States and the international community are positioned to favorably influence reform and synchronize Rule of Law development to counter corruption within the Afghan Government. Despite considerable progress in many areas in 2010, we recognize that there will be hard work ahead as we continue to fight along with our Afghan partners. But, by progressively and steadily executing our sound and validated strategy, I believe we can set the conditions to succeed in Afghanistan.

Partnering with Pakistan

Strategic Partnership

We recognize, of course, that any solution in Afghanistan must address the regional context. CENTCOM supports President Obama's goal of strengthening the U.S.-Pakistan strategic partnership through nascent yet improving military-to-military cooperation with Pakistan. As Secretary Clinton and other leadership has noted, we must concentrate on the efforts Pakistan is taking. They have made very significant moves for going after the terrorist within their own country.

Over the past year, CENTCOM has strengthened and deepened our security cooperation with Pakistan by supporting our counterparts through CENTCOM's Office of Defense Representative-Pakistan (ODRP). ODRP is focused on assisting Pakistan's counterinsurgency efforts and this past year, led the U.S. interagency effort to provide disaster relief and Humanitarian Assistance to areas affected by the flooding. Additionally, in support of our long-term partnership with Pakistan, the CENTCOM Center of Excellence continues to deploy subject matter experts and provide unique reach-back support to ODRP and Special Operations Command-Pakistan (Forward) in order to deepen analysis and to provide greater interagency fidelity on critical issues.

Threats in Pakistan

The potential for instability in Pakistan and the free movement of extremists in the Afghanistan-Pakistan border region continue to pose a serious threat to regional and global security. Pakistan's tribal areas remain the principal sanctuary for al Qaeda and a safe haven for other extremist groups, enabling them to threaten the population and coalition forces in Afghanistan, the people and government in Pakistan, and U.S. and Western interests globally. The Afghanistan-Pakistan region also faces significant humanitarian concerns, including refugees and Internally Displaced Persons (IDPs) from decades of conflict. Additionally, roughly three million Afghan refugees still live in Pakistan, having been displaced by the Russian invasion into Afghanistan 30 years ago.

U.S. Humanitarian Assistance

Last summer's historic flooding in Pakistan was devastating—effectively equivalent in scope to flooding the entire East Coast of the United States. The United States responded to the floods by providing historic levels of Humanitarian Assistance. In all, U.S. rotary and fixed wing aircraft transported more than 40,000 displaced persons and delivered more than 26 million pounds of aid supplies to the people of Pakistan. U.S. helicopters flew more than 5,000 flight hours during the relief operation. The U.S. Government provided Zodiac boat kits to the Pakistan Military for use in rescue operations, and provided eight 50 meter bridges to replace bridges swept away by the floods.

U.S. Support to Pakistan Military

On the security front, continued U.S. assistance is critical to enabling Pakistan to conduct effective counterinsurgency operations. Our forces carry out important partnership and engagement activities in support of the Pakistan military's improving counterinsurgency capabilities. As one important example, ODRP supports Pakistan's Frontier Scouts by providing training support and enabling further counterinsurgency operations. U.S. personnel also assist in the procurement of materials and equipment needed to build infrastructure in support of education, power, and food.

Pakistan Operations and Sacrifice

Pakistan's military has made impressive strides in combating militants in the FATA, while dealing with the effects of large-scale flooding that devastated much of the country. Over the last year, the enemy has lost battlespace to the Pakistan military's sustained efforts to move against the enemy strongholds. Pakistan's military has suffered more than 2,500 casualties (enduring more than 500 personnel

killed in action and more than 2,000 wounded in action) since the start of offensive operations against extremist elements in the Khyber Pashtunkhwa and the FATA. Since June 2009, the Pakistan Military has been involved in nearly continuous operations against militants in the Khyber Pashtunkhwa and the FATA. In total, the Pakistan Military has deployed upwards of 140,000 troops along Pakistan's western border with Afghanistan, a significant portion of which were drawn from Pakistan's border with India.

Regional Context

Our efforts to support Pakistan fit well within the broader regional context. We recognize that Pakistan's longstanding tensions with India are an important part of Pakistan's strategic decisionmaking calculus and military force posture. However, the presence of extremist sanctuaries in Pakistan significantly impacts our progress in Afghanistan, and with the Pakistan military's help we are taking important steps to improve cross-border operations. To address existing challenges along the Afghanistan-Pakistan border, coordination between ISAF, Afghan security forces, and the Pakistan Military continues to improve, especially in the area of Intelligence, Surveillance and Reconnaissance (ISR). In Regional Command East, we are planning coordinated operations with the Pakistan Military. The Pakistan Military recently began clearing insurgent safe havens in Mohmand Agency across the border from Kunar Province—where insurgents have initiated a number of attacks to undermine recent security gains in Afghanistan. While Pakistan's operations are acting as the "hammer" on their side of the border, combined Afghan and ISAF forces are poised to defeat displaced insurgents, acting as the "anvil." Afghan Border Police and other combined security forces are manning outposts along the border and armed drones and close combat aviation are monitoring previously-identified mountain passes that insurgents will likely use as they seek sanctuary in Afghanistan.

Congressional Support

Multi-year security assistance is critical to our efforts in Pakistan. We appreciate continued congressional support for the Pakistan Counterinsurgency Capabilities Fund, which serves as a key enabler of the Pakistan's military operations against extremists. The fund also provides for a range of partnership activities with potentially transformational long-term effects on our relationship with Pakistan if they can be sustained.

Countering Iran's Destabilizing Activities

Iran's Destabilizing Activities

In view of Iran's destabilizing behavior and its persistent pursuit of a nuclear weapons capability, the Iranian regime's current stance represents the greatest long-term threat to the region. Iran continues to rebuff efforts for engagement, further alienating and isolating itself from much of the rest of the region and from much of the international community. The actions of Iran's leadership squander the potential of its own educated populace and sacrifice the free exchange of ideas for the short-sighted interest of preserving an increasingly harsh and oppressive regime. Recently, Tehran equated the Egyptian protests to the 1979 Islamic Revolution in Iran, making a fanciful and wholly false connection.

The Iranian regime relies on the Islamic Revolutionary Guard Corps-Qods Force (IRGC–QF) to extend influence and create instability across the region through persuasion, coercion, aggression, and targeted messaging. In fact, Iran continues to fund, arm, train, and equip a network of agents, surrogates, and proxies in Iraq, Lebanon, Syria, Gaza, Afghanistan and elsewhere across the region. In the pivotal region of the Levant, Iran seeks to expand its influence, in part by enabling Lebanese Hezbollah and Hamas in order to weaken legitimate governance, limit economic development, and undermine security partnerships. Additionally, Iran delivers weapons and provides military training to surrogates in an effort to target Israel (a nation Iran's leadership have vowed to destroy) and undercut the Middle East Peace Process. Of urgent concern, the IRGC–QF continues to equip militants in Iraq and Afghanistan that attack U.S. and coalition forces and undermine stability and governance in each of these countries. The recent January 2011 large caliber Improvised Rocket Assisted Mortar (IRAM) attack against U.S. forces in Iraq demonstrated Iran's malicious intent, and ability to escalate violence when they desire.

Iran's Pursuit of Nuclear and Ballistic Missile Weapons

In spite of a fourth round of United Nations sponsored sanctions, Iran appears determined to mature its nuclear weapons program—an ambition that could lead to the proliferation of illicit nuclear materials and spark a nuclear arms race in the region. Admiral Mullen reinforced this point in December 2010, observing: "I see

Iran continuing on this path to develop nuclear weapons, and I believe that developing and achieving that goal would be very destabilizing to the region." Iran also continues to expand and improve its arsenal of over 2,200 ballistic missiles and long-range rockets, and of approximately 225 fixed and mobile launchers, making it the largest ballistic missile and long-range rocket force in the Middle East. Iran can use these ballistic missiles and rockets, combined with increasing naval capabilities, to threaten global commerce.

Countering Destabilizing Iranian Activities and Keeping Peace with our Partners

Firmly nested within the broader approach of the U. S. Government toward Iran, CENTCOM is committed to countering Iran's destabilizing and coercive activities by building confidence with our partners in the region. As one example, we are working together with our Gulf Cooperation Council partners and other nations to advance Integrated Air and Missile Defense. We also conduct activities to reassure our friends in the region that we are with them, preclude conflict, and deter Iran's destabilizing activities, while at the same time standing ready to conduct contingency operations.

Enabling Transition in Iraq

Looking Ahead in Iraq

The year ahead in Iraq presents a significant opportunity for the United States to solidify our long-term support to this keystone of regional stability. Our continued investment in Iraq is critical at this juncture, especially given the significant commitment we have made in lives and treasure. Now is not the time to be penny wise and pound foolish with respect to our mission in Iraq. Nested firmly inside the State Department's vision for an enduring U.S.-Iraq strategic partnership, CENTCOM is setting conditions to build on the shared sacrifices between our countries.

The Situation in Iraq

Iraq faces lingering ethnic and sectarian mistrust, tensions between political parties, and strained governmental capacity to provide basic services. Al Qaeda in Iraq (AQI) remains committed to undermining the Iraqi Government and is capable of carrying out orchestrated, high profile attacks. Likewise, Iranian-inspired and equipped proxies continue to be a threat to Iraqi security and governance. While the security situation in Iraq is vastly improved since the peak of sectarian violence there in mid-2007 (violence is currently at all-time lowest levels since 2003), Iraq continues to face significant political, economic, and security challenges. Over the coming year, several factors will determine Iraq's strategic direction, including the continuing development of Iraqi Security Forces (ISF), the effectiveness of the nascent governing coalition, and the degree to which the country is influenced by Iran and threatened by AQI and Shi'a militia elements.

U.S. Forces-Iraq

From now until the end of this year, U.S. Forces-Iraq (USF–I) is continuing to partner with ISF during this historic period of transition. USF–I is undertaking a range of activities, foremost among these strengthening the ISF, transitioning security-related activities to Iraq and the U.S. interagency, and contributing to border management and ministerial development.

Establishing the Office of Security Cooperation-Iraq

Through USF–I and in partnership with the Embassy country team, we are planning the initial stand-up of the Office of Security Cooperation-Iraq (OSC–I) in June of this year and expect it to be fully operational by this October. OSC–I is the cornerstone of our long-term mission to build partner capacity with the ISF. Additionally, the OSC–I will ensure the continuation of the military-to-military relationships that advise, train, and assist Iraqi Security Forces.

Iraq's Regional Integration: Iraq is now at a crossroads, poised to emerge as a positive force for the region after posing security challenges for its neighbors in past decades. Baghdad's selection as the location to host the Arab League Summit is a significant testament to Iraq's re-emergence in the region. Iraq also accepted Egypt's invitation to participate as an observer in CENTCOM's largest exercise, Bright Star. Jordan has also exerted considerable positive influence in Iraq, training over 1,500 Iraqi Army officers, a number of Iraqi Air Force pilots, and posting a Jordanian defense attaché in Baghdad, in addition to hosting a program to provide extensive training to Iraqi police. Additionally, Jordan, Saudi Arabia, and Kuwait have aided the economic reintegration of Iraq into commercial activity and regularly scheduled transportation networks. Finally, the United Arab Emirates have trained Iraqi police officers in a joint program with Japan and Germany.

Iraq's constructive integration into the region will also help blunt destabilizing Iranian influence. If left vulnerable to Tehran's meddling, Iraq's sovereign future would be imperiled. At the same time that Iran reconstructs shrines, provides electrical power, and constructs schools and clinics in Iraq, Iran also undermines Iraqi political processes, facilitates violence against innocent Iraqi civilians, and provides lethal support to extremist groups targeting U.S. forces. For the United States and the international community, a sovereign Iraq under a stable and inclusive government is fundamental to regional stability.

Congressional Support

The support of Congress is critical to facilitating an effective transition in Iraq and in setting the conditions for an enduring U.S.-Iraq partnership. We seek congressional support in obtaining the appropriate authorities in fiscal year 2011 to begin immediate facility and site work for the OSC–I to reach full operating capability by October 2011. This is an area of critical need as we work to meet our aggressive timelines. The Iraqi Security Forces Fund (ISFF) critically enables Iraq to set a foundation for its internal and external defense capabilities and provides Iraqi Minister of Interior police forces the training and equipment necessary to maintain internal security without assistance from the Ministry of Defense. Additionally, the ISFF enables Iraqi Army counterinsurgency capabilities and enhances cooperation between the government of Iraq and Kurdish police forces to ensure the consistency of police training and equipment standards throughout Iraq.

Strengthening Central Asian Partnerships

In Central Asia, CENTCOM is committed to strengthening relationships based on those shared interests and goals that we have in common with the Central Asian States of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. While our nations seek to improve broader economic conditions, CENTCOM is working with our partners to address the migration of extremists in certain areas of Central Asia and to counter the trade of illicit narcotics and human trafficking. Often these activities are interrelated.

Northern Distribution Network: Over the past 2 years, the development of a robust transportation network has been the most expansive area of cooperation with our Central Asian partners. Our collective agreements with Kyrgyzstan, Kazakhstan, Uzbekistan, and Tajikistan together constitute a logistical system termed the Northern Distribution Network (NDN) used to supply coalition operations in Afghanistan and taking pressure off the Pakistan lines of supply. This diverse network supports the transit of about half of all sustainment cargo to Afghanistan using a variety of sea, air, and land routes. The remaining supplies are flown directly into Afghanistan, trans-shipped from sealift to airlift, or arrive via surface routes through Pakistan. Ultimately, the development and expansion of the NDN and its associated infrastructure will facilitate long-term economic growth in the region, representing a new opportunity for export of Central and South Asia raw materials and exchange of goods in the international marketplace.

Enhancing the Northern Distribution Network

Future NDN efforts are centered on partnering with certain countries to permit two-way flow of all types of wheeled vehicles and associated repair parts, and to increase shipment of cargo already permitted on the NDN (such as building materials). In terms of airlift, Manas Transit Center in Kyrgyzstan is a key Central Asian location that supports aerial refueling and passenger transit missions.

Building Partner Capacity and Pursuing Cooperative Activities

Cooperation Based on Shared Interests

The investment we make in our military-to-military engagement to build the capabilities of our partner nation security forces is a critical component of the whole-of-government efforts in the region. These cost-effective efforts properly place security responsibilities in the hands of other sovereign governments and help to prevent conflicts and instability. With a long-term perspective, CENTCOM carries out partnership activities designed to build strong security capacity and relationships with our friends in the region.

Training

CENTCOM's training and exchanges with our partners are critical to our regional cooperation. CENTCOM has spearheaded the establishment of several Training Centers of Excellence hosted in partner nations, providing world-class mission-specific training for our allies and partners. Existing Centers of Excellence include an Air Warfare Center and an Integrated Air and Missile Defense Center in the United Arab Emirates (UAE); the King Abdullah Special Operations Training Center in

Jordan; a NATO Partnership for Peace Combat Engineering and INTERPOL Counter Narcotics Center hosted in Kazakhstan; and an extensive array of associations with the other countries' Professional Military Education programs. Developing Centers include a U.S. Naval Forces Central Command (NAVCENT) Maritime Center hosted in Bahrain; a new Explosives Ordinance Disposal school with future Center of Excellence in Saudi Arabia; a proposed Near East South Asia (NESA) branch Center of Excellence in Bahrain; and the Gulf Region Communications, Computer, Command, and Control (C4) Center of Excellence hosted by the Bahraini Minister of Communications.

Exchanges

CENTCOM manages and conducts focused engagement programs with specific partner nations located throughout the AOR in support of the CENTCOM Theater Security Cooperation Plan. The objective is to understand our friend's views and to strengthen relationships and regional organizations to defeat violent extremist networks or situations that threaten the security interests of the region and the United States. This includes capacity building. Additionally, CENTCOM Headquarters in Tampa, FL is host to over 193 coalition partners from 58 allied nations who make significant contributions to our efforts, and receive invaluable experience interacting with both U.S. forces and our allies.

Equipping

We also provide equipment and security assistance to our regional partners. These activities are among the most important practical steps we can take to demonstrate CENTCOM's enduring commitment to our partners—and to enable interoperable forces in the fight. I ask for continued congressional support of these efforts, including Global Train and Equip, as well as the many security assistance programs managed by the Department of State, including Foreign Military Financing, Foreign Military Sales, and International Military Education and Training Program. As Admiral Mullen noted in his testimony, our security assistance authorities are inflexible, and process are too cumbersome to effectively address today's security challenges in a timely manner. We encourage ongoing efforts to streamline the Foreign Military Financing process in order to cement training and sustainment relations with our critical partners. Accomplishing our mission at CENTCOM requires that we demonstrate our responsiveness to the requests of our partners when we alone should not carry the increasing costs of defending the international order.

Exercises

The final pillar of CENTCOM's partnership activities is our military exercise program. Exercises bolster interoperability between our forces and those of our partners. Each year, our component commands conducts more than 50 exercises with our partner nations in the region, including 5 overseen by CENTCOM component commands.

The Long-Term Value of our Exercise Program

The Combatant Commanders Exercise and Engagement program provides critical support to CENTCOM joint training support, exercise and engagement requirements in support of national-level strategic priorities, readiness, and building partnerships within the AOR. Since the beginning of our operations in Afghanistan in 2001, CENTCOM has seen reductions in our exercise program due to ongoing combat operations within the AOR. As combat operations are completed or reduced, restoring sufficient funding levels is critical to support engagement activities with our partners. Without restored funding levels, CENTCOM could lose the advantages gained from a robust exercise engagement program, affecting future access and presence within the AOR and our Theater Security Cooperation Plan. In the interim, we will work imaginatively to make the best use of our exercise budget.

Disrupting Violent Extremist Organizations across the Region

Terrorists in False Religious Garb

The CENTCOM AOR is home to numerous Violent Extremist Organizations (VEO) comprising a network that, in its own right, represents a considerable threat to the U.S. Homeland, U.S. and Western interests, and our allies in the region. The most significant of these is AQ. AQ seeks to impose its morally bankrupt ideology worldwide, and has regional affiliates across the Arabian Peninsula, in Iraq, the Maghreb, and in Somalia (al-Shabaab), with associates including Tehrik-e Taliban Pakistan (TTP), the Afghanistan Taliban, and Lashkar-e-Tayyiba (LeT). The growing cross-organizational cooperation between VEOs replicates mafia syndicates. The organizational success of VEOs is frequently abetted by operating with near impunity in cyberspace.

Attacking VEOs

Along with our interagency and regional partners, CENTCOM continues to develop and implement theater-wide responses in the cyber and physical domains to disrupt and degrade militant networks. Over the past year, interagency efforts have resulted in designating al Qaeda in the Arabian Peninsula (AQAP) and TTP as foreign terrorist organizations, obtaining a number of Treasury designations, Justice Department arrest warrants, Interpol notices, and placing over 100 individuals and entities on the U.S. Department of Commerce Denial List. Thanks to Congressional funding, the Defense Department Rewards Program has been used by commanders in Iraq and Afghanistan in fiscal year 2010 to capture more than 700 high-value individuals, insurgents and terrorists.

Preventing Security Vacuums

In the long-term, CENTCOM is working as a part of an integrated civil-military effort to prevent security vacuums that foment extremism and provide sanctuary to VEOs.

In Yemen, we have forged a tight bond between CENTCOM and our Embassy team in Sana'a to address the heightened threat of AQAP through long-term counterterrorism capacity-building. AQAP cemented its role as a viable and enduring threat to the U.S. Homeland by following-up the failed attempt to bomb Northwest Airlines flight 253 on 25 December 2009 with the "printer cartridge" parcel bomb plot in late October 2010. Radical cleric Anwar al-Aulaqi publicly spearheads AQAP's campaign against the West, most notably by creating Inspire magazine in an effort to encourage Western-based Muslims and enable "lone wolf" style attacks.

In Lebanon, the Lebanese Armed Forces (LAF) has had to navigate a challenging environment in which it does not yet have the monopoly of violence in much of the country. Our assistance has had substantive impact on the ground to include helping the LAF deploy four brigades to the south since 2006 in support of United Nations Security Council Resolution (UNSCR) 1701—taking up space where Hezbollah had been. Additionally we have increased the capacity of the LAF Special Operations Forces that won a hard fought battle in 2007 against the al Qaeda affiliated Fatah al-Islam movement in the Nahr al-Bared Palestinian refugee camp in Northern Lebanon. The LAF sustained almost 200 killed and 2,000 wounded in this operation. We value our close relationship with the LAF officer corps based on mutual respect and confidence. We continue to monitor the government formation process in Lebanon and will need to examine the final composition, policies, and behaviors of the next government before making any decisions regarding our relationship, including security assistance, while recognizing that continued engagement with the LAF is an important step in securing its status as an apolitical, non-sectarian, and professional organization.

In Syria, the regime's continuing support for terrorist organizations prevents CENTCOM from developing a military-to-military relationship and limits the scope of U.S. engagement. Consequently, we view the recent return of a U.S. Ambassador to Damascus as a vital piece of our regional security architecture. We stand ready to support Ambassador Ford's diplomatic efforts to produce a more constructive relationship with Syria however we can, and we urge the Senate to confirm his nomination so that he may continue his important work beyond 2011.

Across the region, Theater Security Cooperation activities work against the ability of Iran and extremist elements to destabilize the region. Absent these programs, there is an increasing potential for security vacuums to arise and open the door to greater influence from Iran or violent actors. Our cooperative efforts with regional partners are essential to the long-term effort to address these threats.

Countering the Enemy's Use of the Information Environment

Our enemies are using every available lever of the information environment to promulgate and reinforce their ideology—and, in league with our interagency partners, CENTCOM is committed to countering the efforts of our adversaries. Our enemies operate within cyberspace (and its associated relevant physical infrastructure) to plan, coordinate, recruit, train, equip, execute and garner support for operations against the United States, its allies, and interests. The recruitment of Umar Farouk Abdullmutallab, the unsuccessful Christmas Day Bomber, demonstrates our adversaries' ability to reach across borders, promote their narrative, and defy traditional military constructs to achieve their objectives. Clearly, in the information age, our military must adapt to this new domain of warfare. We ask for the support of Congress to fund our programs that attempt to counter the enemy in the information domain, just as we need funding to disrupt violent extremists in the physical domain.

CENTCOM Activities in the Information Environment

Consistent with the guidance provided by Secretary Gates last December, we conduct Operation Earnest Voice (OEV), which synchronizes and oversees all of our Information Operations activities. OEV seeks to disrupt recruitment and training of suicide bombers; deny safe havens for our adversaries; and counter extremist ideology and propaganda. Full funding of OEV supports all activities associated with degrading the enemy narrative, including web engagement and web-based product distribution capabilities. The effective engagement of our enemies in cyberspace requires the ability for us to conduct a full-spectrum of traditional military activities against them in that domain, including all aspects of Information Operations and Strategic Communication. We coordinate with the Joint Staff, the Interagency, the Intelligence Community, and our coalition partners to examine the adversary's use of cyberspace and identify techniques, tactics and procedures we can use to counter the adversary in the cyber domain.

Combating Weapons of Mass Destruction

Risk of Weapons of Mass Destruction

At CENTCOM, we recognize the serious risk and potentially devastating ramifications of a terrorist group, violent extremist organization, or state actor acquiring, proliferating, or using Weapons of Mass Destruction (WMD). The nexus between extremist groups, malign state actors, and WMD remains a critical concern throughout the AOR and presents a clear danger to our partners, allies, and the U.S. Homeland. CENTCOM remains vigilant in executing the nonproliferation, counter proliferation, and foreign consequence management pillars of America's National Strategy for Combating WMD.

Countering Proliferation and Combating Weapons of Mass Destruction

Countering the proliferation of WMD-related material is a fundamental aspect of CENTCOM's overall efforts to combat WMD. In concert with our regional partners, CENTCOM is involved with the interagency effort to curtail the ability of adversaries to finance the acquisition of WMD-related items and to deny malign actors the ability to transport suspect dual-use materials across national borders. To this end, CENTCOM plays a key role in containing Iran's evident drive for nuclear weapons in violation of the Nuclear Non Proliferation Treaty by actively enforcing United Nations Security Council Resolutions that sanction the Iranian regime. CENTCOM also supports the interdiction and counter proliferation framework under the Proliferation Security Initiative (PSI). CENTCOM's mainstay program for Combating WMD engagement is the Cooperative Defense Program (CDP). The CDP provides a series of bilateral and multilateral engagement activities to improve U.S. and partner nation interoperability while strengthening partner nations' combating WMD capabilities.

Countering Piracy

The Real and Growing Threat of Piracy

Somali-based pirates continue to prey upon international shipping in the Gulf of Aden, Red Sea, and on the high seas well into the Indian Ocean. Pirates are using previously captured vessels as mother ships to conduct successful attacks as far as 1,400 nautical miles from the Somali coast. The number of successful pirate attacks has risen from 42 in 2008, to 51 in 2009, to 68 in 2010. Pirates now hold nearly 700 hostages for ransom. Multi-million dollar per ship ransoms ensure piracy remains lucrative for pirates and others involved in this criminal enterprise.

A Model for International Cooperation

CENTCOM works with international partners to help patrol the region and to work with interagency partners to gain the prosecution of captured pirates (though we currently lack an international legal framework to detain and prosecute pirates). Piracy is a threat to all, and has promoted international military cooperation that serves as a model for cooperation in other areas. We acknowledge, however, that military action is only one part of the solution, but an essential element nonetheless. NAVCENT coordinates the efforts of over 25 contributing nations to combat piracy at sea and coordinates with European Union (EU) Task Force Atalanta and NATO Standing Naval Maritime Group in Operation Ocean Shield. Pakistan is currently in command of Combined Task Force 151, the international coalition to combat piracy. NAVCENT also hosts a monthly Shared Awareness and De-confliction (SHADE) conference in Bahrain to foster multi-national cooperation and to encourage maritime industry to adopt best practices to defend vessels against piracy. In addition to Coalition, NATO, and EU representation, the conferences also include

civilian maritime organizations, and delegates from China, Russia, Japan, and India.

STRATEGIC APPROACH

Many of our challenges are interconnected and require comprehensive long-term solutions, prompting us to adopt an overall approach that is cooperative, integrated, and enduring. As we undertake a diverse range of operations and activities, three principles guide our efforts:

Adopting Cooperative Approaches by Partnering Based on Shared Interests

First, we must adopt cooperative approaches to solving shared challenges. America's strength and security depends on our ability to help our friends in the region defend themselves, underscoring the importance of CENTCOM's initiatives to build partner capacity and pursue bilateral and multilateral initiatives. Starting from our shared interests, we must capitalize on the comparative advantages of all participating nations—for instance, by taking advantage of unique geography or specialized capability. Ideally, such efforts would combine the political, economic, and security spheres of those who choose to participate, strengthening the whole to be greater than the sum of the parts. Our efforts to develop effective solutions for Integrated Air and Missile Defense in the Gulf Region represent a significant example of the kind of cooperative efforts that are necessary to deter and defeat our common threats. As mentioned above, the international coalition to counter piracy in the Somali Basin is a model for multilateral cooperation in the region that not only addresses piracy but also offers opportunities for engagement in other areas.

Our ability to cooperate with our partners depends to a great extent on trust. As a consequence of the confidential diplomatic and military reporting made public by Wikileaks, we must patiently strengthen trust with our partners over time. We are up front with our partners about this episode—which has informed our enemies about supportive leaders as well as our tactics, techniques, and procedures. We remain committed, as ever, to forthright communication in pursuit of our shared objectives. We are reinforcing our efforts to ensure the security of our communications and focusing on enhancing mutually reinforcing objectives with allies and partners.

Integrating Our Efforts by Implementing Civil-Military Solutions

Second, the wars we are fighting today require intensively integrated, comprehensive approaches from the highest to the lowest levels, embracing diplomatic, information, military and economics in an interwoven effort that builds synergy. Promoting security and stability in the CENTCOM AOR cannot be achieved through military means alone. We must therefore look beyond just the traditional application of military power and integrate all elements of national power to address our many challenges. CENTCOM's experience has shown that military might alone is not sufficient to deal with the challenges we confront along with our partners. Diplomacy and Development are just as vital as Defense in securing our national interests. CENTCOM support efforts to address the underlying conditions of instability that fuel current conflicts. Successful application of these instruments of national power, in turn, depends on our ability to achieve harmony within our civil-military relationships. As such, it is a security concern for us when diplomatic posts go unfilled in the region.

The overlapping forces at work in the CENTCOM AOR—those originating from within and outside the region—require exceptional cross-combatant command cooperation and coordination. We have achieved progress across AOR geographic seams, exemplified by cooperation with PACOM on matters dealing with China and India and cooperation with European Command on Russia, Turkey, and the Middle East Peace Process. CENTCOM, and PACOM regularly synchronize efforts to combat mutual challenges such as piracy, proliferation of WMD, and support to countering VEOs. Additionally, we continue to work closely with U.S. Africa Command to address the state-failure in Somalia, as well as share critical assets to meet time-critical force requirements. Together we have established a counter-piracy Joint Operating Area in the Somali Basin. We team with U.S. Cyber Command to support global relationships in cyberspace and U.S. Northern Command to protect U.S. borders and domestic security. In all, the cross-combatant command effort is going very well.

Supporting Enduring Solutions by Demonstrating Long-term Commitment

Finally, our approach to the region must be enduring. Following through with our long-term commitments in the AOR improves the depth, breadth and quality of our relationships in the region and increases the likelihood of cooperation at the outset. In this region of the world, we are judged by our actions, not words. Individual in-

stances of demonstrated trustworthiness on our part resonate throughout the region for decades. Enduring solutions to the problems that we face also depend on stability, steady economic growth and development in governance. To that end, CENTCOM supports our partners' long-term efforts to grow economically and to develop effective and legitimate institutions of government.

RESOURCING THE FIGHT

Beyond the critical funding authorities highlighted above, accomplishing our mission requires that we fully and efficiently resource the following critical enablers. We appreciate Congressional support to provide our warfighters on the battlefront with the tools they need to accomplish their challenging missions. As we adapt to a thinking adversary, we recognize the need to accelerate our acquisition processes to enable us to out-maneuver our enemies. We also recognize the obligation to be good stewards of our nation's monetary resources. CENTCOM has established stringent control mechanisms to execute our fiscal authorities and to apply the most effective oversight possible of all of our programs.

Intelligence, Surveillance, and Reconnaissance

An Indispensable Tool

There is a considerable and justifiable appetite for ISR capabilities in the CENTCOM AOR. In Afghanistan, persistent ISR capabilities represent one of the most important and effective force multipliers and contribute directly to protecting our troops from the threat of improvised explosive devices through ISR. In cooperation with the ISR Task Force, we have augmented ISAF forces with a greatly increased capability to counter the Taliban and understand the environment in which we operate. Additionally, as we drawdown our forces from Iraq, we are adjusting the apportionment of ISR in a measured way to ensure that we retain adequate capability to support our force in Iraq while we provide the necessary resources to Afghanistan and elsewhere. We continue to refine our ability to fully integrate U.S. and coalition ISR to deny transnational extremist organizations safe haven, training bases, or staging areas to conduct attacks.

Enhancing ISR Capabilities

We greatly appreciate the support of Congress and the Under Secretary of Defense for Acquisitions and Technology in meeting the ongoing demand for more rapidly delivered ISR collection, exploitation, and dissemination capabilities. Interrelated with our ISR needs, we recognize a need to further enhance integration and synergy between aviation and ground elements that is critical to Combat Air Support and counterinsurgency doctrine. We support a limited objective experiment to refine the requirement for a manned, armed ISR asset attuned to the unique challenges of counterinsurgency in Afghanistan. Continued investments in ISR technology, infrastructure, architecture, tools, and personnel (particularly trained ISR managers) help us to build on the significant gains we have achieved in the CENTCOM AOR—and enable us to use the arsenal of ISR capabilities currently in the field.

Critical Intelligence Capabilities

Human intelligence and counterintelligence are just as important as technical solutions to remotely gather intelligence, especially in the conduct of operations in wars among the people. Such intelligence activities are inherently government functions that require a long lead time to develop. CENTCOM is posturing for sustained application of our human intelligence capabilities to afford us insights into adversary plans and intentions. CENTCOM is posturing for sustained application of our human intelligence capabilities to afford us insights into adversary plans and intentions. We are also reshaping our counterintelligence forces to face threats from hostile foreign intelligence services and VEOs that employ sophisticated cyber techniques and trusted insiders to penetrate our networks and compromise our operations.

Improving Force Protection and Countering Improvised Explosive Devices

The Enemy's Weapon of Choice

Now and for the foreseeable future, the enemy is using Improvised Explosive Devices (IED) to kill and maim our troops. These devices remain the greatest risk facing U.S. and coalition forces deployed to Afghanistan and Iraq, as well as a threat to U.S. interests and regional stability throughout the CENTCOM AOR. In Afghanistan, IED attacks account for more than 60 percent of the U.S. and coalition force casualties, though IED casualties have steadily decreased over the past 6 months.

The flow of lethal aid, migration of IED technology and materials, and development of new tactics techniques and procedures represents a global threat. Homemade explosives, which now account for an estimated 85 percent of all IEDs, coupled with the proliferation of commercially available IED materials and commercial grade explosives make them relatively cheap and easy to build and employ.

Ongoing Interagency C–IED Efforts

CENTCOM counters the threat of IEDs by working together with all Services and the Joint IED Defeat Organization (JIEDDO). The Services continue to equip U.S. and coalition forces with the latest technology to mitigate and defeat IEDs. Thanks to Congress and the Department of Defense, CENTCOM and our national and international partners have delivered and fielded an unprecedented number of Mine Resistant Ambush Protected family of vehicles throughout Afghanistan. These vehicles have proven critical to safeguarding the tactical mobility of our warriors in harm's way. CENTCOM, in conjunction with the C–IED Senior Integration Group, and JIEDDO have recently fielded a variety of C–IED enablers that have proven to save lives on the battlefield. As a result, we are finding and clearing more IEDs in Iraq and Afghanistan—at a rate above 60 percent for the last 12 months and 70 percent over the last quarter of 2010. These improvements are due in part to more tips from the population, better tactics, and additional enablers, including the effective use of additional ISR provided by the Services to counter this threat.

Attacking the Network

We are going after the entire IED network and insurgent supply lines. Many of our recent successes have come in the use of persistent systems emplaced throughout significant threat areas to help develop insights into the local area. We are concurrently protecting the force using trained dogs, mine rollers, jammers, and handheld devices; the Marines in southern Afghanistan now employ nearly one dog per squad, and soon we will have more than 200 working dogs in Afghanistan. Along with the Services, JIEDDO, and academia we will continue to do everything in our power to ensure our servicemembers and coalition partners have the best technology and training available to defeat the IED threat.

Supporting Additional C–IED Efforts

We continue to call on the defense industry to provide innovative solutions to counter the threat of IEDs. Critical airlift and airdrop sorties dramatically reduce the number of servicemembers exposed to the IED threat. In fact, the number of pounds of supplies airdropped in Afghanistan has doubled every year since 2005, with an astonishing recovery rate of better than 98 percent. Not all critical movements can be completed by air however. We ask that Congress continue to fund those organizations that provide research and development for the evolution of new and existing counter-IED systems and technologies, especially in areas of predetonation, IED stand-off detection, and non-lethal weapons to deny the enemy the ability to deliver or emplace IEDs. We also ask that Congress provide the flexibility to rapidly and proactively counter new, emerging, and future threats that are either present on the battle field or potential threats that represent vulnerability and would be difficult to counter.

Unity of Command and Control of C5 Networks

Coalition, Command, Control, Communications, and Computer (C5) networks that meet the challenging demands of our troops in theater are essential to CENTCOM. Currently, the command and control of networks available to our deployed forces is divided among Services, agencies, and combatant commands, resulting in degraded and delayed actions that have allowed our adversaries to exploit this fundamental cyber shortfall for too long. One bright network spot, however, is the Afghan Mission Network, which enables U.S. and coalition forces and civilians to remain connected and synchronized on the battlefield and linked to supporting assets throughout the world. We seek congressional support to enable effective integration and extension of networks to wherever we fight, from maritime environments to the aerial layer and over rugged mountainous terrain.

CONCLUSION

In closing, we greatly appreciate the support of Congress on behalf of America's military personnel serving in the CENTCOM region. The stalwart Americans in today's force have been fighting two wars for nearly 10 years in the CENTCOM AOR. With remarkable spirit, they look beyond the ambiguity and longevity of today's complex, demanding operations and answer their country's call. Their courage, character and commitment in the face of repeated deployments are inspiring. As their

commander, I am proud to serve alongside them. Thank you very much for your unflagging support of our troops in harm's way and their families here at home.

Chairman LEVIN. Thank you very much, General Mattis.

We will try a 7-minute first round for questions.

General, you made reference to Pakistan and noted that they, indeed, have gone after some terrorist groups, and they have suffered losses in that process. What you did not make reference to, though, is what troubles us a great deal. What troubles you, I am sure, too, and our leadership, is the failure of the Pakistanis to go after terrorist groups in North Waziristan and in Quetta, and those are the groups that cross the border and attack our force, coalition forces, and the Afghan people.

Why is it, in your judgment, that Pakistan is not going after those terrorist groups, including the Haqqani network in North Waziristan and the Quetta Shura?

General MATTIS. Mr. Chairman, there have been disconnects where we have not always seen eye-to-eye with Pakistan. Part of the reason these groups exist is, together with Pakistan, we helped create some of them.

Any attempt to look at Pakistan's security interests must include their difficult relationship with India. Over the years, I believe that Pakistan got into a position where the very groups that, in some cases, we helped to give birth to, became part of the landscape, the Kalashnikov culture, for example.

In many cases, they have moved against these areas, and not all of it has been cost-free. As I noted, they have lost thousands of troops, killed and wounded. Especially telling is the number of junior officers they have lost, indicating an aggressive effort against these areas.

I think, too, it is the most difficult terrain I have ever operated in, in my 39 years in uniform. The Pakistan military's movement against these folks is continuing. We are now into our 24th month of unrelenting campaign against them.

Chairman LEVIN. But the Pakistanis have not gone after the two groups that are giving us the most trouble in Afghanistan. Have you pressed on the Pakistan military the importance of going after those groups?

General MATTIS. Yes, sir, I have.

Chairman LEVIN. There has been a request, as you have indicated, to increase the size of the ANSF. You made a reference to the request that is under consideration to be an increase between 45,000 to 70,000 above the goal set for October of this year, which will be met. That target of 305,000 is already met or will be met easily by October.

Now when you made reference, when you say you support further growth of ANSF, did I understand you then to support the growth beyond the October 2011 target of 305,000 and somewhere between 45,000 and 70,000 personnel is the target that you support?

General MATTIS. Yes, sir, I do. I think, though, we have to look at whether or not we can sustain it. I believe that President Karzai last week came out of his National Security Council and said that he now supports it, and that recommendation, of course, will have to be considered by the NATO Council.

Chairman LEVIN. Right. Now I made reference repeatedly to the importance of the July 2011 date for the beginning of reductions of American forces in Afghanistan. We heard, as I indicated in my opening remarks, from Secretary Gates and Admiral Mullen a week or 2 ago that they support the reduction beginning in July 2011 of U.S. forces with the pace to be determined by conditions on the ground.

General Mattis, do you support the decision to set the July 2011 date as the beginning point of reductions in U.S. forces in Afghanistan?

General MATTIS. Mr. Chairman, I do support it. I would like to say that I support it because it undercuts the enemy's narrative. When they say we are there to occupy Afghanistan, this helps to deny the enemy that moral victory. I think, too, that because it is a conditions-based drawdown that begins this year, I am comfortable with it from a military point of view.

Chairman LEVIN. Thank you.

Admiral Olson, do you support that date as the beginning of U.S. reductions?

Admiral OLSON. Mr. Chairman, I do. As a beginning to thin out the force in order to accomplish a full transition eventually.

Chairman LEVIN. Admiral, what has been the effect of the Afghan Local Police (ALP) effort that the special ops folks are so deeply involved in, in the villages of Afghanistan where you, working with the Afghans' military and police, are working at the local village level to create these local police units? Can you tell us about these programs?

How successful are they? What is the partnership arrangement with the Afghans in the operations between our special operations people and the ALP?

Admiral OLSON. Mr. Chairman, that is a matter, of course, under General Mattis's operational control, but I was just able to visit a couple of these ALP sites last week, and my sense is that this is having real value at a micro regional level. This is an Afghan Government program that is administered within the Ministry of the Interior. It is at the local level under the district governors, and it is local leaders who recruit and select those who will be members of the ALP forces.

The role of SOF in this is to move to these remote regions in small numbers, establish the personal relationships that are so important to gain credibility as an advising force, and then provide some training and mentorship to these ALP as they gain the ability to defend their villages.

In my opinion, this has had quite a powerful effect locally. These are not roaming armies by any means. These are certainly locals who have organized themselves under local leadership to protect their own neighborhoods.

Chairman LEVIN. The partnering issue?

Admiral OLSON. Sir, the partnering is in that there is a small team of U.S. forces in a village that is then the naturally partnered force with the ALP in that village. They stay for months at a time there, and so this becomes a very strong partnership. But again, it is an Afghan Government-administered program with the U.S. forces strongly supporting it.

Chairman LEVIN. Are Afghans with us in any operation that we are involved in?

Admiral OLSON. Sir, in all of the operations that are conducted in Afghanistan, there are Afghans involved.

Chairman LEVIN. Thank you very much.

Senator McCain.

Senator MCCAIN. Well, thank you Mr. Chairman.

As a follow-up to the chairman's question, does it concern you, General Mattis, that the defense ministers of various allies who have troops and commitments in Afghanistan have said to me that, "Well, if you are going to begin to withdraw, we will begin to withdraw as well." Is that of concern to you?

General MATTIS. It would be, sir. It is why we have to engage with them.

Senator MCCAIN. So we expect them to stay, while we withdraw?

General MATTIS. I think what we want them to do is, as we look at the transition process, Senator McCain, we make certain in their area that we follow the transition guidelines, and in some cases, that may mean withdrawal. In some, it may mean that they reinvest the people that they have achieved some success with into another area. Maybe that they go into training, that sort of thing.

But there is no misunderstanding that the Americans are carrying the bulk of this fight, over 100,000 troops, and I think that our commitment is pretty straightforward, both fiscally and troop wise.

Senator MCCAIN. I know Libya is not within your AOR, but would you venture an opinion as to the difficulty of establishing a no-fly zone?

General MATTIS. My military opinion is, sir, it would be challenging. You would have to remove the air defense capability in order to establish the no-fly zone.

So no illusions here. It would be a military operation. It wouldn't simply be telling people not to fly airplanes.

Senator MCCAIN. Declaration of a no-fly zone to the enemy would have a significant deterring effect on their desire to fly. I think we know that to be the case.

General MATTIS. Yes, sir.

Senator MCCAIN. Obviously, the events in Bahrain are of great concern to you and all of us. How much Iranian involvement have you seen in these? I fully understand this is a popular uprising, but isn't it into some respects a proxy conflict between Saudi Arabia and Iran?

General MATTIS. I think the current Tehran regime is incapable of trying to let other nations just take care of their own issues. They have to meddle and create mischief.

The Bahrain situation I think is a legitimate popular effort. But I am under no illusions that the Iranians would not try to take advantage of this issue or any other, whether it be in Lebanon or anywhere else in the region.

Senator MCCAIN. The loss of the Fifth Fleet headquarters would be a significant setback?

General MATTIS. It would be. But right now, sir, from even the opposition, our sailors who live out in town, driving to and from work, have encountered zero anti-Americanism. I was just there

about a week ago, and there is no hostility directed towards Americans right now—obviously not from the government with whom we have been very good friends for 40, 50, 60 years, but not from the opposition either.

It has been heartening, actually. The DOD school has been open every day. We are on about the 12th day with no violence. So it is not right now something that concerns me.

Senator MCCAIN. Given the long-term needs of Iraq, how are the deficiencies of the Iraqi Security Forces—such as maintenance, readiness, intelligence fusion, and particularly the building of an air force—going to be addressed absent U.S. troops?

General MATTIS. You hit the three points that we are concerned with. Under logistics, it is maintenance as well, how they keep their gear going. The intelligence fusion and the air sovereignty are critical.

I think right now there are going to be loose ends unless the Iraqis ask us to stay and work on these issues. Those loose ends would be difficult for them to overcome on their own, sir.

Senator MCCAIN. Hezbollah is now the dominant actor in the government of Lebanon. Do you think the United States should continue providing military assistance to the Lebanese air forces, armed forces, or is it something we should wait and see? What is your view of that situation?

General MATTIS. Well, we saw Hezbollah use threats of violence to undercut the government. We are all very much aware of that. The new government is still in formation, and we will have to take a very close look at how it is organized and how it is formed to deal with Lebanon's future.

I think that an inclusive government is the only option that works with the various confessional groups that try to share power there. But I believe right now, if we look at the example of Egypt, and we look at what happened where we were able to maintain, under some criticism that Congress came under for giving us the amount of money that we gave to the Egyptian military, but we were able to maintain a relationship there that paid off, I think, when it came time to see them either ethically use their position to help the people of the country or what we see in Libya.

So as we look at Lebanon, where they have never lost track of any of the equipment that we have given to them yet—the equipment given to the Lebanese armed forces, I think we should look at the quality of the government as it is put together, recognize that the military can actually be a bulwark against malign influence, and act in our best interest once we have made that analysis.

Senator MCCAIN. Have you seen the news reports that a number of people were arrested in Iraq as a result of demonstrations?

General MATTIS. I have. Yes, sir. The ones on, I think, the 26th? Yes, sir.

Senator MCCAIN. So it is of concern that they would be arresting demonstrators in a country we expect them to allow demonstrations?

General MATTIS. Sir, the demonstrations were not as large as we expected, but they were spread all over the country. The demonstrations, by and large, were peaceful. The Iraqi Security Forces were out, and al Qaeda did not take advantage. I don't think they

could take advantage of this opportunity to kill more innocent people.

In the midst of that, there were some people who did things like stone troops. There were about as many people injured on the Iraqi Security Force side, around 50, as there were injured total and killed, unfortunately, on the demonstrators' side. Those appear to be contained in each case where government buildings were stormed. Prime Minister Maliki has said that he will investigate each death, each injury, and make certain they know what happened in each case.

So I think right now what we saw was, by and large, a very restrained use of force by the Iraqi Security Forces in regards to the demonstrators. There was no opening fire on them. It was a much more restrained effort. I don't know what all the investigations are going to show yet, Senator, but I would like to get back to you once I see what we can find through our intel sources.

[The information referred to follows:]

In coordination with U.S. Forces Iraq, we have determined the protests drew approximately 27,000 Iraqi citizens to 43 demonstrations across the country. Protestors directed many of their grievances at provincial governments. The largest demonstrations were in the cities of Baghdad, Mosul, Basrah, and Fallujah. Individual demonstrations ranged from a few hundred up to 8,000 protestors. While the protests were largely peaceful, 14 of 43 turned violent, usually after the demonstrators attempted to enter or damage government buildings. Current reporting has determined that 119 Iraqis and 4 journalists were detained across Iraq on the day of 25 February. At this time, I do not know the specifics of each arrest.

In several cases, security forces responded to violent demonstrators with small arms fire. Prime Minister Maliki has initiated investigations to determine what happened in these instances. In total, 11 Iraqi citizens were killed; 72 citizens were injured, and 45 members of the Iraqi Security Forces were wounded.

Senator MCCAIN. Thank you very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain.

Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Thanks to both of you. General Mattis, thanks for your service. Admiral Olson, also let me join those who are thanking you for your extraordinary career of service to our country and the time particularly in which you have been the leader of SOCOM, and through you really to thank everyone who serves under you in that command.

This is a remarkable group of Americans who I have had the privilege to meet as I have traveled around, particularly to battle zones. Honestly, every day they are performing critical and dangerous missions with a remarkable degree of skill, bravery, and I would say patriotism, and also, of course, effect.

A lot of that has grown and developed under your watch. I can't thank you enough for that, and thank all of them.

Let me just give you an opportunity to develop a little more your metaphor that the fabric is strong, but around the edges there may be a little fraying of the SOF. What are the specific shortfalls that you would like to see us address to make sure that the whole fabric is as strong as you and we want it to be?

Admiral OLSON. Thank you, sir.

I got an email not too long ago from an operational commander forward who said, "Sir, the good news is that the demand for SOF

is higher than ever. The bad news is the demand is higher than ever."

As 100,000 U.S. troops came out of Iraq, only fewer than 1,000 were from SOF. At the same time, we saw a requirement to move more than 1,500 into Afghanistan. This is the force that, as you said, has earned its way to real importance in terms of executing strategies in those conflicts.

It is at the point where for some elements of our force, time at home with their families has become the abnormal condition. They have to adjust to being home rather than adjust to being away. It is those elements of the force that I am seeking to provide some relief for in terms of 1,000 programs.

There is no magic answer to this. It is gaining a greater understanding of what the real issues are. It is shaving where we can the number of days that they are away from home for training when they are not forward deployed. It is putting more predictability into their lives. It is relieving every special operations member of any job that can be performed by anybody else.

I do believe that the Services—Army, Navy, Air Force, and Marine Corps—could invest in capabilities that would provide more habitual, more timely support to SOF. We are in those discussions with each of the Services.

I do believe that the quality of the training, the equipment, and the facilities that we provide them is certainly a factor in ensuring that this force, in which we have invested so heavily for 10 years, will still be with us 10 years hence.

Senator LIEBERMAN. Well, I appreciate that answer, and I am sure the members of the committee look forward to working with you and your staff to see if we can help you with some of those.

General Mattis, as Senator McCain said, we had the opportunity to travel through some of the Arab world last week where these remarkable changes are occurring. My own feeling is that while you are right, there is both opportunity and challenge, that the opportunity here is greater.

It is really remarkable to see these peaceful revolutions occur, which have to make both the leaders of al Qaeda up in the mountains feel that history may be passing them by, but also represent a real direct threat to Iran, which I think you correctly and characteristically bluntly identify as our greatest long-term threat in the region.

I want to just come back to Libya briefly because I was interested that in some of our visits with young people and others in Tunisia, Egypt, where these revolutions have succeeded, they are watching how the world responds to Gaddafi's brutality to his own people. Because they are taking it as a sign of if Gaddafi can survive, they worry that other leaders in the Arab world will similarly try to repress revolutions.

I know the administration is considering a range of options now with regard to Gaddafi. I know Senator McCain asked you about the no-fly zone. Have you, in your CENTCOM role, been asked to prepare for any activities relating to Libya, including, for instance, the provision of humanitarian assistance, medical supplies, food, to people in the liberated areas of Libya?

General MATTIS. Senator, as you understand, this comes under Africa Command's (AFRICOM) AOR.

Senator LIEBERMAN. Yes, sir.

General MATTIS. I have dispatched ships under the order of the Secretary of Defense that could provide options to the President. Yes, sir.

Senator LIEBERMAN. That is reassuring to hear. I know it is the AFRICOM. But obviously, you have a lot of assets in the region, and I am encouraged to hear that they are moving to be available.

Going back to Iran, for some period of time, there was a certain uncertainty, if I can put it that way, about the extent to which the Iranians were assisting the terrorists and extremists in Afghanistan against us. It was clear that they were assisting the Shia extremists in Iraq and, unfortunately, have a lot of American blood on their hands as a result.

Could you tell us a little more now about the state of our conclusions about what the Iranians are doing to help the Taliban or other anti-government, anti-American forces in Afghanistan?

General MATTIS. I can give you an incomplete answer, Senator. They have given low levels of ammunition, money, that sort of support, improvised explosive device components, to our enemies in Afghanistan. At one point, the Taliban and Iran were very much at odds with each other, to include the Taliban killing a number of Iranian diplomats there in northern Afghanistan.

But the reason I say I am giving you an incomplete answer is we are keeping a very sharp eye on some recent information we have to see if they are, in fact, elevating their support, which would be very, very unwise for them to do.

Senator LIEBERMAN. Thank you, sir. My time is up.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

Again, we would all echo the remarks about your service, Admiral Olson. You certainly will be missed.

When we are talking about the withdrawal of troops in Afghanistan, occasionally the President talks about conditions on the ground. I am not sure just what is going to happen, what these timetables are.

But I would say this. I have had the opportunity, going all the way back to the fall of 2003 when it happened to be the Oklahoma 45th over in Afghanistan helping the ANA to train themselves, and they were doing really a great job. But each year when, we go back and see it, we see this improvement in training. I think this really has to be recognized.

I don't see Senator Hagan here now, but she and I were there spending New Year's Eve in Afghanistan and had a chance to go down to the Kabul military training center. It is almost like looking at a training center here in the United States. I am talking about the separation between artillery and infantry, how they are doing it.

We had individual interviews, with interpreters, where just at random we would select people, and we saw the enthusiasm they have for their quality of training. So I see really great improve-

ments in the quality of training over there, and that was my personal observation.

General Mattis, are you as excited about that as I am?

General MATTIS. Sir, the success of this last year, especially as we see the Afghan forces coming of age, very much is depending upon the training, the superb training, and it is going exactly as you say. We now have metrics in place where we measure them. Then we are seeing the improved capability in the field. It has to be the enemy's worst nightmare.

Senator INHOFE. Yes, I would say that is true. When we talk to these individuals, they want this to be a career.

When I saw the position that the Egyptian military is going to be in during this new transition or whatever we are going into right now, I was somewhat pleased with it. One reason is that I have been a staunch supporter up here, probably the most staunch supporter, of the International Military Education and Training (IMET) program and what it has meant. With Egypt, it even goes further because we are talking about 3 decades now that they have done this.

My feeling was that one of the great benefits of the IMET program is that it develops a relationship between the military of other countries. I have seen this throughout Africa and elsewhere, which is why we have been wanting to expand it. So I felt pretty good about that.

I noticed that in 2010, our Egypt IMET program was at about $2 million and dropped down to about $1.5 million in 2011. I am trying to get the figure now as to what is requested for 2012.

I would like just to get you on the record on your feelings about the IMET program and how much that has benefited us, particularly with the situation right now as it is in Egypt.

General MATTIS. Senator, I think the IMET program is a strategic asset to us, where we bring those officers to our country. They go through training and education here. We then go on joint exchanges with them back in their country, exercises and all, and we see it pay off there.

But there is a longer-term payoff, and that payoff is when I walk into a room as a brigadier general back in 2001, and the first discussion I have with a half dozen officers is them telling me the best year of their life was in Maxwell Air Force Base or in Fort Leavenworth—and we immediately start from a position of common understanding. I think this is a strategic asset to us that we should certainly maintain full support for.

Senator INHOFE. All right. I appreciate that.

Do you echo those sentiments, Admiral Olson?

Admiral OLSON. Absolutely, sir. You can sign me up as a member of the IMET fan club. I was in a position long ago, a part of the implementation team of IMET in Tunisia, and that country was particularly well served by IMET.

Senator INHOFE. Yes. We were just a couple of days ago with Prime Minister Netanyahu. He was referring to the earthquake that is taking place right now. When Senator Lieberman was talking about the commands, it occurred to me that when we were in Stuttgart, we were with European Command, AFRICOM, and

CENTCOM. You have three commands, really, right now that are dealing with this problem.

Are you guys all talking to each other? Do you feel there is no problem in that you are dealing with an earthquake that has taken place in three commands?

General MATTIS. Sir, we have a very close working relationship, and there is strong collaboration between us.

Senator INHOFE. Yes.

Admiral Olson, we also had the opportunity of spending some time in Djibouti, and Admiral Losey, I guess it was, spent quite a bit of time with us. I was certainly impressed with what they are doing there.

When I look at your statement, it says, "We now total close to 60,000, about a third of whom are career members of SOF, meaning that they have been selected, trained, and qualified to earn the military occupational specialty or skill code identifier of the SOF."

Now that would be a third of the 60,000. Tell me a little bit about the other two-thirds that are not included in this category.

Admiral OLSON. Yes, sir. They are the full range of enabling, technical, supportive capabilities—engineers, logisticians, administrators, intelligence analysts, maintenance crews, and the like—that make the rest of it all possible. We are a broadly capable force. We do have our own airplanes, our own helicopters, our own boats, our own mini submarines. So, this requires a supporting crew that has to be quite expert as well.

Senator INHOFE. Well, we are concerned about your resources, that you have them, because we know what your mission is and what you have been able to do. Is everything going all right in terms of retention and recruiting?

Admiral OLSON. Sir, the recruiting is good. The recruiting has been pretty consistent over the last decade, even consistent across the 9/11 attacks. Retention has been pretty good. It has been above the service averages in almost every category.

Senator INHOFE. Which is very good, too.

Admiral OLSON. Yes, sir.

Senator INHOFE. Yes.

Admiral OLSON. We are beginning to see at the mid-grade level, sort of the 8 to 10 years of service point, a slight leveling off of the retention.

Senator INHOFE. All right. Thank you.

My time has expired. But if you, maybe for the record, could elaborate a little bit on your numbers that you have right now as you look into the future and how this—whether the 60,000 is going to be—increasing it, if that is going to be adequate, for the record.

Admiral OLSON. Sir, for the record, in my opinion, it is adequate. I believe that the key to special operations capability beyond our current numbers is mostly in terms of supporting special operations from the much broader range of capabilities within the department, with habitually assigned units that are timely in their response, that understand what special operations is and how to support special operations requirements.

I am calling this the "special operations force generation concept" and working with each of the services on how they can contribute

to that and how we can contribute to their force generation cycles, as that is appropriate.

The specific answer to your numbers question is that—and I am on record before this committee now in 3 previous years as saying we should not, we ought not grow more than 3 to 5 percent per year in our manpower because of the quality that we need to maintain as we do that. We are projected to do that for the next 3 or 4 years.

Senator INHOFE. That is good. Thank you.

Chairman LEVIN. Thank you, Senator Inhofe.

Senator Nelson.

Senator NELSON. Thank you, Mr. Chairman.

Also let me add my appreciation, Admiral Olson, for your service and best wishes for your future.

IMET is a very important part of what I would hope to be our outreach to the world in a way that makes good sense. I have had military officials from Egypt in my office before who have been here getting the IMET training, and I have been impressed with their appreciation and their understanding of what kind of military—or what the military should do in connection with government.

My question would be do you think that the difference between the way the military has behaved in Libya and the way military behaved in Egypt is, at least in part, due to their IMET training?

General Mattis?

General MATTIS. I think there is no doubt it has contributed, sir. Each nation has its own history, its own culture. But I think the ethical performance by the Egyptian military was impacted by their time spent in our schools over these last decades.

Senator NELSON. The same would be true in the case of Tunisia as well?

General MATTIS. Yes, sir.

Senator NELSON. Do we have any plans to try to expand the program? I know resources are tight right now. But one of the best ways of avoiding future expenditures is to have ethical military operatives in other countries. Are there any plans that you are aware of to expand this to perhaps some other countries where there is an interest?

General MATTIS. I am not aware of plans to expand it. Of course, the Secretary of Defense can open the door to different countries at different times, give them more school seats, that sort of thing. I think it would be a resourcing issue. You would have to have more instructors, more classrooms, this sort of thing. I think it is worth looking at, but I am not aware of any plans right now to do so, Senator.

Senator NELSON. Well, we will try to take this up with the Secretary. I appreciate, though, your response.

General Mattis, I have been a strong proponent of benchmarks with metric measurements for Afghanistan and Pakistan. I had support for those in Iraq as well, and I am interested in your evaluation of the benchmarks.

The last report was in November 2010, and it is my understanding the next report will be provided in April of this year. So perhaps I am a little ahead of the report progress. I would like to

know whether or not the report in November stated that the assessment of governance in focus districts showed that 38 percent of the population lived in the areas rated as having emerging or full-authority Afghan governance.

It reflects no change through March 2010. I wonder are we trending up, or are we flat-lined, or are we trending down at this point? I am talking about both Pakistan and Afghanistan. There may be a difference in each of the countries.

General MATTIS. Oh, there is significant difference, sir. Let me address Afghanistan, where General Petraeus and Ambassador Eikenberry lead our effort in supporting the Afghan governance. I will tell you that this is receiving a lot of attention. We are making progress.

I believe it is lagging behind the security effort. I think that is somewhat understandable. You don't get governance in until you get enough security that people can, without concern, carry out the governmental functions.

At the same time, we are dealing with a country that probably took several hundred billion dollars' worth of damage during decades of war, according to the International Monetary Fund. When you translate that into the human damage and the damage to the people, the education system, this sort of thing, it is a long, hard slog to create the kind of governmental organizations and the right people who can then create the kind of progress that will reflect in those metrics, sir.

The Pakistan military is where I have most of my connections. But from what I read, I have concerns about Pakistan's governance and their ability to meet the needs of their people. I believe right now that President Karzai may actually be in a better position on this than the political leadership in Pakistan.

Senator NELSON. Both Afghanistan and we depend on the Pakistani military and the Pakistani Government to be able to take care of those largely isolated areas—I guess Swat and the particular areas there—where there are safe havens for al Qaeda, the Taliban, and other hostile operatives. That makes it much more difficult for us to be able to contain and degrade and defeat that enemy. Is that fair?

General MATTIS. It is very fair, sir. Again, it is the Federally Administered Tribal Area (FATA), which constitutionally is under a different sort of governance even within Pakistan.

Further, I think the impact of the floods this year—we served alongside the Pakistan military that performed very well providing relief and life-saving efforts. But those floods, which were enormous in their impact—the worst in a hundred years—I don't know that once the Pakistan military had done what they could do in terms of saving the people from those floods, that there was a sufficiently robust governmental response then to help those people put their lives back together.

Senator NELSON. So the attitude towards the government may not be as strong as it could be if the government had a strong follow-up response?

General MATTIS. I believe you are right. I don't have the data. I haven't looked at it specifically. But I believe you are correct, Senator.

Senator NELSON. Okay. My final question, General, is that as we trend out of Iraq and we come upon December 31, there is some concern that maybe the Iraqi Government will ask us to remain. I don't have any indication of that, but just a general concern that perhaps their security is not sufficient for them to be able to self-govern.

If that is the case—and I asked this of Secretary Gates recently. If that is the case and we are in a position where we might make the decision to stay, I would hope that we would do so, recognizing that from that point forward, that we would expect the Iraqi Government to pick up a bigger share of the cost that we would incur.

It is my understanding they are dealing with a deficit there, just as we are here. But it only adds to our deficit. If I have to choose between mine and theirs, you know what I am going to choose. If that happens, I would hope that we would be thinking about how we can make certain that the Iraqi Government picks up a bigger share of any costs that we would incur going forward.

That is less a question more than a wish. In that regard, I hope that you will keep that in mind because, obviously, it will come indirectly under your jurisdiction. Have you had any thoughts about that? Should we be asked to stay?

General MATTIS. I haven't looked specifically at your point. However, there is clearly an increasing sense of responsibility by the Iraqi Government toward resourcing their own security forces. I think that would be a natural part of the negotiations between the two governments if we were asked to stay.

Senator NELSON. Yes, I would hope that we would make that a part of the negotiations because that is what we would have to do. We can't just assess it. We would have to have a common agreement.

General MATTIS. I have it, sir. Thank you.

Senator NELSON. Well, thank you, General Mattis, and thank you for your service and all the men and women under your command. We appreciate their continued sacrifice and service, and their families as well. Thanks.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Nelson.

Senator Ayotte.

Senator AYOTTE. Thank you, Chairman.

I also want to commend Admiral Olson and General Mattis for your distinguished service to our country. Please express our gratitude to all the troops that serve underneath you for all that they are doing to protect our country.

In recent hearings, Secretary Gates as well as Secretary Vickers have testified that approximately one out of four detainees who have been released from Guantanamo have gotten back into the fight. Admiral Olson or General Mattis, could you tell us a little more about what are the details regarding some of these detainees who are joining the fight?

Have there been examples where some of these detainees have actually injured or killed American troops that have been returned back into the fight?

General MATTIS. Senator, the best data we have would show approximately 25 percent have either returned, and we can confirm it, or we strongly suspect they have returned.

Twenty-five percent is a concern to all of us involved in this war because it reinforces the enemy. It gives people some degree of credibility because they have been in our hands. They have gotten out.

So, yes, ma'am, it is a big concern.

Senator AYOTTE. Have there been examples where some of these detainees who have returned to the fight have actually injured our soldiers or killed our soldiers?

General MATTIS. I don't have a specific example of that. However, for example, we know one of them is the number two person in AQAP. Clearly, he is engaged in trying to do so. If he hasn't, it is just because he hasn't been successful yet, but his intent is exactly what you are suggesting.

Senator AYOTTE. He is obviously directing members of al Qaeda to kill American troops. That is a deep concern, given that we released him from our detention facility.

I am deeply concerned about our policy toward detainees and release back into theater, and I think that the least we can do for our troops is to hold those who are dangerous and not allow them to get back into theater to harm our troops. It is certainly something that I look forward to continuing to work with others in the Senate to make sure that we have a sensible detention policy that doesn't allow these terrorists to get back into theater.

General Mattis, I know that we have emphasized that, of course, Libya is not directly in your responsibility. However, you mentioned that recently you have dispatched ships to provide options and assets in the region itself.

Last week, there were many nations who were sending military aircraft and ships to Libya in order to evacuate their own citizens that were in Libya. As I understand it, we sent and chartered a civilian ferry to try to take the civilians that were in Libya, U.S. citizens, to get them out of Libya. Yet that ferry actually couldn't depart port for 2 days due to high winds and waves.

Are you aware whether certain nations, including Germany and Great Britian, actually sent military assets to be able to get its citizens out of Libya?

General MATTIS. Senator, I am not aware of the specifics here. As you will understand, I have been a little busy in my own theater. But I think what you are saying is about right, but I can't confirm it.

Senator AYOTTE. Do you know if we had wanted to, whether we could have sent military assets to be able to get our civilians out of Libya, as other countries did?

General MATTIS. Ma'am, again, I don't keep the Mediterranean picture. I am not current on it. So I don't know what ships or aircraft were available at what time and where they were and what airfields were open. I really can't give you a good answer on that.

Senator AYOTTE. Okay. But you are now, of course, sending some of our CENTCOM assets over to assist in that area, as you testified earlier?

General MATTIS. Yes, ma'am. We have. Those were to give whether it be humanitarian or whatever options the President may want. Those assets have been sent through the Suez Canal.

Senator AYOTTE. Had you been asked to do that last week, is that something you would have been able to do earlier last week, as opposed to where we are now?

General MATTIS. Yes. Well, ma'am, the way it comes to me is not as a request, frankly. I get orders. But, yes, ma'am, we can do it on order. Obviously, I have my own requirements in the theater. It is always a balancing act that the Secretary has to go through between different combatant commanders.

Senator AYOTTE. General, you would have certainly had the capability of doing it last week, as opposed to where we are right now?

General MATTIS. Yes, ma'am.

Senator AYOTTE. Thank you very much. I appreciate both of you testifying before the committee today.

Admiral Olson and General Mattis, thank you so much for your distinguished service to our country.

Chairman LEVIN. Thank you, Senator Ayotte.

Senator Webb.

Senator WEBB. Thank you, Mr. Chairman.

General, Admiral, greetings. I am hoping that you can help provide us a little bit of focus in terms of how we are going to approach similar situations in the future.

Not long after September 11, a coalition of Afghan forces, assisted by a handful of special operators, Forward Air Controllers, kicked out the Taliban in a matter of a few weeks. We were the enablers, for lack of a better term, not the instruments or the creators, of societal change in that evolution.

We took a different approach in Iraq. We are taking a different approach today in Afghanistan. We have undertaken a duty, I understand, what I would call the concept of negligence in the law. Once you undertake a duty, if you don't see it all the way through, you are guilty of negligence. At the same time, we need to really start looking at the future in terms of how we are going to use our military.

Secretary Gates made a speech at West Point recently, indicating that, in his view, this troop-heavy concept read pretty much nation building is not a model that should be applied in the future with respect to issues of international terrorism. At the same time, General Casey, over the past day or 2, mentioned that he wouldn't be surprised to see 100,000 Army soldiers deployed in these types of operations 10 years from now.

I would like to hear your thoughts on where should we be moving here in terms of the use of our ground troops in issues of combating international terrorism? General?

General MATTIS. Senator, I think, as we look toward the future, I have been a horrible prophet. I have never fought anywhere I expected to in all my years.

I believe that we have to take each situation on its own, and we have to define the problem to a Jesuit's level of acceptability. It has to be defined to a point that the solution is very clear in terms of

what is the strategy we must adopt. The strategy, of course, is what are the ends, and what are the means to get there?

The one caution I would give, having studied this problem, is that we cannot marry one preclusive view of war and preclude other types and say we just won't do that because the very nature of war is the enemy will gravitate toward our perceived weakness. We are going to have to have a force that has a built-in shock absorber, basically can go anywhere and do anything, at the same time have a moderating impact on our own strategy, so we don't try to go anywhere and do everything.

It has to be a vital national interest, and we have to make sure we have a force that is a general-purpose force that does not allow the enemy to think that we are leaving some form of warfare uncovered and then works against us in that direction.

Senator WEBB. I wouldn't disagree with you on that at all. At the same time, I can recall having written a piece the day after September 11, discussing how to deal with international terrorism, and two of the concepts in that—you build your strategy off of operational concepts and the enemy that you are facing.

Two of the clear concepts in that was, number one, you have to maintain your maneuverability, and, number two, when you are fighting a mobile enemy, you are at risk whenever you occupy territory and then have to defend the territory that you are occupying. I think that those are the decision points moving toward the future.

Admiral, do you have any thoughts on that?

Admiral OLSON. Sir, I think when the enemy is a ponderous, state-sponsored, uniformed, organized fighting force, it may require a similar force to defeat it. But I think that is less likely in the future. I agree with Secretary Gates on that.

We are much more likely to see the less regular kinds of warfare—the cyber warfare, the terrorist warfare, the non-state sponsored warfare—to which the best solution is often enabling another country's forces to deal with it in that region and being, as you said, the supporting force, not the supported force in that fight.

Senator WEBB. Again, clearly, in terms of international terrorism, the whole operational concept is to not align themselves with a state.

By the way, I would not in any way disagree with what General Mattis just said about keeping all your options on the table. But it just seems to me with the variety of threats that face us right now, the type of response that we have made over the past 8 or 9 years is not a workable model. It concerns me a good bit.

General, I want to ask you a question about Pakistan. I have raised a number of questions over the past 2 years about the transparency of our funding in terms of assistance to Pakistan. Are you comfortable with the transparency of the money that is going into Pakistan, and that you know where it is going?

General MATTIS. I am, Senator; they don't do it by computer. So it is all written out by hand, and we track it right down to the end user.

I have some of the most aggressive colonels and majors you can imagine in Islamabad working under my vice admiral there who

track this, and we routinely reject requests from them for reimbursement.

I know it is not where they just walk in with a bill and we pay it. Sometimes the ones we want more evidence of outweigh the numbers that we just accept and say, "Yes, we know you did these things. So we are going to pay you." For example, fuel for our forces and that sort of thing that comes in.

So, yes, I think we do have a very good feel for whether or not we are reimbursing real costs vice any fraudulent costs.

Senator WEBB. We have seen news reports that Pakistan has doubled its nuclear arsenal in recent years, as we have been providing assistance in other areas. Do you have any worries that our assistance to Pakistan has allowed them to fund programs such as their nuclear program?

General MATTIS. I am confident there is no direct funding going to their nuclear program because of my confidence in tracking the costs we are reimbursing them for now. Obviously, they have their own funding, and whether or not they would spend some of that elsewhere, if we weren't reimbursing——

Senator WEBB. Right. I understand that direct money would not be going over there. The concern that I have is that if we are funding programs that they otherwise would be funding and they are able to take that money in order to increase their nuclear arsenal, it is not a healthy situation for the region and for us, in my view.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator Webb.

Senator Wicker.

Senator WICKER. Thank you, Mr. Chairman.

Thank you, gentlemen.

General Mattis, let me follow up on a line of questioning Senator McCain began. I was not in the room at the time, but I understand that he got a brief answer to this so-called day of rage in Iraq.

Let me see if I could explore this a little further. In particular, I would point out a Washington Post Foreign Service story that appeared on Saturday, February 26, in which it is reported that Iraqi Security Forces detained hundreds of people, including prominent journalists, artists, and intellectuals, in demonstrations that brought thousands of Iraqis to the streets and ended with soldiers shooting into crowds.

It goes on to say that this involved more than a dozen demonstrations across the country that killed at least 29 people, as crowds stormed provincial buildings, forced local officials to resign, freed prisoners, and otherwise demanded more from a government they only recently had a chance to elect.

Is this, in your judgment, General, an isolated incident? Or is it an example of the contagion that is sweeping the entire region? What does it say about the popular support of a government which recently was subject to election?

I understand the complications after the elections of the government being formed in a very fragile manner without a clear consensus. How accurate is this depiction? How worried should we be that this country, where we have invested so much of our blood and treasure, might be just as unstable as some other regimes?

General MATTIS. Senator, I can't comment directly on the accuracy of the story because the word that I have is there were dozens of demonstrations. But I take that as a positive sign. Those did not happen 15 years ago under Saddam.

It is a nascent democracy. It is the one that has been through a very violent era. A critical part of our training of the Iraqi Security Forces has been the ethical use of force. They are also still operating against a very capable terrorist enemy.

For example, the minister of defense of al Qaeda in Iraq was killed on that day—I believe it was on that day—by Iraqi Security Forces. It was a very good event for us.

Senator WICKER. Was he part of the protests?

General MATTIS. He was not. But my point is that the enemy operates in this country, even as the people are trying to exercise their freedom to protest. I believe, from what I am told, that the number of Iraqi Security Forces injured and the number of demonstrators injured and killed is about the same.

The reason I bring that up is that that is oftentimes an indicator of whether or not a military just opened fire on a crowd. You open fire on a crowd with an automatic weapon, and the casualties are going to be significantly higher than the ones reported either by the government or by the newspaper article.

Frankly, I wasn't ready for your question. I need to go back and check and see if I missed something in our assessment of what happened that day. I need to get back to you, Senator, because the numbers you are citing are higher than what I was told.

Senator WICKER. I see.

General MATTIS. In most cases, it was when a government building was attacked, and most of the injured soldiers were in place, were injured by rock throwing. So that is the kind of the framework I am looking at it through.

Senator WICKER. So I can expect you to supplement your answer on the record, and I appreciate that.

[The information referred to follows:]

In coordination with U.S. Forces Iraq, we have determined the protests drew approximately 27,000 Iraqi citizens to 43 demonstrations across the country. Protestors directed many of their grievances at provincial governments. The largest demonstrations were in the cities of Baghdad, Mosul, Basrah, and Fallujah. Individual demonstrations ranged from a few hundred up to 8,000 protestors. While the protests were largely peaceful, 14 of 43 turned violent, usually after the demonstrators attempted to enter or damage government buildings. Current reporting has determined that 119 Iraqis and 4 journalists were detained across Iraq on the day of 25 February. At this time, I do not know the specifics of each arrest.

In several cases, security forces responded to violent demonstrators with small arms fire. Prime Minister Maliki has initiated investigations to determine what happened in these instances. In total, 11 Iraqi citizens were killed; 72 citizens were injured, and 45 members of the Iraqi Security Forces were wounded.

Senator WICKER. As to the larger question, though, sir, of whether we need to be concerned about this government falling, much as governments in the region have toppled and are toppling one by one, what is your informed judgment as to the larger question?

General MATTIS. Well, the election was very close. It took months—I think 8, 9 months—to actually get a government formed. In close elections in a parliamentary system, that is understandable. I think it is still a work in progress.

The performance of the Iraqi Security Forces during that long period, when there was just basically a caretaker government at work, gives me some degree of confidence that the security forces can protect this nascent democracy as it grows its roots. But one or two elections doesn't make a democracy, as we all know, and there is a lot of work that still has to be done. Right now, I do not think that it is in danger of falling.

Senator WICKER. To what extent are the supporters of Mr. Allawi supportive of the government as it finally emerged?

General MATTIS. I think that is still a work in progress as well, as we see where Mr. Allawi falls out in the organization of the government. I spoke with him about 2 months ago in Baghdad, and he was still relatively positive at that time that he was going to have a meaningful role. That would bring the people you are referring to onboard with him.

Since then, it has been difficult to see progress, but I think it is always slower than we want to see. I think there is still progress along those lines, but I don't know where it is going to fall out right now. I think it is still too early to say.

Senator WICKER. Finally, to what extent do we need to be concerned about Iran attempting to influence the foreign policy of Iraq?

General MATTIS. I have no doubt that Iran will attempt to influence the foreign policy and domestic policy of Iraq.

Senator WICKER. Is this a serious problem or simply one of the many concerns that we have?

General MATTIS. I think Iran is going to be left behind by this contagion, as you described it, sweeping across the region, as they find that people are not interested in exchanging one authoritarian for one like in Tehran. So I think they have as much to worry about from this contagion.

Actually, I think, in many cases, the Iraqi people are quite capable of making up their own mind without Iranian help, and that will continue to manifest. I am not naive about Iran's intent here.

Senator WICKER. I hope you are correct. Thank you.

Chairman LEVIN. Thank you, Senator Wicker.

Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman.

I certainly want to thank Admiral Olson and General Mattis for your excellent service to our country. Thank you so much.

The Marine Corps Forces Special Operations Command (MARSOC) was established in 2005 and is headquartered at Camp Lejeune in North Carolina. Some have suggested that MARSOC personnel should be special operations for life, rather than rotating through the command on a rotational basis as they are currently doing.

They argue that this would help SOCOM create and retain personnel within the special cultural and language skills that are critical for success in irregular warfare and the foreign internal defense missions.

Admiral Olson, what is your assessment of the progress made in standing up and growing MARSOC, and how are they unique within the SOF? Could you also give me your thoughts on whether the

Marine operators should be special operations just for life, just as in the Army?

Admiral OLSON. Thank you, ma'am.

First, I would say we can be very, very proud of the way that MARSOC has been established. It did just celebrate its fifth birthday last month, and they have made tremendous progress.

They have been deployed at the battalion level now for over a year with tremendous effects in western Afghanistan and earning an awful lot of respect from the forces with which they serve. It has been a very close partnership between SOCOM and the U.S. Marine Corps in building the MARSOC to the extent that it has so far.

The Commandant of the Marine Corps has recently approved a military occupation specialty for those who have been through selection and advanced training to be members of the MARSOC, which will help us track and retain selected members of that community. I do believe that SOF for life is a concept that ought to be limited, that there is great value to circulation, that it is good for SOCOM to circulate people through its community back out into the big services and to bring people from the big services into our community so that we are not guilty of spinning a cocoon too tightly around ourselves in the special operations community.

I am quite comfortable with the way it is going now. Even those who are in for sort of one tour in the MARSOC, that is now at least a 4-year tour and in some cases 5 years, which goes beyond some of the other services in many cases.

Senator HAGAN. Thank you.

On February 17, Secretary Gates indicated during his testimony before this committee that it is unsustainable for the United States to fund a sizable ANSF indefinitely. He suggested that perhaps the United States could temporarily fund the ANSF as a sort of surge in security assistance and then reduce that as conditions in Afghanistan improve and as the ANSF becomes more capable.

General Mattis, can you elaborate on what Secretary Gates discussed on February 17?

General MATTIS. I can, Senator. If you look at what has happened with the Taliban, beaten down badly in 2001, was able to regain its balance and come back strongly, and then over this last year or 2, we have reversed their successes.

So we have surged our own military. NATO has surged. The troop-contributing nations have—about 100,000 United States, about 50,000 non-U.S. coalition. We have about double that on the part of the Afghans.

What you are seeing is we are going into a critical time, and we are going to have to fight it out. As the enemy loses—and they will lose—we will succeed. Then there is going to come a point where you don't need as many international troops and eventually, perhaps, not as many Afghan troops and police because the enemy has been taken down. So the idea that Secretary Gates explained about a surge right now shows the normal ebb and flow that could result as a result of this kind of war, as the enemy's fortunes start going backwards.

Senator HAGAN. You said that you thought the ANSF could also, at some point, reduce its numbers?

General MATTIS. Well, I believe that at some point after the country gets more mature, it has more opportunity for young people. So there is not the breeding ground there for young guys to go join the extremists. Then the demand, the requirement for the size of those forces could well drop off.

Senator HAGAN. Thank you.

Admiral Mullen has indicated that the longstanding U.S. military-to-military relationship has contributed to the professionalism of the Egyptian military. Experts have indicated that it is important to sustain Egypt's annual military aid because regardless of how events unfold in Egypt, the military will likely preserve its unique position within the governing system.

They have also argued that freezing military aid to Egypt undermines the leverage that our Government has to promote an effective transition and to persuade the Egyptian armed forces to abide by the peace treaty with Israel.

General Mattis, what is your position on the future of the U.S.-Egyptian military-to-military relationship? How might restructuring the foreign military financing allocation to Egypt impact our strategic objectives in the country, as well as the Egyptian-Israeli peace treaty?

General MATTIS. Senator, I believe that we should remain relentlessly engaged with the region. This is not the time to pull back.

I am on the phone, for example, with General Anan, the chief of defense of the Egyptian military, on a routine basis. I have seen him in Egypt. There is a degree of professional respect there that allows us to have very candid discussions.

He has been very proud of the fact that they are a caretaker military government. They are going to move quickly toward elections. I don't think you can disconnect that from the experiences of his officers, who have spent years in our country going through schools. I think that right now the military-to-military relationship and the ethical performance of the Egyptian military are very tightly tied together.

This has to do with regional peace. This has to do with Middle East peace, as you know so well from decades of peace between Egypt and Israel. I endorse what we are doing right now, and I think we should continue.

Senator HAGAN. As far as the treaties, do you feel confident that they will abide by these treaties?

General MATTIS. Yes, ma'am, I do. It is in Egypt's best interest as well. But I am hesitant to get into the political arena and start forecasting things.

Without a doubt, our military-to-military relationship, I think, is helpful in terms of being a stabilizing force and, I might add, with a force that used its authority in an ethical manner when a crisis came.

Senator HAGAN. They did. Thank you.

My time has expired.

Chairman LEVIN. Thank you, Senator Hagan.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

I join in thanking both of you, Admiral Olson and General Mattis, for your service and the service of the courageous and dedi-

cated men and women under your command. I want to ask a couple of questions about those men and women who are serving and sacrificing so courageously.

Admiral Olson, last year, I believe you testified that the SOCOM's Care Coalition was supporting 2,800 wounded SOF officers through a clearinghouse that works to increase the likelihood of their returning to service or having lives afterward. I think that clearinghouse exemplifies one of the SOF truths, which is that humans are more valuable than hardware, an emphasis that I certainly appreciate.

I wonder if you could share with the committee an update on what SOCOM is doing to manage the kind of care, medical care, counseling, and other kinds of care that are necessary for these wounded warriors?

Admiral OLSON. Thank you, Senator.

I thank you for highlighting the Care Coalition. It was actually mentioned by Admiral Mullen as the gold standard for DOD, and we are quite proud of it.

Part of the true value of the Care Coalition is that the population with which it works is small enough that the relationships are personal. So that when somebody calls the Care Coalition for some help, a wounded or a family member, they are known to the Care Coalition. It is difficult to scale this up too much, but so far, it is within a manageable level that has been quite effective.

What they do is serve as advocates for the wounded and their families. They connect those who have need with those who are willing to provide for needs. So your term "brokering" and "broker house" is an accurate one.

In addition to that, we are investing more heavily than in the past in rehabilitation facilities, in physical therapy experts, and technicians at the unit level so that those who need that frequent assistance have access to it on a daily basis. That has been hugely effective in accelerating the ability of our people to return to duty.

It is reality that the instinct of virtually all of our wounded is to ask "How soon can I get back to my unit?" So, providing them accelerated opportunity to do that has become very important.

Senator BLUMENTHAL. Admiral Mullen testified not long ago before this committee about the difficulty of identifying some of the wounds, particularly when they involve traumatic brain injury or post traumatic stress. Can you give the committee your assessment of how adequate, how effective the means are to diagnose and identify those kinds of problems?

Admiral OLSON. Senator, frankly, I think we are very inadequate. I think the data does not collect in a meaningful way the information that we need to not only be responsive but, perhaps more importantly, to be proactive and preventive in dealing with those who have suffered psychological trauma as well as physical trauma.

I have established what I call the "pressure on the force task force." This is a tiger team that is going from unit to unit now. I will get a report back from them in about 90 days. What I have asked them to do is ignore the data and do sensing, rely on leaders, intuition, on the experience of teammates, and spend real time

with the families, to include the children, to gain an understanding of what really is happening in the force.

I don't want to get out ahead of that because I don't want to taint the responses to the surveys. But I do look forward very much to receiving the recommendations from that team.

Senator BLUMENTHAL. Your testimony speaks very powerfully to the potential of new developments actually on the battlefield as well as afterward in medical advances, potential research and development, and technology and so forth. Can you elaborate on that and also give us your assessment on whether the resources in the 2012 budget are adequate for that purpose?

Admiral OLSON. Sir, I would ask that the 2012 budget be supported. I don't have a strong sense of the adequacy precisely, but I believe that there is enough request in the budget to give us room to move with respect to that.

In terms of medical advances, I do believe that biomedical research is a very important undertaking for the military, that we have experiences that are unlike civilian medicine and that any investment in military biomedical research is a good investment.

Senator BLUMENTHAL. Thank you.

General Mattis, in light of what we are seeing in the world today, the recent transit through the Suez Canal of Iranian naval vessels, the ongoing attacks by Somali pirates, and other developments that affect our lines of communication and transport at sea, I wonder if you could share your views on the adequacy of the Navy's funding request with respect to submarine operations and undersea warfare for this fiscal year and the next.

General MATTIS. Senator, I have not looked at the Navy's request because, as a combatant commander, I only look at whether or not they are filling my requests with those ships they have today. I am somewhat in the current fight. I will tell you that I get what I need when I ask for it.

But clearly—CENTCOM's future will be an increasingly naval future. It will not be one in which we have significant numbers of ground troops on the ground in various locations. So, how do we maintain a Navy that has the reach and can sustain our influence, reassure our friends, and temper any mischief by our enemies, make certain that they realize there is a cost? I think that is critical in the CENTCOM future.

Senator BLUMENTHAL. Thank you very much. My time has expired, but I just want to thank both of you.

Thank you.

Chairman LEVIN. Thank you, Senator Blumenthal.

Senator Manchin.

Senator MANCHIN. Thank you, Mr. Chairman.

I want to thank both of you. I just returned from Afghanistan and Pakistan. I can't tell you how impressed I was at the quality of people that we have—our men and women, all of you who are leading them, and the job they are doing.

With that being said, I am going to ask some questions. We will try to keep the answers as brief as possible to try to get through these.

First of all, I will ask both of you, are we fighting a war on terror, or are we nation building? I will start, Admiral, with you.

Admiral OLSON. My responsibility is in both arenas. We present the SOF in two flavors. One is simply the strike flavor, the man hunting, the hunting aspect of counterterrorism. But at the same time, we are out in the villages and remote areas, working with locals to develop their own resources and look after their own neighborhoods.

Senator MANCHIN. General?

General MATTIS. Sir, we are fighting a war that is unlike conventional war. It requires both counterterrorism and counterinsurgency efforts. Part of that would be seen as nation building, but you have seen it in action over there. Whatever it is called, it checkmates the enemy's designs.

Senator MANCHIN. The other thing I would ask is the size. Can you all identify the size of our enemy and how much our enemy is being funded by—their cost of their operation against us?

General MATTIS. Identify the size of the enemy?

Senator MANCHIN. Is there 10,000 of them versus 100,000 of us? Are they getting $100 million, and we are spending $100 billion?

General MATTIS. I will have to take the question for the record, sir. There is a syndicate of organizations. Al Qaeda has been—pretty much been pushed down, beaten down. They are in a kind of hang-on up in the FATA right now.

Haqqani network is still robust, kind of their special forces. They are linked to the Taliban in Afghanistan, who are also linked to the Taliban in Pakistan. It is a syndicate. It comes together. It goes apart. It fights each other. It fights us. It is hard to get an exact count. It will take me a little time, but I will get you our best estimate on each of those groups in that syndicate.

[The information referred to follows:]

[Deleted.]

General MATTIS. As far as the cost, I think it is very difficult to evaluate the cost. But clearly, I think we have to look in the future to how do we become cost imposing, use cost-imposing strategies on an enemy, rather than being in the position that you just described.

[The information referred to follows:]

In coordination with the AF/PAK Center of Excellence at U.S. Central Command, the U.S. Special Operations Command Joint Intelligence Center Special Operations Command estimates that the Taliban and insurgent forces inside of Afghanistan is between 22,000 to 32,000 fighters.

Senator MANCHIN. Let me just say, if I can, the best I could decipher from what we were getting information is I think it is fair to say that we have about 10 to 1 of the troops superior. We have about 10 troops for their 1 identified. We spend about $10 for their $1. It looks like money is not going to win this war. Is that a fair statement, Admiral?

Admiral OLSON. Sir, I would have to take, for the record, your numbers to confirm or deny that. I do believe that the presence in a variety of capacities and the whole of nation approach to Afghanistan is very important. I do believe that it is less expensive to fund an insurgency than a counterinsurgency, certainly.

Senator MANCHIN. If I may ask this question, and this will be to you, Admiral. I was so impressed with special ops. We were privileged to go through a briefing and watch how they operate.

With that being said, do you believe that you all are able to identify the Haqqanis and Quetta Shura tribes, if you will, and their location within Pakistan and your inability to go get them or them to assist you in getting them? Is there any break in that whatsoever?

Admiral OLSON. Sir, I would say that Pakistan is a sovereign nation and will, as sovereign nations do, act in its own best interests first. It does not see itself as threatened by those groups, as our forces feel they are threatened by those groups. We are willing to assist Pakistan at the rate that they are willing to accept our assistance, sir.

Senator MANCHIN. So, basically, we have an ally who truly is not acting as an ally. This is just from an outsider's opinion and looking at the operation of our people being at risk, knowing where the enemy is, and we can't do anything about it.

Admiral OLSON. Sir, I would say that in many ways Pakistan is behaving as a great ally and taking much risk upon themselves. But there is perhaps more that can be done. I think that the senior-level dialogues that are taking place are very productive in this regard.

Senator MANCHIN. To both of you, do you know if the literacy rate in Afghanistan has improved at all over 10 years?

General MATTIS. Yes, it has. I would have to get you the numbers, sir. It is also one of the primary recruiting tools for the Afghan army. But today, we have significantly higher education. I will get you the numbers that can verify this.

Senator MANCHIN. The numbers that I received show that literacy in Afghanistan is still only 28 percent.

General MATTIS. Sir, well, considering that during the Taliban's control, they didn't build a single school and they have been trying to blow up the ones we are building, it has been difficult. But we are making progress, sir. I will get you the numbers.

[The information referred to follows:]

Afghan literacy rates have indeed improved and are currently trending upward under International Security Assistance Force (ISAF)-led development efforts. In 2008, the Department of State estimated the adult (over 15 years old) Afghan literacy rate at 43 percent for males and at 12 percent for females. In September 2009, an ISAF assessment estimated the adult Afghan literacy rate had climbed to 50 percent (+7 percent) for males and 14 percent (+2 percent) for females.

Based on the October 2010 Congressional Report on Progress Toward Security and Stability in Afghanistan, most literate Afghans are concentrated in the cities. In rural areas, 90 percent of women and more than 60 percent of men remain illiterate. Under the Taliban regime girls were not allowed to go to school and fewer than 900,000 boys were enrolled. During the same period, university enrollment was only 7,881 students. In stark contrast, nearly 7,000,000 students are now enrolled in primary and secondary education facilities (with 37 percent of them being female) and university enrollment has grown to 62,000.

Senator MANCHIN. I would ask both of you this question, too. Do you believe that al Qaeda still poses a threat to the United States of America? If that is still correct, since they are not a presence in Afghanistan, with all of our resources and so much of our money has been dedicated to that arena, where are they now, and what

are we doing to be able—are we capable of taking the fight to them, wherever it may be?

Admiral OLSON. Sir, I think al Qaeda is struggling. I think that its leadership is less experienced. I think its ranks are more fractured than any time in the last decade, and they certainly have distributed. There is AQAP, al Qaeda in the Maghreb, al Qaeda in Iraq, and other al Qaeda associated groups in the region. So there is a requirement to continue taking the fight to where they are, sir.

Senator MANCHIN. General?

General MATTIS. They are a threat. They are under terrible pressure right now. They have gone to ground in the epicenter of this effort, which is up in the FATA, but they have also distributed down into AQAP. They have been hit hard in Iraq, but they are still a threat to the Iraqi Government. We see links going down into Somalia with al-Shabaab.

Senator MANCHIN. With the tremendous budget concerns we have within our own nation, if changes are made or adjustments are made to the operation as we know it in Afghanistan today, do you think it will affect the outcome at all, if we reduce the funding?

General MATTIS. Absolutely, it will, sir. It must. I mean, right now, we have, just in the last year and a half, gotten the resources, personnel, training, Commander's Emergency Response Program (CERP) funds, that sort of thing correct. We are right now approaching the time when we are going to see the results of all that.

We are already seeing the results, but they are going to be very telling shortly.

Senator MANCHIN. Admiral?

Admiral OLSON. Sir, Afghanistan SOF are operating at the edge of their people and at the edge of their budget. Any reduction in either would be detrimental to the effect, sir.

Senator MANCHIN. Thank you.

Chairman LEVIN. Thank you, Senator Manchin.

Senator Udall.

Senator UDALL. Thank you, Mr. Chairman.

Good morning, gentlemen. Thank you for your patience and, of course, for your service.

I would like to pursue further discussion about the sanctuaries in Pakistan with this lead-in. General Mattis, I was in Malajat last October. I know you spoke to, in your testimony, what had happened there and the positive developments. Fort Carson troops were there from my home State of Colorado. So it was particularly special to be there, and it was very impressive.

My fear is that it is only a matter of time before insurgents reappear. Their refuge in that part of Pakistan is only about 4 hours from Kandahar. It is just my sense is as long as the enemy has sanctuaries, we are fighting with an arm tied behind our back.

General, you have spoken to why Pakistan isn't doing more to eliminate the sanctuaries. If they can't or won't address them, do you believe that the International Security Assistance Force (ISAF) and Afghan forces working together can make enough progress on the security front to overcome the challenges presented by the sanctuaries?

Admiral Olson, I would welcome your thoughts as well after the General has spoken to this.

General MATTIS. Sir, the area the troops from your State were operating in is, obviously, close to the border area. It is subject to being impacted by the enemy coming out of safe havens.

It is not that the Pakistanis have done nothing here. They have lost thousands of troops. They have had almost 30,000 of their civilians murdered by these enemies, and they are probably in a position of saying, "I don't want to create more enemies right now than I already have." They are engaged in years of the longest campaign and the most costly campaign that they have faced.

I think that, while it is not perfect, we have to remind ourselves that the only thing more difficult than fighting with allies is fighting without allies. Thank God, we have the 49 nations alongside us, fighting in Afghanistan right now.

With Pakistan, I think we have to look at both what they are doing and continue to try and close the gap in our understanding with what they are not doing. We are very candid in our discussions with the Pakistani leadership about this, and we will continue to work it.

However, in the area that you are referring to, that kind of open ground coming from Kandahar over towards the border, General Petraeus, thanks to the increase that the President authorized, now has a surveillance brigade from the Army that is watching over that area.

In other words, it is not just a thoroughfare. The enemy is going to have a very difficult time come spring when they try to reintroduce their troops back into the areas of Helmand and Kandahar, where they have lost the initiative.

We are aware of the situation. We are adapting to it, and the Pakistanis are doing a lot. There is more they could do, but there is more we could be doing as well. This is the normal give-and-take of war, sir.

Senator UDALL. Admiral Olson?

Admiral OLSON. Sir, we wish they would do more. Perhaps they could do more. But I don't pretend to understand the internal dynamics within Pakistan, certainly the strategic implications of their decision-making process, to be too critical of them.

Senator UDALL. Yes, they do have their hands full. I do know there is a school of thought that counterinsurgencies have never been successfully completed if the insurgents have sanctuaries, and we need to continue to worry that concept.

If I might, General, Admiral, I would like to talk about some of the analysis that right now we are in a strategic stalemate in Afghanistan. That is a better situation, some would argue, than we had a year or 2 or 3 ago. By that, I mean neither side can achieve its aims through the use of arms alone.

A follow-on thought is that we will have difficulty preserving our gains just because we are visitors, if you will, to the area, without entering into some sort of negotiations. I know there are still disagreements among many in Afghanistan, both in the Afghan community and in ISAF, what those negotiations look like, how quickly they should happen, and what they might accomplish.

My opinion is—and I have heard this from the military leadership in our country and the civilian leadership—that the way home is through a political process and political solution, ultimately. How

do we incentivize the process further and make reconciliation and reintegration move more quickly?

General MATTIS. Senator, I do not think we are in a strategic stalemate right now. If I was before you a year ago, I probably would have accepted that. I think that the enemy is now in a worsening situation. What we are doing is our strategy is that we have a military component. You have seen that. Everyone knows what that is—reinforced, well-trained troops, better strategy. I can go on. Then you have a civilian component. Those two are married together into a combined civilian-military effort.

Additionally, there is a diplomatic effort to end the war. Taliban are going to have to say we will abide by the constitution, break with al Qaeda and stop using violence. They are welcome back in.

The reconciliation process has to be a process that is owned by the Afghans because they are the ones who have to reconcile. We can support it. We should support it. The international community is supporting it.

Reintegration is the bottom up, reconciliation being the top down. Reintegration is where we are getting young fellows to come over to our side, and there is a process to bring them onboard.

So you are seeing right now a strategy of how do you incentivize it? First point, make certain the enemy doesn't think they are going to win. That is what we have had to reverse in the last year. Then the diplomats have more of a chance to get these other efforts—reconciliation, reintegration—going. I hope that answers your question.

Senator UDALL. Admiral Olson, do you have any additional thoughts?

Admiral OLSON. Sir, I certainly agree with what General Mattis said. I would say that I do think we are on a path to being able to negotiate from a position of strength. I do believe that negotiation can accelerate the termination of a conflict, but you have to be able to do it from a position of strength.

Senator UDALL. Speaking of negotiations, General, India and Pakistan are reportedly negotiating again over such tough topics as Kashmir and economic integration. I assume you and Admiral Willard share perspectives and are working together.

Would you comment on the opportunity there? My opinion, if India and Pakistan could reach the point at which they had a little warmer relationship, it would help our efforts in Afghanistan.

General MATTIS. I completely concur with you. Admiral Willard and I are in routine contact with one another, as we make certain that seam between the two combatant commands does not become a gap in our efforts to work together.

At the same time, this India-Pakistan reconciliation has to be something that they take responsibility for. So we are more in a mode of making certain that what we are doing militarily is never seen as contrary to that trend.

Senator UDALL. My time has expired. Two brief comments. I met with some returning civilian and military leaders from Afghanistan. Interesting ideas taking shape, which is that the Afghan civilian sector ought to surge into the Afghan rural communities. That is not a new idea to you, but I wanted to continue to acknowledge. I know the chairman has really pushed on that front as well.

Then, second, listening to you, I was reminded of President Lincoln's great comment that it always seemed like in war the best generals were working for the newspapers. Listening to you two today, I think the best generals and admirals are working for the American people. So, thank you.

Chairman LEVIN. Thank you very much, Senator Udall.

I just have a couple questions for a second round, and then we are going to adjourn over to the Capitol Visitor Center, room 217, for a closed session. There has been a request by at least one Senator for that. We should start there, hopefully, 5 minutes to 12:00, if no one else has any additional questions here.

I just have two questions. One, General, is the question of whether or not you expect that President Karzai will be announcing later this month the first phase of provinces and districts for transition to Afghan security responsibility based on the joint recommendations of ISAF and Afghan officials. That is what Defense Minister Wardak told me was likely to happen, when he met with me in my office. Is that your understanding?

General MATTIS. It is, Mr. Chairman. I believe it will be on March 21.

Chairman LEVIN. All right. The other question relates to the camp in Iraq, Camp Ashraf, where there are Iranian dissidents who are being continually harassed in various forms by agents of Iran and also by some of Maliki's people as well.

Now, one of the issues there are the loudspeakers, apparently large numbers of loudspeakers, which blare propaganda into that area. I am wondering whether you have taken this issue up, General, with Prime Minister Maliki and whether we are pressing this issue because that kind of psychological abuse is unacceptable. Have you raised this with Prime Minister Maliki?

General MATTIS. I will raise it with him, sir.

Chairman LEVIN. Has it been raised before, do you know?

General MATTIS. I don't know.

Chairman LEVIN. Okay. Will you make sure that it is raised?

General MATTIS. I will.

Chairman LEVIN. Any other questions? If not, we are going to adjourn right away to that classified session.

We thank both of you again for your service. We will see you over at the Capitol Visitor Center.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

VILLAGE STABILITY OPERATIONS/AFGHAN LOCAL POLICE

1. Senator LEVIN. Admiral Olson and General Mattis, General Petraeus and others have emphasized the importance of the Village Stability Operations (VSO) and Afghan Local Police (ALP) programs to the strategy in Afghanistan. Under the ALP, Special Operations Forces (SOF) are working with local villagers to empower communities to create their own protection force answerable to the local elders and under the oversight of the Ministry of Interior. General Petraeus has discussed the possibility of dramatically increasing the size of both programs to more effectively undercut Taliban influence in rural areas while also better connecting these areas to the central government. What has been the effect of these programs on rural Afghan populations and what has been the response from the Taliban?

Admiral OLSON. VSO and the associated ALP program have offered the Afghan Government its first steps toward legitimacy in key rural areas. By contributing to local governance, VSO provides the mechanism by which the Government of the Is-

lamic Republic of Afghanistan is able to address security, economic, judicial and developmental grievances. This has improved popular confidence in the Afghan Government and the various Afghan Security Forces. It has significantly impacted Taliban safehavens, freedom of movement, recruiting and operational effectiveness in the micro-regions where it has been implemented. As a result, the Taliban are increasing their efforts to intimidate communities and individuals participating in the VSO and ALP programs.

General MATTIS. [Deleted.]

2. Senator LEVIN. Admiral Olson and General Mattis, do you believe the availability of U.S. Special Operations teams is a limiting factor in expanding these programs to a point where they can have a strategic impact in Afghanistan?

Admiral OLSON. The SOF teams have a strategic impact even in small numbers, but the demand is outpacing the supply.

General MATTIS. No. While the VSO/ALP mission initially required SOF's unique capabilities, the program is now mature enough for conventional forces to conduct with SOF oversight.

AFGHANISTAN COUNTERTERRORISM OPERATIONS

3. Senator LEVIN. Admiral Olson and General Mattis, according to published reports, the tempo of counterterrorism operations in Afghanistan by U.S. and Afghan SOF has increased dramatically in the last 6 months and demonstrated significant results. Lieutenant General Rodriguez stated recently that the Afghan people are playing an increasingly important role in the success of these operations by "helping to provide significantly more tips because they see Afghan Security Forces out among them more than they ever had because of the increase in the number [of Afghan Forces]." Reportedly, 85 percent of counterterrorism operations take place without a shot being fired. Do you agree with Lieutenant General Rodriguez that the increased presence of Afghan Security Forces has resulted in better intelligence because the population is more likely to come forward with information?

Admiral OLSON. Yes. This is one of the reasons that SOF operations are partner led and U.S./Coalition missions are no longer unilateral.

General MATTIS. Yes. Locally provided intelligence has increased based on the growth of both Afghan National Security Forces (ANSF) and International Security Assistance Forces. A more secure environment has reduced the threat of retribution and allowed for the establishment of numerous community-based self-defense programs, multiple "tip lines" to harvest indigenous information, and 74 new local police sites that collectively provide actionable intelligence.

4. Senator LEVIN. Admiral Olson and General Mattis, what has been the impact of this intelligence on the success of counterterrorism operations?

Admiral OLSON. Further deployment of ANSF has led to better intelligence collection. Not only is the local population more likely to report information to the ANSF, the pairing of ANSF and coalition partners can greatly assist in guiding collection focus and methods. Specifically, the partnership of Afghan National Army (ANA) Special Forces with U.S. Special Forces teams has greatly increased the Operational Detachment Alpha's ability to understand the human terrain and socio-cultural dynamics at the village and district level. Similarly, Afghan National Civil Order Police has seen success in manning checkpoints throughout southern Afghanistan. Their lasting presence along major roadways helps the Conventional Forces to better understand local populations and have demonstrated an ability to support counter IED initiatives in southern Afghanistan.

General MATTIS. These operations have facilitated Coalition and Government of Afghanistan efforts to secure the Afghan populace. The enhanced security environment has paid great dividends and fostered popular support and trust in the ANSF, leading to more intelligence tips from the people.

5. Senator LEVIN. Admiral Olson and General Mattis, are news reports accurate that 85 percent of SOF counterterrorism operations are conducted successfully without a shot being fired?

Admiral OLSON. Our data for 2010 indicates that, of about 2,000 counterterrorism operations, 86 percent did not include gunfire.

General MATTIS. [Deleted.]

AIRLIFT SUPPORT FOR SPECIAL OPERATIONS FORCES

6. Senator LEVIN. Admiral Olson, one of the most frequent concerns related to deployed SOF is the lack of rotary wing airlift to support their missions, especially in Afghanistan. The two primary concerns are that U.S. Special Operations Command (SOCOM) uses its organic rotary wing airlift almost exclusively to support kill/capture counterterrorism missions and that airlift support from the General Purpose Forces is rarely available. This leaves special operations personnel performing counterinsurgency missions with very little direct support. The 2010 Quadrennial Defense Review (QDR) mandates some action on this issue by increasing SOCOM's organic capabilities and by dedicating a limited number of Navy helicopters to support of SOF. Do you believe the actions directed by the QDR will address SOCOM's airlift needs?

Admiral OLSON. The actions directed by the QDR adequately addressed SOCOM's longer term organic helicopter needs. Surge operations still require allocation of General Purpose Force helicopters to support SOF operations. Further, foreign training requirements may place an additional demand on SOF rotary wing capabilities.

7. Senator LEVIN. Admiral Olson, do you believe additional capabilities should be grown within SOCOM or provided by the General Purpose Forces?

Admiral OLSON. SOCOM's programs of record, and those we have planned across the Future Years Defense Program (FYDP), combined with General Purpose Forces provided by the Service Departments, are adequate to fulfill the current and anticipated airlift support requirements.

INTELLIGENCE SUPPORT FOR INDIRECT ACTIVITIES

8. Senator LEVIN. Admiral Olson and General Mattis, some observers contend that the National intelligence agencies focus their assistance to the Department of Defense (DOD) in Afghanistan on special operators engaged in direct action operations against the Taliban. As a consequence, it is alleged, General Purpose Forces and SOF engaged in indirect activities, including VSOs and population security, receive less intelligence support. Do you believe SOF performing primarily indirect missions in Afghanistan receive adequate intelligence support?

Admiral OLSON. Yes, intelligence support is generally adequate and responsive.

General MATTIS. Yes. All general purpose and SOF are provided the intelligence support required to accomplish their assigned missions.

9. Senator LEVIN. Admiral Olson, how is SOCOM working to build its organic intelligence gathering and exploitation capabilities?

Admiral OLSON. SOCOM is focused on developing an organic airborne Intelligence, Surveillance, and Reconnaissance (ISR) capability with a corresponding Processing, Exploitation & Dissemination (PED) capacity. The SOCOM J2 (Intelligence) and J6 (Communications) have teamed to design and build a robust Special Operations Information Enterprise (SIE) that will facilitate the movement, sharing, and coordination of information across theaters of operations, from tactical users to strategic decisionmakers. The intent is to fully integrate with the Service developed Distributed Common Ground Station (DCGS) family of networks, which will enable the rapid sharing of critical information in a joint-combined operating environment.

SOCOM leads DOD in the employment of Identity Intelligence tools, tactics, techniques and procedures. Partnering with the Biometric Identity Management Agency and the ISR Task Force, we received $79.9 million the past 2 years and developed a $26 million (FYDP) training program at Fort Bragg, NC, resulting in the fielding of 1,426 biometric systems that led to 2,686 tiered Watchlisted and IED associated persons of interest. Our Sensitive Site Exploitation (SSE) program leverages biometrics, forensics and document/media exploitation as mission enablers to defeat terrorists and their networks. SOCOM is also a leader in tagging, tracking, and locating technology, as well as in providing SOF with a world-class reconnaissance, surveillance, and target acquisition capability that includes still/video, sensor trigger and unattended ground sensors/unattended maritime sensors (UGS/UMS).

SPECIAL OPERATIONS PERSONNEL MANAGEMENT

10. Senator LEVIN. Admiral Olson, some have argued that you, as the Commander of SOCOM, should have greater influence on personnel management issues which are generally within the purview of the Services, but which directly impact the as-

signment, promotion, compensation, and retention of SOF. Do you believe you are adequately empowered to influence the personnel management decisions of the Services as they apply to SOF?

Admiral OLSON. Until recently, no. However, DOD Directive 5100.01, Functions of DOD and its major components, approved by the Secretary of Defense on 21 December 2010, requires the Services to "coordinate" personnel policies with SOCOM, and this has the potential to improve SOCOM's influence in this regard.

UNDERSEA MOBILITY STRATEGY

11. Senator LEVIN. Admiral Olson, last July, SOCOM cancelled the Joint Multi-Mission Submersible program and announced a new Undersea Mobility acquisition strategy focused on the development and fielding of a family of wet and dry combat submersibles to meet the requirements of SOF. These actions follow the extremely costly development and fielding of the Advanced SEAL Delivery System, which was ultimately rendered inoperable by a November 2008 battery fire. Please describe the decisionmaking process that led to the change in acquisition strategy.

Admiral OLSON. In the programming and budgeting process for fiscal year 2012, the Department conducted a detailed review of the JMMS program. Based on the review, it was determined that the planned program to develop and field a fleet of JMMS was unaffordable due to current and expected future competing priorities for SOCOM resources. In addition, during the JMMS material solutions analysis, another feasible alternative had been identified to develop and field a fleet of smaller, less-capable dry combat submersibles that could operate from Dry Deck Shelter equipped submarines and surface ships. Simultaneously, SOCOM has been looking at alternate commercial submersible concepts and experimenting with a commercial-off-the-shelf submersible that showed promising results at reduced cost.

Accordingly, SOCOM revised its undersea mobility acquisition strategy to use the funds originally programmed for JMMS to develop a fleet of affordable Dry Combat Submersibles (based on commercial technologies and practices) and the necessary Dry Deck Shelter and submarine modifications to support them. This enables SOCOM to field a larger number of undersea vehicles sooner than the original JMMS approach.

12. Senator LEVIN. Admiral Olson, how would you characterize the technological, cost, and schedule risks associated with development of a new family of dry combat submersibles?

Admiral OLSON. Technical risk is medium to simultaneously meet the "iron triangle" of payload, speed, and range requirements due to current battery technology. Commercial off-the-shelf and Government off-the-shelf silver-zinc battery technologies are rated at Technology Readiness Levels 7–9, so they should be reliable. However, they have not demonstrated the power required for our ideal submersible in a realistic environment. Our Dry Combat Submersible program is focused on identifying what is affordable and achievable within current budgets and technologies.

Cost and schedule risk are both assessed as medium level risk based primarily upon the risk associated with safety certification. SOCOM is using commercial design standards and processes (e.g. American Bureau of Shipping) wherever possible to help reduce these risks through a more determinant certification process. SOCOM is also working closely with the U.S. Navy to properly scope any certifications they require for operations associated with nuclear submarine.

13. Senator LEVIN. Admiral Olson, how does SOCOM intend to avoid the costly development and reliability issues that plagued the development and operation of the Advanced SEAL Delivery System?

Admiral OLSON. SOCOM intends to leverage commercial submersible design, fabrication, and safety certification methodology to provide timely, reliable, and cost-effective capabilities. Design studies are also planned to cultivate the submersible industrial base. SOCOM intends to use American Bureau of Shipping classed competitive prototypes to affirm speed, range, and payload thresholds prior to ordering the Dry Combat Submersible-Light lead ship. Additional economies will accrue from using proven sonar systems and communication systems from our wet SEAL Delivery Vehicles.

14. Senator LEVIN. Admiral Olson, what is the appropriate role for the Naval Sea Systems Command in the development and acquisition of SOCOM's undersea mobility platforms?

Admiral OLSON. SOCOM will use the engineering expertise of Naval Sea Systems Command (NAVSEA), its shipyards, and laboratories to support the Dry Combat Submersible (DCS) programs, especially in the areas of engineering and safety certification. We are working with NAVSEA to identify experts and define roles such as the subsea engineering found at Naval Surface Warfare Centers. NAVSEA will perform system safety certification of all submersibles that will operate from submarines. SOCOM will perform system safety certification of any DCS submersibles (including prototypes) that will not operate from submarines. SOCOM is also using the expertise of commercial engineering and safety certification agencies such as American Bureau of Shipping (ABS) to provide independent review and classification services for DCS programs. ABS has certified 47 submersibles that operate for extended periods every day, carrying civilian and non-DOD government personnel for research, tourism, and the oil industry.

MILITARY INFORMATION SUPPORT OPERATIONS

15. Senator LEVIN. Admiral Olson, DOD recently announced that it was discontinuing use of the term "psychological operations" in favor of the term "Military Information Support Operations." Why do you believe such a change was necessary?

Admiral OLSON. The U.S. Armed Forces have long recognized the vital importance of conveying truthful information to influence foreign governments, organizations, groups, and individuals. Military information activities in both wartime and peacetime have been described as "psychological warfare", "psychological operations" and PSYOP.

In recent years, the term "psychological operations" became anachronistic and misunderstood. Although PSYOP activities relied on truthful information credibly conveyed, to some people PSYOP connoted propaganda, brainwashing, manipulation and deceit. In some cases, the negative connotations of the term discouraged commanders and our civilian interagency partners from making use of military PSYOP capabilities to advance national objectives.

To overcome the stigma of the name and allow DOD to better utilize these military information capabilities in an interagency environment, the Chief of Staff of the Army, General Casey, and I recommended to the Secretary of Defense that we replace the term "psychological operations" or PSYOP with Military Information Support Operations (MISO) to more accurately convey the nature of the activities. The Secretary directed DOD to implement the change this fiscal year.

16. Senator LEVIN. Admiral Olson, what operational and doctrinal impacts do you believe such a change will have?

Admiral OLSON. The change will have no operational or doctrinal impacts. It is only an administrative terminology change. The definition and all policy, legal, organization, and doctrinal guidance previously applied to PSYOP remain in effect for MISO.

SPECIAL OPERATIONS MISSIONS

17. Senator LEVIN. Admiral Olson, in recent years, SOF have taken on an expanded role in a number of areas important to countering violent extremist organizations, including those related to information and military intelligence operations. Some have advocated significant changes to SOCOM's Title 10 missions to make them better reflect the activities SOF are carrying out around the world. What changes, if any, would you recommend to SOCOM's Title 10 missions?

Admiral OLSON. Over the past year, SOCOM has reviewed the set of special operations activities listed in Title 10 through the Strategic Capabilities Guidance process. We have identified a set of operations and activities that better reflect how SOF supports national strategies, global campaign plans, and theater plans. We have also come to realize that operations-counterterrorism, counterinsurgency, foreign internal defense, and others-often blend in today's complex environment. It is now much more difficult to neatly categorize a specific operation as one type versus another. Therefore, we see the need to differentiate between operations and activities.

To provide clarity in how SOF executes its missions, we have developed a framework for SOF Core Operations and Activities. Core Operations are the operational contexts within which SOF operate, often in concert with conventional forces and interagency partners. Core Activities, however, are unique capabilities that SOF apply in different combinations tailored for an operational context. A core special operation activity is a stand-alone, operationally significant, military capability that SOF can apply independently or in combination as part of a global, Geographic

Combatant Command, or joint force commander's campaign or operation. I will be reviewing the revised list of operations and activities over the next few months with SOF senior leaders. The revised list, which could possibly become the basis for a Title 10 legislative proposal, includes the following:

Core Operations:

Combating Weapons of Mass Destruction
Counterinsurgency
Counterterrorism
Foreign Internal Defense
Stability Operations
Support to Major Combat Operations and Campaigns
Unconventional Warfare

Core Activities:

Advise and Assist
Civil Affairs Operations
Hostage Rescue and Recovery
Intelligence Preparation of the Environment
Interdiction and Offensive Weapons of Mass Destruction Operations
Military Information Support Operations
Operational Preparation of the Environment
Reconnaissance and Surveillance
SOF Combat Support and Combat Service Support
Strikes and Raids
Support to Insurgency

COUNTERING RADICAL IDEOLOGIES

18. Senator LEVIN. Admiral Olson, in 2005, Ayman al-Zawahiri, al Qaeda's second-in-command, declared that "We are in a battle, and more than half of it is taking place in the battlefield of the media." The new National Military Strategy lists "countering violent extremism" as the first National Military Objective and stresses the importance of long-term "whole of nation" approaches to countering extremism beyond short-term activities of killing and capturing extremists. However, earlier this year, a non-partisan study highlighted the lack of a U.S. strategy to counter radical ideologies that foment violence (e.g. Islamism or Salafist-Jihadism). What is SOCOM's role in supporting efforts by the geographic combatant commands to counter the spread of violent extremist ideology and the radicalization of vulnerable populations?

Admiral OLSON. SOF, specifically MISO support the geographic combatant commands in countering VEO ideologies and radicalization of vulnerable populations through several means. SOCOM Military Information Support units have been deployed in direct support of U.S. military operations in Afghanistan (OEF), Iraq (New Dawn), and the Philippines (OEF–Philippines) from the onset of those operations, often in collaboration with coalition forces and other U.S. Government Agencies.

Outside the areas of conflict, SOCOM deploys Military Information Support Teams (MISTs) to countries supporting military objectives to erode support for extremist ideologies and deter tacit and active support for VEOs. Deployed at the request of both the GCC and the respective U.S. Ambassador, MISTs provide the GCCs with a direct engagement tool to improve partner nation capabilities to combat VEOs and resist the spread of their associated ideologies.

SOCOM also resources and manages two effective trans-regional military information support programs: the Trans-Regional Web Initiative (TRWI), and the Regional Magazine Initiative (RMI). Both programs provide the GCCs a capability to conduct influence operations to directly address VEO ideology, facilitation, and radicalization without putting boots on the ground.

In addition to forces provided and programs executed, SOCOM also supports the GCCs by providing direct planning support.

19. Senator LEVIN. Admiral Olson, to what degree does SOCOM draw upon research conducted by DOD's Minerva and Human Social Cultural Behavioral Modeling programs?

Admiral OLSON.

Minerva Research Initiative (MRI)

MRI is a DOD-sponsored, university based social science program initiated by the SECDEF in 2008. The program's goal is to improve DOD's basic understanding of

the social, cultural, behavioral, and political forces that shape regions of the world of strategic importance to the US. SOCOM has been an integral part of two of the five projects: (1) 'Finding Allies for the War of Words: Mapping the Diffusion and Influence of Counter-Radical Muslim Discourse' and (2) 'Terrorism, Governance, and Development'

SOCOM has fostered multiple relationships between DOD project managers; academics; and SOCOM planners, analysts, and interagency personnel.

Human Social Culture Behavior (HSCB) Modeling Program

In 2008, OSD established the HCSB modeling program. The mission of the 6-year program is to research, develop, and transition technologies, tools, and systems to help planners, intelligence analysts, operations analysts, and others represent, understand, and forecast sociocultural behavior at the strategic, operational, and tactical levels. SOCOM representatives have been in close collaboration with HCSB project managers to garner better insights regarding objectives, identify those projects that are of importance to SOCOM, and engage with appropriate academics to ensure they understand our interests.

SOCOM received funding to write a program called ANTHRO ANALYST (AA) FOR J2 SOCPAS. AA is an advanced application allowing a user to quickly input elevation, population density, and intelligence information to generate and predict human terrain as well as habitable areas.

SOCOM attends the Air Force Office of Scientific Research annual program reviews and provides updates to appropriate offices and directorates within the command. SOCOM continues to leverage the projects' findings and to incorporate appropriate information into efforts across the command.

QUESTIONS SUBMITTED BY SENATOR CLAIRE MCCASKILL

CAMP ASHRAF

20. Senator MCCASKILL. General Mattis, in recent Senate Armed Services Committee hearings on U.S. policy in Iraq, as well as during this hearing before the committee, the plight of residents of Camp Ashraf in Iraq was discussed. In addition, prominent former government officials have recently raised concerns about the welfare of the residents at Ashraf, including former Energy Secretary Bill Richardson, General Peter Pace (Ret.), and former Attorney General Michael Mukasey. The approximately 4,000 Iranian dissidents and their advocates continue to allege abuses and harassment by members of the Iraqi security services. The harassment includes tactics such as continuous exposure to loudspeakers, as Chairman Levin remarked, and up to and including serious physical harm against camp residents. To what extent do U.S. military forces have contact with the residents of Camp Ashraf?

General MATTIS. U.S. military forces had limited contact regarding Camp Ashraf since Government of Iraq has taken over responsibility. In the wake of the incident on 8 April that led to a number of deaths and injuries, we have requested access to Camp Ashraf but so far have been refused by the Iraqi Government. We have been told the Iraqi Government is undertaking an investigation on events there, and the U.S. Ambassador in Baghdad and General Austin are making clear U.S. policy and the way forward with the Iraqi Government

21. Senator MCCASKILL. General Mattis, has any U.S. military equipment provided to the Iraqi military or security forces been used to harass or endanger the residents of Camp Ashraf?

General MATTIS. It is possible that any given Iraqi unit which operated in the vicinity of Camp Ashraf may have had some U.S.-provided equipment in its inventory, particularly vehicles. Since 2003, the United States has provided millions of dollars worth of defense equipment to the Government of Iraq which is widely distributed across the Iraqi Security Forces.

Overhead photographs taken during the 8 April 2011 events at Camp Ashraf appear to include images of High Mobility Multipurpose Wheeled Vehicles (HMMWVs) among the vehicles employed by Iraqi forces. The HMMWV, which has been supplied in large numbers to the Government of Iraq, is a characteristic U.S. military vehicle. It is possible that some at Camp Ashraf on 8 April are among the many which have been delivered to Iraq by the United States over the course of the past 8 years.

22. Senator MCCASKILL. General Mattis, what is your opinion of the Government of Iraq's willingness and ability to protect the residents of Camp Ashraf?

General MATTIS. The events of 8 April that led to a number of deaths and injuries are of serious concern. In the wake of that incident, we have requested access to Camp Ashraf but so far have been refused by the Iraqi Government. Most important is the assurance that residents will NOT be forcibly transferred to a country where there are grounds for believing the residents would be persecuted, tortured, or unfairly put on trial based on their political or religious beliefs. The Government of Iraq (GoI) has also publicly committed to undertake an investigation as to what exactly happened on April 8 that led to a number of deaths and injuries. We continue to urge restraint and nonviolence as means to facilitate an appropriate solution to the situation. I respectfully defer to the Department of State (DOS) for any details concerning specific issues.

23. Senator MCCASKILL. General Mattis, what is your assessment of Prime Minister al-Maliki's long-term plans for Camp Ashraf?

General MATTIS. The Government of Iraq's stated policy is that the People's Mujahideen Organization of Iran must leave Iraq by the end of 2011 with the cooperation of the United Nations and international organizations. DOS is working to find a negotiated settlement to the situation. I respectfully defer to DOS for any details concerning specific issues.

AFGHAN NATIONAL SECURITY FORCES

24. Senator MCCASKILL. General Mattis, during his testimony on DOD's 2012 budget request, Secretary Gates stated that he was still uncertain how the United States was going to continue to train and fund the ANSF once U.S. forces have withdrawn or been reduced. I believe that investing in ANSF is extremely important to long-term stability in Afghanistan. However, I also have concerns that the U.S. Government may not have adequately come to grips with just how expensive it will be to sustain ANSF over the long term ($12.8 billon is requested for next year). The total gross domestic product (GDP) of Afghanistan is about $29.8 billion a year, so it is unrealistic to expect the Afghans to pay for full ANSF costs anytime soon. What long-term branch plans are being developed to sustain the training and funding of the ANSF beyond 2014?

General MATTIS. The international community has acknowledged that while the transition of lead security responsibility will be completed by December 2014, financial support of the ANSF and other parts of the Afghan economy will be necessary past 2014. Senior Civilian Representative Sedwell, as recently as February, commented that the ANSF will need some level of funding through 2025. U.S. Central Command (CENTCOM), in collaboration with other U.S. Government agencies, is developing economic initiatives to enable more coordinated and effective international community assistance. This effort will help transition Afghanistan from an aid based economy to more of a self-sufficient, trade based economy putting the Government of Afghanistan on a path to meeting the expenditures of a robust ANSF.

25. Senator MCCASKILL. General Mattis, what checks and balances do you have in place to ensure that U.S. weapons and equipment provided to the ANSF are accounted for and do not end up in the hands of the Taliban or other terrorist groups?

General MATTIS. In March 2009, the Combined Security Transition Command in Afghanistan established a functional organization within its command to register and monitor the transfer of equipment to Afghanistan. This organization carries out the requirements of Section 1225 of the 2010 National Defense Authorization Act, which requires the Secretary of Defense to certify that a program of registration and monitoring is in place in Afghanistan.

26. Senator MCCASKILL. General Mattis, given the repeated and frequent requests by the United States on the NATO members for increasing troop and equipment contributions for ANSF trainers, what do you think is an equitable and reasonable cost-sharing for ANSF training in terms of manpower and funding?

General MATTIS. The North Atlantic Council has agreed to expand the NATO ANA Trust Fund to include funding for sustainment costs. Timely provision of these funds will represent a welcome, tangible demonstration of fiscal cost sharing. We continue to make a concerted effort to increase NATO and other international partner fiscal contributions.

Our coalition partners have made good faith efforts to fill manning requirements for ANSF trainers within their capabilities and national interests. We will continue to work with our coalition partners, NATO and others, to meet the needs of NATO Training Mission-Afghanistan (NTM–A).

IMPACTS OF MIDDLE EAST TURMOIL

27. Senator MCCASKILL. General Mattis, the political upheaval in Egypt, Libya, Tunisia, Yemen, and elsewhere in CENTCOM's area of responsibility (AOR) is of great concern. Given the rapidity of the change and the subsequent fragility of the geo-political status quo, there seem to be numerous potential impacts on CENTCOM operations. What, if any, impact do you assess the turmoil in the Middle East could have on the function of Northern Distribution Network and on the logistical tail needed to support coalition operations in the region, especially related to fuel and the cost to transport it?

General MATTIS. The current situation in the Middle East is expected to have minimal impact on fuels operations supported through the Northern Distribution Network since these fuel sources, both crude and refined products, originate from Southeastern Europe, Caucasus Region, Central Asian States, and Russia.

28. Senator MCCASKILL. General Mattis, what is your opinion of the effects of the turmoil on some of the more autocratic Central Asian leaders, including and especially Islam Karimov of Uzbekistan? Do you anticipate any impact on our air or rail transit agreements as they stand?

General MATTIS. I view the influence of the changes in the Middle East on Central Asian leaders as minimal in the short term due to the deep entrenchment of leaders among the social, political and economic elite, the existence of little political opposition, and the lack of a coordinated social network capability to organize and implement a challenge. I consider Uzbekistan to be at low risk for instability leading to a change in government. I do not anticipate any impacts to our air or rail agreements as they stand.

QUESTIONS SUBMITTED BY SENATOR MARK BEGICH

RELIANCE ON FOREIGN FUEL SOURCES

29. Senator BEGICH. General Mattis, as you noted in your testimony, countries in your AOR contain more than half of the world's proven oil reserves and nearly half of its natural gas. As a result, this area also has some of the world's busiest trade routes. It's also one of the world's most volatile regions. I am extremely concerned with the national security implications of relying on foreign sources for fossil fuels when we have significant reserves in the United States, specifically in the State of Alaska. I know DOD buys most of its fuel from local refineries in proximity to Iraq and Afghanistan for the vast majority of our requirements in the area. In which countries are those refineries located?

General MATTIS. Our contracted suppliers that move fuel through the various ground lines of communication report that fuel is sourced from refineries in Pakistan, Azerbaijan, Russia, Turkmenistan, Bahrain, Kuwait, United Arab Emirates, Oman, Iraq, and various European countries.

30. Senator BEGICH. General Mattis, what would be the impact to operations in Iraq and Afghanistan if those refineries no longer could meet our needs?

General MATTIS. To mitigate supply chain disruptions, CENTCOM has developed redundant and complementary fuel supply capability to satisfy fuel demand in both Iraq and Afghanistan. Should supply be reduced because of the loss of a refinery or refineries, our supply chain managers have the ability to shift fuel orders to alternate sources. CENTCOM has established minimum storage requirements at current operating and intermediate storage locations to enable us to continue operations until alternate means of supply can be implemented. Additionally, CENTCOM can implement fuel conservation measures, relocate aircraft, and reduce certain operations in order to mitigate the effect of reduced fuel availability.

31. Senator BEGICH. General Mattis, what would the impact be of a Suez Canal or other trade route disruption on operations in CENTCOM's AOR?

General MATTIS. The Suez Canal is an important trade route and any interruption to current commercial transit through the Suez could have an impact on global resupply, as transit times without the use of the Suez Canal would increase by approximately 10 days. However, temporary closure of the Suez and ensuing disruption to the transit lanes would have little to no impact on operations in the CENTCOM AOR. Adequate stores of fuel are on hand that would provide a buffer until alternate supply routes are established.

32. Senator BEGICH. General Mattis, what role do these energy resources play in regional and internal instability in your area of operations?

General MATTIS. Energy resource problems are prominent in our region, particularly in States where meeting growing domestic demand for electricity has become more challenging. For some governments, the energy resource supply and demand imbalance, and subsequent populace discontent, come as States continue converting traditional crude oil-based energy industries to those based on more efficient natural gas. In other countries, inadequate energy resources and infrastructure could have a more lasting destabilizing impact.

Competition over shared hydrocarbon resources also has the potential to undermine regional stability, as challenges to poorly defined territorial borders where shared energy resources exist can quickly turn historic accommodation to more volatile, intrusive demands over ownership.

33. Senator BEGICH. General Mattis, in your opinion, does U.S. consumption of oil and natural gas from these countries perpetuate instability?

General MATTIS. No. In my opinion, just the opposite is true. U.S. consumption boosts economic stability in these countries, as this is a fundamental exercise of international commerce providing economic benefit to a lengthy supply and consumer chain.

34. Senator BEGICH. General Mattis, in your opinion, how do recent protests, uprisings, and calls for reform in many of the countries in your AOR potentially impact availability of energy resources to the United States?

General MATTIS. The wave of unrest is currently confined to nations that are relatively small oil and gas producers. If the wave migrates to larger energy producing regions, energy resource availability could be more significantly impacted.

35. Senator BEGICH. General Mattis, how would potential disruptions impact operations in CENTCOM?

General MATTIS. CENTCOM is well postured to endure an array of possible disruptions that may occur. We have ample storage at current operating and intermediate storage locations, fuel conservation measures, plus the redundant and complimentary fuel supply chain capabilities that have been developed.

QUESTIONS SUBMITTED BY SENATOR KIRSTEN GILLIBRAND

MIDDLE EAST TENSIONS

36. Senator GILLIBRAND. Admiral Olson and General Mattis, in response to the major uprising against the Qadhafi regime, how would you rate the risk that a post-Qaddafi Libya turns chaotic and provides a safe haven for al Qaeda and associated groups to exploit?

Admiral OLSON. SOCOM respectfully defers this question to AFRICOM as Libya is under their area of concern.

General MATTIS. [Deleted.]

IRAN

37. Senator GILLIBRAND. General Mattis, I am concerned, as I know you are, with Iran's continuing deployment of hundreds of short- and medium-range ballistic missiles that can reach our forces and our allies throughout the region. Do you believe you have sufficient ballistic missile defense (BMD) capability to defend against this threat now and in the future?

General MATTIS. [Deleted.]

38. Senator GILLIBRAND. General Mattis, I am concerned with Iran's mix of conventional and asymmetric warfare capabilities and the threat they pose to U.S. interests in the Gulf. If Iran threatened to close the Strait of Hormuz, which as you know would drastically affect the flow of petroleum to the world economy, do you have everything you need to deter and defeat this threat?

General MATTIS. [Deleted.]

39. Senator GILLIBRAND. General Mattis, do we have sufficient support from allies to achieve our goals?

General MATTIS. Yes. Our regional partners, in particular the Gulf Cooperation Council nations, increasingly recognize the threat posed by Iran. We have a shared

interest with these partners to counter Iran's destabilizing activities, and we have seen an increased level of cooperation in that regard. At the same time, we recognize the territorial integrity of our partners, continue to act in concert with them, and relentlessly engage to support mutually reinforcing objectives.

40. Senator GILLIBRAND. General Mattis, two Iranian Navy ships were permitted by Egypt to sail through the Suez Canal this month. The Iranians have said they are traveling to Syria for a training mission. While other military ships have travelled through the Canal, since 1979 no Iranian military ship has done so. What do you think is the reason for Iran's activity?

General MATTIS. Iran increasingly asserts its military capability across the region in order to expand its influence and to assume the role of regional hegemon. Iran's regular navy deployed the two ships through the Canal and to the Mediterranean Sea and Syria as part of their semi-annual cadet training cruise. These cadet cruises have a two-fold mission of training the next generation of naval officers and showing the Iranian flag. The cruises included foreign port visits, which support Iran's strategic effort to portray itself as a regional military power.

41. Senator GILLIBRAND. General Mattis, what actions are we taking, if any, in response to Iran's activity?

General MATTIS. With respect to Iranian naval vessels transiting the Suez Canal, we have not responded with any operational actions, though CENTCOM continues to closely monitor such activity. CENTCOM maritime operations are clearly observable by Iranian vessels, sending a clear message of U.S. presence and readiness, but also a sign of commitment to our partners.

PIRACY

42. Senator GILLIBRAND. Admiral Olson and General Mattis, last week, as you know, Somali pirates killed four Americans on a yacht they had captured. Admiral Mullen said in discussing the incident that more than 30 warships are involved in the anti-piracy drive underscoring the "significance of the challenge [of piracy] and also the priority in terms of focus." Despite this presence, Somali pirates continue to hijack vessels, and last year they seized 53 ships and took 1,181 hostages. Admiral Mullen further stated that hunting down the sea bandits in such vast waters was like searching for a "needle in a haystack." How are you adapting your tactics to deal with what is now a more lethal threat to U.S. citizens?

Admiral OLSON. I defer to General Mattis on questions concerning how forces under his operational control are employed. SOCOM is responsible for equipping SOF and providing the Geographic Combatant Commands with fully trained SOF. For counter piracy activities, SOF elements are trained to respond to hostage scenarios in a maritime environment in a manner that best protects U.S interests and the lives of U.S. citizens. SOF is generally not brought in unless there exists a lethal threat to U.S. citizens. I believe our current tactics, techniques, and procedures, or TTPs, are sound and we have made no recent significant changes. However, SOCOM will continue to assess the threat and modify our TTP's appropriately.

General MATTIS. We continue to adapt our tactics, as do the pirates. The scope and scale of the piracy enterprise has expanded considerably in recent years, and represents a challenge to both commercial and military elements of the international maritime community. Working with our Coalition, European, and NATO partners we have established three Naval Task Forces in the region that have placed up to 30 military vessels at any given time in key locations to deter attempted pirate attacks. Our CENTCOM Maritime Component Commander also hosts a bi-monthly Shared Awareness and Deconfliction (SHADE) conference in Bahrain to ensure multi-national deconfliction of activity and cooperation among all counter piracy activities in the region. In addition to Coalition, NATO, and European representation, the conferences also include civilian international maritime organizations and delegates from non-affiliated countries such as China, Russia, Japan, and India.

In addition to these international military efforts, we continue to coordinate closely with the maritime industry on communicating to merchant vessels the importance of adhering to the International Maritime Organization's Best Management Practices. Statistics indicate that the employment of these practices, to include well-trained embarked security teams, is a significant deterrent against pirates.

43. Senator GILLIBRAND. Admiral Olson and General Mattis, considering that this is essentially an international criminal issue, do you have the authority to respond?

Admiral OLSON. SOCOM respectfully defers this question to CENTCOM and the other combatant commanders as they are responsible for military operations within their area of control.

General MATTIS. Yes, we have several counter-piracy authorities. Legally speaking, the use of military assets to conduct counter-piracy operations is permitted under both domestic and international law. U.S. counter-piracy operations in the CENTCOM AOR are conducted pursuant to the Counter-Piracy Execute Order and in accordance with the Law of the Sea and U.N. Security Council Resolutions pertaining to suppressing piracy in the Horn of Africa Region.

Suppressing piracy has been a traditional maritime military activity dating back hundreds of years. Counter-piracy operations are conducted to preserve freedom of navigation on the high seas, ensure the free flow of commerce, and protect the sea lines of communication. Criminal prosecution, albeit an effective tool to keep captured pirates from returning to their activities and deterring other would-be pirates, is a means to accomplish the military mission of preserving freedom of navigation.

44. Senator GILLIBRAND. Admiral Olson and General Mattis, the root cause of piracy is often a failed state. What do you need from diplomatic and developmental resources to address piracy?

Admiral OLSON. SOCOM respectfully defers this question to AFRICOM as they are working with Department of State on how to deal with the root causes of piracy emanating from Somalia.

General MATTIS. While we can inhibit piracy on the sea with military action, ultimately the solution to the problem of piracy lies ashore, with stable governments that can control their sovereign territory. I fully support ample funding for diplomatic and developmental resources as part of an integrated civilian-military effort to maintain international support and unity of effort in combating issues of mutual concern such as piracy.

45. Senator GILLIBRAND. Admiral Olson and General Mattis, what steps should the private sector take to protect itself from piracy?

Admiral OLSON. I expect they will follow all Legal options available. SOCOM is not in a position to speak about what the private sector should or should not do in order to protect itself from piracy.

General MATTIS. The most effective deterrent against pirates is to adhere to the International Maritime Organization's Best Management Practices. These practices include the use of professional, well-trained embarked security teams, adherence to established security routes through the region, notification of sailing intentions to the United Kingdom Maritime Trade Operations (UKMTO), employing speed and evasive maneuvering when approached, and construction of onboard fortified citadels.

46. Senator GILLIBRAND. Admiral Olson and General Mattis, are you concerned that companies may take overly aggressive measures in response to piracy?

Admiral OLSON. SOCOM is not in a position to comment on what measures the private sector may take or how those measures could impact Combatant Command Counter-Piracy efforts.

General MATTIS. No. CENTCOM continues to advocate the importance of adhering to the International Maritime Organization's Best Management Practices. Statistics indicate that employing these practices, to include well-trained embarked security teams, provides a deterrent against piracy. The next iteration of Best Management Practices will recommend the practice of embarking armed security teams in order to prevent ship crew members from performing this function.

TERRORISM AND PROLIFERATION

47. Senator GILLIBRAND. Admiral Olson and General Mattis, I am concerned with reports that Iran is acting as an intermediary with North Korea to supply Syria with various forms of weapons of mass destruction (WMD) and missile technology. In April 2010, the Obama administration called in Syria's ambassador to ask about reports that Syria had transferred Scud and Fateh 110 missiles to Hezbollah. With the longer-range Scuds and more accurate Fatah 110s, how do you see this affecting the strategic balance in the region?

Admiral OLSON. [Deleted].

General MATTIS. I do not believe Hezballah's acquisition of SCUDs and Fateh 110s will significantly alter the regional balance of power. These new weapons enable Hezbollah to strike deeper into Israeli territory and enhance the group's power

projection, but Israel already defends against comparable missile threats from Syria by maintaining a high defensive posture and employing modern air defense and offensive systems.

48. Senator GILLIBRAND. Admiral Olson and General Mattis, this year's National Military Strategy (NMS) states: "the intersection between states, state-sponsored, and non-state adversaries is most dangerous in the area of WMD proliferation and nuclear terrorism. And then it goes on to say the prospect of multiple nuclear armed regimes in the Middle East with nascent security and command and control mechanisms amplifies the threat of conflict, and significantly increases the probability of miscalculation or the loss of control of a nuclear weapon to non-state actors." How confident are you that al Qaeda or associated insurgent groups could not acquire or steal a nuclear weapon or nuclear materials from Pakistan that they could then in turn use in a nuclear September 11 scenario?

Admiral OLSON. [Deleted.]

General MATTIS. The nexus of Violent Extremist Organizations and WMD proliferation is among my most pressing concerns. CENTCOM, along with our interagency partners, conducts a range of activities to combat WMD proliferation. With respect to Pakistan, I know Islamabad regards its nuclear program as the country's most important strategic asset and continues to place highest priority on nuclear security. Its nuclear security program is well established and we remain confident in Pakistan's ability to safeguard its nuclear weapons and stockpile.

49. Senator GILLIBRAND. Admiral Olson and General Mattis, how are the growing U.S.-Pakistan tensions impacting our ability to protect against that scenario?

Admiral OLSON. [Deleted.]

General MATTIS. At this time, I do not believe the present tensions between the United States and Pakistan will significantly impact the security of Pakistan's nuclear program. However, continuing tensions between the United States and Pakistan could undermine the effectiveness of long-term U.S. support to the Pakistan Army, which could in turn indirectly impact Pakistan's nuclear program security. But at this point such connectivity is spectulative and not based on concrete facts.

AFGHANISTAN

50. Senator GILLIBRAND. Admiral Olson and General Mattis, when I traveled to Afghanistan and Pakistan a few months ago I heard repeatedly from our commanders on the ground that our mission in Afghanistan is inextricably linked to Pakistan's harboring of al Qaeda, Taliban, and aligned organizations. U.S.-Pakistan relations have chafed greatly over the past year, particularly recently, and while Pakistani military has indeed suffered casualties in their fight against insurgency groups, our assessment remains that insurgents enjoy a relative safe haven in Pakistan. How are we going to execute a redeployment strategy in Afghanistan if Pakistan does not go after the insurgency within its borders?

Admiral OLSON. I defer this question to the combatant commander since he has operational responsibility for that area.

General MATTIS. Insurgent sanctuaries in Pakistan somewhat limit our ability to accomplish the mission in Afghanistan. Despite this considerable challenge, we continue to make significant progress in our campaign. It is important to note that Pakistan has taken a number of difficult steps and has suffered over 30,000 casualties in the fight against insurgents in their Northwest.

Our intent is to simultaneously degrade the enemy's capacity while we enhance the capacity of our Afghan and Pakistani partners to a point that they can pursue this effort without direct U.S. intervention. Such efforts are adversely affected by Pakistani requests that we reduce our footprint. Despite the challenges we currently face in Pakistan, we are committed to our long-term strategic relationship with them. We will continue to transfer the lead for security and governance to our partners in accordance with ISAF objectives, the Afghan-led transition process, and U.S. national strategy regarding both Afghanistan and Pakistan.

LEBANON

51. Senator GILLIBRAND. General Mattis, you state that you value the relationship with the Lebanese Armed Forces (LAF), and that you would like to see how the government develops before making a decision regarding continuing U.S. aid to the LAF, despite Hezbollah's role in the new government. What factors will you look for with respect to the new government in Lebanon and the LAF in order to shape your

strategic outlook with respect to Lebanon or the LAF, and particularly the advisability of continued aid or military-to-military transactions?

General MATTIS. [Deleted.]

CENTRAL ASIA

52. Senator GILLIBRAND. Admiral Olson and General Mattis, Kyrgyzstan has been a major refueling station for U.S. Forces in Afghanistan. The Northern Distribution Network with the other central Asian republics has provided us with important logistical support. How solid are the military relationships in Central Asia for the United States?

Admiral OLSON. All of our SOF military relationships with the Central Asian countries fall under the purview of CENTCOM. SOF elements under U.S. Special Operations Command-Central Command have established good tactical level military relationships with Kyrgyzstan, Kazakhstan and Tajikistan through Counter-Narcotics Training (CNT) programs.

General MATTIS. Our military to military relationships in Central Asia are generally good and improving, despite being comparatively new. I have been encouraged by the support of our Central Asian partners. We have made strides in further developing the Northern Distribution Network (NDN) over the last year in particular. Of course, our Central Asian partners offer support in accordance with domestic concerns. We have seen Russia accommodate our NDN efforts, which has helped to allay a significant concern among our partners. Central Asian states are at times reluctant to provide public or direct support of our efforts because of their Soviet-era Afghanistan experiences as well as concerns about provoking violent extremist organizations. Continued support for our military-to-military programs, IMET, and exercises is critical to continuing to improve these relationships. We are committed to conducting all military-to-military activities in concert with broader DOS strategy and policy within the Central Asian region.

53. Senator GILLIBRAND. Admiral Olson and General Mattis, does Russia remain neutral with respect to these relationships or does it attempt to disrupt them?

Admiral OLSON. [Deleted.]

General MATTIS. Russia's influence is a significant factor in the strategic calculus of Central Asian states, but has so far not significantly disrupted U.S. policies in the region. Russia supports efforts in Afghanistan, most notably by enabling recent enhancements to the NDN.

Russia is concerned about the growth of violent extremism as well as the flow of narcotics and other illicit cargo through Central Asia into Russia. At the same time, Russia is sensitive to the potential expansion of U.S. influence and the prospects of permanent U.S. bases in the region, and engages in information operations to counter and contain U.S. influence. As Central Asia's most influential trading partner, Russia has substantial influence over most of the Central Asian nations.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

COOPERATIVE SECURITY LOCATIONS IN IRAQ

54. Senator MCCAIN. General Mattis, I have a question about the establishment of cooperative security locations in CENTCOM as a vital tool for your theater security plans. Assuming the current plan for U.S. forces to withdraw from Iraq by December 2011 is carried out, we should still want to maintain a positive collaborative relationship with the Government of Iraq in a very strategic location of the region for our national interests. Is there value to you and the United States to establish forward operating sites and cooperative security locations in Iraq for future operations?

General MATTIS. While there is potential value to establishing security assistance sites and cooperative security locations in the CENTCOM region, the establishment must be balanced against many factors, to include host nation support, operational need, and possible future U.S. funding to develop and sustain these locations.

55. Senator MCCAIN. General Mattis, would the establishment of these locations have an impact on your withdrawal plans?

General MATTIS. The establishment of cooperative security locations would not be consistent with the current U.S.-Iraq Security Agreement or current U.S. policy for departure of U.S. forces.

56. Senator MCCAIN. General Mattis, what impediments, if any, preclude you from establishing the agreements necessary to establish these locations?

General MATTIS. The establishment of cooperative security locations is not consistent with the current U.S.-Iraq security agreement, which calls for the full withdrawal of U.S. forces by end 2011, and is consistent with current U.S. policy. It is also worth noting that the current U.S.-Iraq security agreement, which has authorized the U.S. military presence in Iraq from January 1, 2009 to December 31, 2011, stipulates that "Iraqi land, sea, and air shall not be used as a launching or transit point for attacks against other countries."

THEATER SECURITY COOPERATION

57. Senator MCCAIN. General Mattis, on the issues of theater security cooperation plans, I am aware that you have very few forces assigned to you during peacetime. Any exercises or collaborative training you plan to accomplish with other nations in your region must be supported by rotational U.S. forces sourced from the Services. Realizing that it has been some time since you were able to devote any significant resources to theater security cooperation in a peaceful region, are you comfortable with the arrangement to rely on rotational forces for the overwhelming majority of your security cooperation requirements? If, not, what changes would you propose?

General MATTIS. Yes. I am satisfied we are meeting our theater security cooperation objectives through a robust program of exercises, events, and activities across our AOR. The engagements include individual training utilizing subject matter experts, fielding equipment through Foreign Military Sales and direct commercial sales, increasing interoperability via mil-to-mil engagements, and executing bi-lateral and multi-lateral training exercises to develop partner capability and capacity.

One area that does present a problem is the need for sufficient and sustained Foreign Military Financing and a more responsive Foreign Military Sales (FMS) system that delivers urgent operational capabilities to meet our partner requirements. Too often, we are not able to meet their requirements in a timely manner due to an overly complicated foreign military sales system. I strongly support the recent initiatives of the Secretary of Defense directed Security Cooperation Reform Task Force and believe it is a definitive step in the right direction.

AFGHANISTAN RECONSTRUCTION

58. Senator MCCAIN. General Mattis, the Office of the Special Inspector General for Afghanistan Reconstruction recently published a report questioning the U.S. plan to invest $11.7 billion to construct facilities for over 300,000 ANSF. Are you aware of that report?

General MATTIS. Yes. I am aware of the Special Inspector General for Afghanistan Reconstruction Audit released on January 26, 2011.

59. Senator MCCAIN. General Mattis, what are you doing to address the concerns raised in the report?

General MATTIS. We are working with the Combined Security Transition Command in Afghanistan (CSTC–A) to incorporate the majority of the report's recommendations to extend our planning horizon and develop long-range operations and maintenance plans. CSTC–A is currently updating their guidance documents to incorporate the planning principles referenced in the report which should improve the identification of future projects and better document their priorities.

60. Senator MCCAIN. General Mattis, can you provide a long-range construction plan to meet the facility requirements for Afghan forces with the funds that Congress has provided?

General MATTIS. Afghan National Security Force generation drives the timeline for the construction planning and execution. Fiscal year 2011 and fiscal year 2012 are significant program years for construction, with $2.9 billion in fiscal year 2011 and $2.4 billion in fiscal year 2012 from the Afghan Security Forces Fund (ASFF). This ASFF funded infrastructure must support the diverse requirements of over 305,000 ANA and Afghan National Police personnel at locations throughout Afghanistan.

BAHRAIN NAVAL BASES

61. Senator MCCAIN. General Mattis, given the uncertainty in the region, including Bahrain, as well as the crisis we are facing here at home with deep deficits, in your opinion, should taxpayer funds exceeding $370 million continue to be expended this fiscal year on the complete revitalization of our navy base at Manama, Bahrain, and our base at Isa, or would a pause be prudent to allow for further assessment of our requirements in the region?

General MATTIS. The CENTCOM AOR presents limited opportunity for U.S. basing options. Bahrain remains one of our staunchest allies and provides us an optimum location. Current and future contingency operations in the region dictate the need to spend military construction (MILCON) funds now to address shortfalls. The current MILCON augments ship berthing space due to severe degradation of pier facilities, and provides critical ammunition storage for current and future operations. The MILCON program also includes quality of life improvements to alleviate overcrowding and provide acceptable living standards. Continued execution of MILCON funds in Bahrain is an essential CENTCOM mission support requirement and integral to CENTCOM Global Defense Posture initiatives. Reduced expenditure of MILCON funds in Bahrain will significantly impact operations now and in the future.

62. Senator MCCAIN. General Mattis, from an operational perspective, do you currently have an alternative port to Manama for support of 5th fleet? If not, do you believe it would be wise to use MILCON funds to develop one?

General MATTIS. No. The U.S. relationship with Bahrain remains strong and we do not currently see the need for an alternative port to Manama, Bahrain. In the event the situation dramatically changes with respect to either the bilateral relationship or U.S. policy, we will present options to DOD and Congress.

SOCOM MAJOR WEAPONS PROGRAMS

63. Senator MCCAIN. Admiral Olson, SOCOM has historically relied on the modification of service common equipment with SOF-peculiar technology as the basis of its equipping strategy—a strategy that has proven enormously successful in a number of areas. However, over the last several years, the command has undertaken efforts internally to develop major weapons programs, some at significant cost, such as the Advanced SEAL Delivery System (ASDS), the Joint Multi-Mission Submersible (JMMS), and the Special Operations Combat Assault Rifle (SCAR). While the specific issues and outcomes associated with the development of these three particular programs differ, they have brought attention to the ability of SOCOM to develop and ultimately field major weapon systems, particularly in an increasingly resource constrained environment. Do you believe SOCOM is properly structured to successfully undertake the development and fielding of major weapons systems?

Admiral OLSON. The structure of the Special Operations Research, Development and Acquisition Center (SORDAC) is not staffed or intended to be staffed, to support Major Defense Acquisition Programs. For programs such as the ASDS or JMMS, SORDAC enters into agreements with Service component acquisition offices to support our efforts. Traditionally SOCOM relies on the Services to develop major programs (e.g. ASDS) so that SORDAC can focus organic capabilities on the integration of new technologies, modifying service platforms, and developing new capabilities that the Services are not well positioned to do. SORDAC has had success in using the Joint Acquisition Task Force model to rapidly field new capability by integrating teams from the various service offices to meet urgent needs.

64. Senator MCCAIN. Admiral Olson, what lessons has SOCOM learned, not just from the aforementioned programs, but as a whole, in its efforts to develop and field systems to satisfy its requirements?

Admiral OLSON. SOCOM has developed its acquisition approach around the following four key principles which have enabled the successful acquisition of SOF unique equipment: deliver capability to the user expeditiously, exploit proven techniques and methods, keep warfighters involved throughout the process, and take and manage risks. SOCOM has shown that a dedicated corps of SOF acquirers is essential to rapidly, agilely, and successfully field SOF unique capability. SOCOM has been working closely with the Services to improve the synergy of Service and SOCOM acquisition activities through biannual acquisition summits co-chaired by the OUSD/AT&L and the SOCOM Commander.

65. Senator MCCAIN. Admiral Olson, to what degree is SOCOM looking to leverage commercially available and proven technology in the development of solutions to satisfy SOF-peculiar requirements?

Admiral OLSON. The SORDAC, the SOCOM acquisition arm, balances the need for advanced technology with rapid fielding of needed capability. In an effort to provide Special Operations deployed forces with required assets, SORDAC Program Executive Offices (PEOs), constantly evaluate existing technology, service available, and off the shelf solutions (commercial off-the-shelf and government off-the-shelf). There are a number of venues that provide direct insight into technology currently available or technology that will be available in the near term. The Technology and Industry Liaison Office (TILO) serves as the interface to industry, providing a venue for open dialogue and market research in support of the command. SOCOM utilizes the TILO as a conduit for industry to present products and services to the command for evaluation. Additionally, SORDAC's Science and Technology (S&T) Directorate, constantly evaluates technology with a near term potential to mature into fielded capability. SORDAC S&T initiated the Rapid Exploitation of Innovative Technology for SOF (REITS) program in 2010 to expedite technology which had the potential to rapidly transition to the field. Examples of current technology being evaluated in a Special Operations environment through the REITS program are; vehicle shock mitigation systems and mobile solar power generating systems. SORDAC S&T also sponsors an open experimentation venue which provides an opportunity for industry to demonstrate emerging technologies and capabilities which could support SOF. Experimentation creates synergy among industry partners and connects SOF operators to developers during concept assessments. The PEOs continually evaluate existing standalone equipment and package them to provide an enhanced capability to meet a new capability gap. For example, the Austere Location Force Protection Commodity Procurement Project packages off-the-shelf equipment to provide an integrated force protection system to support remotely deployed SOF Teams. Off-the-shelf equipment is a critical aspect of SORDAC's strategy to balance capability that will save lives today with the need to provide a technological leap that will provide SOF Operators with a significant tactical advantage in the field tomorrow.

TRAINING REQUIREMENTS SHORTFALLS

66. Senator MCCAIN. Admiral Olson, does SOCOM have any shortfalls in the availability of training resources, particularly ranges and facilities that are affecting the ability of your forces to prepare and train for specific deployments and missions? If so, please describe in detail these shortfalls and the effect they have on the ability of your forces to adequately train for specific deployments and missions.

Admiral OLSON. Many SOF units are unable to conduct all of their training requirements at or within close proximity of their home stations. Some training requirements, including long-range, full-mission profile validation exercises for example, require SOF to train at other installations. It is difficult to conduct training missions that accurately replicate operations routinely conducted by the Combined Joint Special Operations Task Forces in Afghanistan, and previously Iraq. These long-range live-fire exercises generally include mounted and dismounted ground elements supported by helicopters and tactical aircraft. Additionally, SOF units may conduct training with SOF-unique weapons systems that require larger Surface Danger Zones than weapons systems employed by conventional forces.

Ever increasing competition with conventional ground and aviation units for limited training range resources is adversely impacting SOF access to Service-owned ranges. For example, there are a very limited number of ground tactical ranges on U.S. Navy installations for Navy SOF to train. The majority of ground tactical ranges within the Department of the Navy are located on U.S. Marine Corps installations. This has challenged Navy and Marine Corps leadership to balance the training requirements of Navy SOF with those of Marine Corps units vying for use of the same ranges and training areas.

Unmanned Aircraft Systems (UAS) training continues to be hampered by the lack of adequate restricted airspace for SOF to execute fully integrated training events in which the full range of "shoot, move, and communicate" skills are rehearsed with UAS ISR support. Federal Aviation Administration Certificates of Waiver and Authorization allow limited access to the National Airspace System; however, the restrictions placed on UAS flights in these areas do not allow for adequate training for SOF.

67. Senator MCCAIN. Admiral Olson, what is planned to address these shortfalls?

Admiral OLSON. SOF is working closely with the Services to develop courses of action that allow SOF reliable and predictable access to resources such as training ranges for ground and aviation elements.

SOCOM is currently conducting a range study to examine the specific problems SOF is encountering with respect to ranges and training areas. The analysis will include SOF range access shortfalls, range saturation levels at home station, as well as adequacy of master range plans and existing agreements with the Services. Additionally, the study will determine if SOCOM components currently have adequate access to simulators and range simulation devices that could mitigate their requirements for range access. Findings and recommendations from this study will be staffed and presented to the SOCOM Commander.

SOCOM is addressing range and training area issues with each Service during scheduled warfighter talks. SOCOM is also hosting periodic range conferences and working groups with representatives from our components as well as the Services. The intent of these conferences is to exchange ideas, information, and seek solutions to any range issues identified.

The Navy has established a range working group with Marine Corps, Naval Special Warfare Command, and SOCOM participation to coordinate resolution of a request from Navy SOF for increased access to ranges and training areas on the west coast.

U.S. Army SOCOM is working with the Army to determine the feasibility of establishing SOF training centers at select ranges on Army installations. The Army G3/5/7 is analyzing and modeling Army SOF requirements (specifically, long-range mobility full mission profile validation exercises) to determine supportability on identified Army installations.

SOCOM and its components are working in numerous areas to bolster and support mission training requirements. These include: investment of MPF–11 dollars to fund SOF-peculiar modifications of existing ranges and facilities; expanded use of nontraditional training areas such as contracted facilities; and development of plans for SOF-managed training areas.

68. Senator MCCAIN. Admiral Olson, what can Congress do to help you address and improve the specific training requirements for SOF?

Admiral OLSON. DOD faces an increasing challenge from the cumulative effect of continuing urbanization and the increasing application of environmental requirements to military readiness activities—sometimes through novel or overly broad interpretation of law. Congress will have to balance the two public goods—military readiness and environmental protection. Some issues may require congressional action, while others can be relieved by changes within the regulatory agencies.

Under Title 10, U.S.C., ownership of real property—to include ranges—is a responsibility of the Services. The Commander, SOCOM cannot own real property. SOF units are tenants on installations and do not own the ranges on which they operate and train.

It is therefore critical that Congress adequately fund SOCOM to continue using home station, as well as other Service installation ranges and training support. Having sufficient resources also allows SOCOM to fund range enhancements and improvements, where appropriate, to meet SOF-unique training requirements.

SOF access to Service ranges can be adversely impacted by challenges associated with land withdrawal agreements, National Environmental Policy Act actions, aviation airspace issues, and civilian encroachment on Federal lands. As Service initiatives addressing these challenges move forward, congressional advocacy, as appropriate, may be warranted.

QUESTIONS SUBMITTED BY SENATOR SCOTT BROWN

IRANIAN NUCLEAR WEAPONS

69. Senator BROWN. General Mattis, today Iran is producing higher enriched uranium and is moving closer to possessing the weapons-grade uranium needed for a nuclear weapon. Neither economic sanctions nor diplomacy have worked to diminish Iran's goal to enrich uranium. The President has stated that he intends to "use all elements of American power to prevent Iran from developing a nuclear weapon." What is your assessment of Iran's role in the CENTCOM AOR?

General MATTIS. Iran's persistent destabilizing behavior runs counter to the United States, and more importantly, regional country interests. Likewise, Iran uses its Islamic Revolutionary Guards Corp-Qods Force to expand soft power influence across the region and beyond via religious, cultural and humanitarian outreach,

while at the same time executing destabilizing activities. Iran's nuclear program is a serious, destabilizing factor in the region and is widely believed to be part of the regime's broader effort to expand its influence.

70. Senator BROWN. General Mattis, what would it mean for the neighbors of Iran and the entire Middle East if Iran were to secure a nuclear weapon?

General MATTIS. A nuclear armed Iran would dramatically shift the balance of power between Iran and key regional nations. This shift and perceived failure of the international community in allowing Iran to develop nuclear weapons, would likely spark a regional arms race as Iran's neighbors would be apt to redress the balance. In the short term, the development of an Iranian nuclear weapon will place tremendous pressure on other countries to follow suit. The effects of these developments would rapidly extend beyond our region. A nuclear-armed Iran would most likely be more assertive and more aggressive with regional states, leading to less stability in an already unstable region. Possession of a nuclear weapon would likely embolden Iran to engage in "saber rattling" to intimidate or coerce its neighbors and enhance or increase Iran's perceived status as a leader in the Gulf region. Iran might not provide nuclear technology or weapons to its surrogates, due to concerns over control, accountability, and international repercussions. However, those surrogates, with a nuclear-armed sponsor, may be emboldened to act more aggressively, though not necessarily under Iran's control or on Iran's behalf.

71. Senator BROWN. General Mattis, do you agree that a nuclear-armed Iran poses an unacceptable risk to the United States?

General MATTIS. Yes. Iran remains the most significant threat to regional stability. Although the United Nations Security Council has spoken out against Iranian actions through additional sanctions, the regime continues its destabilizing activities globally. A nuclear armed Iran would significantly impede our global priorities of preventing WMD proliferation, retaining strategic access and ensuring the security and free flow of global commerce, especially energy resources. This would create a significantly more complex problem for our national security team and for the U.S. economy. Also, we could see other countries in the region finding it necessary to develop nuclear weapons or significantly increase conventional weapons to deter a nuclear armed Iran. We should endeavor with our international partners to take strong measures to prevent Iran from developing nuclear weapons.

TRANSITION IN IRAQ

72. Senator BROWN. General Mattis, do we have a contingency plan in place if Iraq security forces are not making progress by the end of this year?

General MATTIS. We are currently on track to remove U.S. security forces from Iraq by 1 January 2012 and will be ready to support U.S. Government led efforts through the Office of Security Cooperation-Iraq. If the Government of Iraq requests U.S. forces remain to assist Iraqi Security Forces after December 31, 2011, and the U.S. Government agrees to such a request, the U.S. military has the capability to assist.

73. Senator BROWN. General Mattis, during the transition in Iraq how do we prevent a mass exodus of institutional knowledge from occurring as a result of DOS taking over too abruptly?

General MATTIS. The same military personnel with institutional knowledge assigned to the Office of Security Cooperation-Iraq are currently working closely with our partners in DOS to support a smooth transition. We share a common objective for continuity and stability during the transition in Iraq. Preparations have been underway for some time and began with a comprehensive assessment of what was necessary to ensure a successful transition. A plan was developed and went into execution in the summer of 2010, including the identification of a multitude of tasks that will transition from U.S. Forces-Iraq to the U.S. Embassy-Iraq, CENTCOM, and the Government of Iraq, or be discontinued altogether.

74. Senator BROWN. General Mattis, what is the psychological dimension of the transition in Iraq?

General MATTIS. The psychological impact of the transition in Iraq varies. The American public may view the transition as positive. For the majority of the Iraqi people, the transition will be a positive experience that marks the re-emergence of Iraq in a regional and international context. Iraqi nationalism and the emergence of a representative government are all positive trends towards a new and pros-

perous future for Iraq. The future security and prosperity of Iraq now rests with its citizens. At the same time, some citizens in Iraq may view the transition with angst and uncertainty as the U.S. transitions from a Defense Department led effort.

75. Senator BROWN. General Mattis, will our Iraqi military partners have the confidence and incentives necessary to keep security tight after we are gone?

General MATTIS. Current assessments project some gaps in the Government of Iraq security capabilities will continue to exist. The Iraq Security Forces Fund combined with Foreign Military Sales cases directly address required equipment and training to deal with capability requirements. With these efforts, some shortfalls such as an air sovereignty capability requiring much longer timelines to put in place will continue to exist. Our primary strategic objective remains assisting the Government of Iraq in building and forging a professional, self-reliant, and effective security force capable of maintaining internal security and deterring external threats.

QUESTIONS SUBMITTED BY SENATOR SUSAN COLLINS

U.S. FINANCIAL COMMITMENT TO AFGHANISTAN

76. Senator BROWN. General Mattis, I understand the number of ANSF has increased dramatically in the past year. Pending the funding level provided for 2011, we have committed about $20 billion towards training and equipping the ANSF in 2010 and 2011. We provided roughly the same amount in the preceding 7 years. It is unclear to me that Afghanistan has the budget to sustain these forces once we drawdown in Afghanistan in 2014 or sometime between now and then. Unlike Iraq, which has significant oil revenue, Afghanistan's total GDP is about $30 billion.[1] Are we establishing a long-term U.S. financial commitment with the Afghan Security Forces Fund, or is there a transition plan that ensures Afghanistan sustains their security forces once we have trained and equipped them?

General MATTIS. The international community has acknowledged that while the transition of lead security responsibility will be completed by December 2014, financial support of the ANSF and other parts of the Afghan economy will be necessary past 2014. CENTCOM, in collaboration with other U.S. Government agencies, is developing economic initiatives to enable more coordinated and effective international community assistance. This will move Afghanistan from an aid based economy to a more self-sufficient trade based economy that will put Government of Afghanistan revenues on a path to eventually meet the expenditures of a robust ANSF which is capable of both meeting Afghanistan's security requirements and achieving U.S. strategic objectives in Afghanistan.

SAFE HAVENS IN PAKISTAN

77. Senator BROWN. General Mattis, last week, Admiral Mullen stated in his written testimony before this committee that one of the necessary conditions to succeed in achieving sustainable security in Afghanistan and Pakistan requires neutralizing insurgent sanctuaries in Pakistan.[2] On the next page he testified that "Insurgent groups such as the Quetta Shura and the Haqqani network operate unhindered from sanctuaries in Pakistan."[3] Putting these two comments together, it leaves me with the impression we are not on a path to success unless these safe havens in Pakistan are addressed. How confident are you that coalition or Pakistani forces will neutralize these sanctuaries—including those sanctuaries utilized by the Haqqani and Quetta Shura groups—in the next 12 months?

General MATTIS. I don't believe Pakistan will reverse its current policy within the next 12 months and eliminate sanctuaries enjoyed by the Quetta Shura Taliban and Haqqani Network. However, satisfactory end-states are attainable in Afghanistan even if the sanctuaries persist. Combined counterinsurgency operations beginning in late 2009 succeeded in ejecting the Taliban from key districts in southern Afghanistan despite Taliban sanctuary across the Pakistani border. Continued security gains and Afghanistan Government progress in security, governance, and development over the next several years have the potential to neutralize the Taliban as a

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[1] CIA World Fact Book.

[2] Mullen Testimony, SASC Hearing, February 23, 2010: Page 6 "Achieving sustainable security requires developing Afghan governing capacity, cultivating the conditions needed for conflict resolution, neutralizing insurgent sanctuaries in Pakistan, and countering corruption. Absent these conditions, we will not succeed."

[3] Mullen Testimony, SASC Hearing, February 23, 2010: Page 7.

strategic threat, even if sanctuaries in Pakistan allow insurgents to maintain influence in outlying areas and sustain a certain level of violence throughout Afghanistan.

IRANIAN NUCLEAR PROGRAM

78. Senator BROWN. General Mattis, last month, the quarterly report issued by the International Atomic Energy Agency reiterated concern about undisclosed nuclear-related activities that Iran has undertaken since 2004 related to the development of a nuclear payload for a ballistic missile. Will you update the committee on the latest estimates for when Iran could develop a nuclear weapon and when it could launch an Intercontinental Ballistic Missile?

General MATTIS. The Iranian regime continues to flout U.N. Security Council resolutions on its nuclear and missile programs. Iran is keeping open the option to develop nuclear weapons in part by developing various nuclear capabilities that better position it to produce such weapons, should it choose to do so. Iran is technically capable of producing enough highly enriched uranium for a weapon in the next few years, if it chooses to do so. Iran would likely choose missile delivery as its preferred method of delivering a nuclear weapon. It continues to expand the scale, reach, and sophistication of its ballistic missile forces, many of which are inherently capable of carrying a nuclear payload.

PIRACY ATTACKS

79. Senator BROWN. General Mattis, I am alarmed at the sharp rise in piracy attacks on the high seas in the last 4 years. According to the International Maritime Bureau, the number of pirate attacks against ships has risen every year for the last 4 years, and ships reported 445 attacks in 2010, up 10 percent from 2009. The number of crew members taken hostage has increased from 188 in 2006, to nearly 1,200 crew members in 2010. The recent killing of four Americans traveling on a sailing yacht demonstrates that the pirates threaten the safety of our citizens in international waters. In addition, the freedom to safely travel on the open ocean enables trade, which is the lifeblood for many American jobs. I certainly can appreciate that anti-piracy missions require significant resources and present many legal issues because most of these instances occur in international waters, but what needs to be done to reverse the increasing trend in piracy attacks?

General MATTIS. While we can inhibit piracy on the sea with military action, ultimately the problem of piracy must be solved on shore, primarily in Somalia with a stable government which can enforce the rule of law over its sovereign territory.

BALLISTIC MISSILE DEFENSE

80. Senator BROWN. General Mattis, many of us are concerned about the number of missiles and ships required to deploy an adequate BMD for our Nation and for our allies. The challenge is that in addition to protecting the U.S. Homeland, we need to protect our forward based troops and our allies. As a result, there are likely going to be a demand for BMD assets in European Command, Pacific Command, and CENTCOM—which is your AOR. Has CENTCOM established present and future requirements for both missiles and launchers regarding BMD in your AOR?

General MATTIS. Yes. We have identified BMD requirements for the CENTCOM AOR and they are based on our assessment of potential threats, present and future.

81. Senator BROWN. General Mattis, do you expect that the CENTCOM requirements for these assets will be fully satisfied now and in the future?

General MATTIS. No, I do not. There simply are not enough assets to deal with the global threat. As our adversaries improve their capability both in quality and quantity, the threat becomes ever more challenging and we must continuously reexamine the gap. Hence, we advocate for more interceptors now and additional systems as they become available. However, we are taking other steps to deal with the growing threat. We have engaged our partners and encouraged them to invest in their own BMD.

Our adversaries will likely continue to outpace us in terms of sheer numbers of ballistic missiles compared to our interceptor inventory. However, we don't need to match them one for one. We believe we can establish a credible deterrent by establishing an integrated, interoperable, collective defense with our regional partners. Therefore, in order to adequately defend against the missile threat in our region, we must maximize production capacity, to not only close our own capability gaps,

but also to enable rapid delivery of these critical systems to our partners once they commit to procuring them.

SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

82. Senator BROWN. Admiral Olson and General Mattis, the information and oversight the Special Inspector General for Iraq Reconstruction (SIGIR) has provided over the last several years has been invaluable to my colleagues and I to evaluate the U.S. mission in Iraq. The most recent SIGIR quarterly report suggests SIGIR has experienced some challenge in obtaining detailed information from DOD in the course of fulfilling its congressionally mandated requirements.[4] Will you each commit to be forthcoming in providing information to SIGIR for adequate reporting of the transition during this year?

Admiral OLSON. Yes.

General MATTIS. Yes. CENTCOM has always, and will continue to fully support SIGIR to the very best of our ability by providing the detailed information they require to execute their oversight functions.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

ROLE OF U.S. GROUND FORCES IN FUTURE CONFLICTS

83. Senator CORNYN. General Mattis, on February 25, 2011, Secretary Gates made the following comment regarding the force structure that will be needed in the years ahead: "The Army also must confront the reality that the most plausible, high-end scenarios for the U.S. military are primarily naval and air engagements—whether in Asia, the Persian Gulf, or elsewhere ... But in my opinion, any future defense secretary who advises the President to again send a big American land army into Asia or into the Middle East or Africa should 'have his head examined'." This past week, we had the 20th anniversary of coalition forces driving Saddam Hussein's Army out of Kuwait. Clearly, land forces played a huge role in Operations Desert Shield and Desert Storm. Remarkably, 150,000 coalition ground troops and 1,500 tanks were able to push the Iraqi Army out of Kuwait in just 100 hours. Is that type of military operation truly a thing of the past?

General MATTIS. I agree with the Secretary that the most plausible scenarios for military intervention involve naval and air engagements. These forces are particularly well suited to conducting short-notice, reactive and expeditionary actions to counter threats to our national interests. However, there remain plausible scenarios today where a U.S. ally or interests are so threatened by a force that only a joint force including robust, integrated land forces would be able to defend our partners and U.S. interests, as we saw in Operation Desert Storm. I expect this reality will continue to be a dominant feature of my Command's AOR and for that reason we must always be able to rely on our Army's core land force capabilities.

84. Senator CORNYN. General Mattis, if such a scenario arose again in the near future, would it be possible to drive the enemy out through primarily naval and air engagements?

General MATTIS. A combination of air, land, and sea engagements is critical in influencing enemy courses of action and their will as an opposing force. An example illuminating the limitation of an air power only campaign includes the NATO air campaigns over Bosnia in 1995. Successful engagements are derived by concurrent balance of forces that offer the greatest strategic flexibility while building on momentum to create opportunities for rapid achievement of objectives.

85. Senator CORNYN. General Mattis, would it have been possible to conduct the initial phases of Operation Enduring Freedom—in which we invaded Afghanistan, inflicted severe damage on the Taliban and al Qaeda, and held key ground in Afghanistan—using primarily naval and air forces?

General MATTIS. No. During the early phases of combat operation in Afghanistan in October 2001, naval and air forces were largely focused on disrupting the Taliban and al Qaeda and preventing their use of terrorism training camps. However, CENTCOM assessed that the indigenous ground forces could not prevail without U.S. and allied assistance on the ground.

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[4] SIGIR Quarterly Report and Semiannual Report to Congress. Pages 5 and 16.

U.S. WITHDRAWAL FROM IRAQ

86. Senator CORNYN. General Mattis, several startling recent events in Iraq call into question the Iraqi Security Forces' ability to maintain peace, including violent protests and the bombing of the Baiji Oil Refinery—the largest in Iraq. During your testimony, you alluded to the possibility that terrorist organizations such as al Qaeda are behind this recent unrest. How concerned are you that al Qaeda or its affiliates will return to Iraq and take root again following the departure of U.S. forces?

General MATTIS. The Al Qaeda in Iraq (AQI) network continues to suffer setbacks. AQI efforts to reinvigorate a Sunni support base will likely fall short of achieving its objective. The majority of Sunnis in Iraq strongly oppose the al Qaeda network for the harsh tactics the group imposes. The transition to Iraqi-led counterterrorism operations has already taken place and the Iraqi Security Forces have demonstrated the ability to aggressively and accurately pursue AQI entities. Iraq will undoubtedly face challenges long after the departure of U.S. forces; however, the Government of Iraq and its security forces are demonstrating the ability to prevent AQI from advancing.

87. Senator CORNYN. General Mattis, several military and civilian leaders have expressed serious concern about the Iraqi Air Force's ability to protect its own air space once U.S. forces redeploy home. The Iraqis had aggressively pushed to purchase 18 American-made F–16s, but they announced postponement of the planned purchase in order to shift that funding to domestic priorities. In light of this unfortunate delay, what steps have you taken to enable Iraq to adequately defend its airspace following the U.S. withdrawal?

General MATTIS. While current intelligence assessments describe the threat to Iraqi air sovereignty as minimal, shared contingency planning addresses any potential threats and provides a framework for mitigation procedures. Iraq has taken the initial steps towards self-reliance in air defense with the objective of acquiring two long-range radar systems that will provide them a capable early warning system. This is the first piece in the development of a sustainable air sovereignty posture, of which the F–16 case was to be the next essential step. These radar systems, one to be provided through Iraqi Security Forces Funding and the other through an FMS case, will provide a foundational capability in air defense. We are working with them to have the radar capability installed and operational by the end of 2011. CENTCOM also intends to conduct military-to-military bilateral contingency planning with GoI. The GoI will still need to acquire a capable air defense weapon system in the future, whether it is the F–16 or another platform. While the GoI will investigate all options, including a like-capability from other countries, CENTCOM will continue to encourage a U.S. manufactured solution as we believe this will provide the best sustainable capability for Iraqi air defense.

PIRACY

88. Senator CORNYN. General Mattis and Admiral Olson, Somali pirates are a lingering threat off the Horn of Africa and now even in the Indian Ocean. The February 22 murder of four Americans on a private, hijacked vessel near Oman served as a wake-up call. This year alone, Somali pirates have mounted over 50 attacks, hijacked several ships, and have taken over 200 crewmembers hostage. It appears that piracy is increasing in numbers, reach, and determination, despite the growing number of U.S. and international assets committed to protecting the maritime commons. In your mind, what is the most effective strategy to guard against piracy and secure the use of maritime routes off the east coast of Africa and throughout the Arabian Sea and Indian Ocean?

Admiral OLSON. SOCOM provides specially trained and equipped forces to support the counter-piracy strategies of the geographic combatant commanders.

General MATTIS. While we can inhibit piracy on the sea with military action, ultimately the problem of piracy must be solved on shore, primarily in Somalia with a stable government that can enforce the rule of law over its sovereign territory.

SOCOM FUNDING

89. Senator CORNYN. Admiral Olson, in January, Secretary Gates announced several "efficiency" cuts, including $2.3 billion from the SOCOM budget. At the same time, our Nation asks more than ever of our SOF. Recently, you stated "We are doing more with more, but the more we're doing it with doesn't match the more

we've been asked to do . . . we are beginning to show fraying around the edges." You have also stated that deployment frequency for SOF is exceedingly high, while SOCOM lacks the resources to meet the current demand. Will losing this $2.3 billion detrimentally impact SOCOM operations? If so, why?

Admiral OLSON. Senator Cornyn, thank you for affording me the opportunity to answer this extremely important question. Secretary Gates has directed cost consideration in all we do, and a "culture of savings" to ensure that we optimize the resources entrusted to us. His direction for improving DOD business operations last summer was clear; identify our savings and efficiencies initiatives over the next 5 years under the notion that those savings would be reinvested. The Department's stated goal was to significantly reduce excess overhead costs and apply savings to force structure and modernization—not a reduction of the DOD topline through efficiency cuts.

CDR SOCOM's efforts in resourcing tactical units, divesting of obsolete and redundant capabilities, and leveraging Service common capabilities are consistent with the Secretary of Defense efficiency focus. Realigning the $2.3 billion across the FYDP did not have a negative impact on SOCOM. In fact, it allowed us to address growing capability gaps and improve battlefield performance by invigorating our acquisition agenda. SOCOM was able to realign funding towards Undersea Mobility and AC–130J Gunship recapitalization. Additionally, we were able to realign funding to improve SOF operational readiness and improve our human capital strategy. Key efforts such as Foreign Language Proficiency Pay, Marine Corps Forces Special Operations Command sustainment, flying hours funding, and Warrior Rehabilitation were enhanced.

INTERAGENCY COORDINATION ON NATIONAL SECURITY

90. Senator CORNYN. General Mattis, in recent years, our troops in Iraq and Afghanistan are increasingly operating in areas outside their traditional competencies. We have seen examples of combat commanders standing up agricultural unions, dealing with veterinary issues, water issues, health issues, human services issues, and conducting elections in their areas of operations. While most of these tasks have been executed successfully, due in part to the sheer tenacity and determination of our military, many have been completed without the support and expertise of the relevant U.S. Government agencies. Could you comment on what legislative modifications you think are necessary in order to improve interagency security cooperation?

General MATTIS. Transitioning our military forces out of Iraq and Afghanistan will become more difficult if we cannot maintain assistance in the economic and governance areas on the civilian side. Robust resourcing for the State Department, the U.S. Agency for International Development, and other agency and department missions are some of the best investments for reducing the need for military forces to be employed.

91. Senator CORNYN. General Mattis, do you see the need for a more comprehensive review or possible reorganization of some government agencies to better support our expeditionary military?

General MATTIS. Improved interagency coordination begins with an adequate level of resources available to our civilian interagency associates and partners. It is vitally important to support and fully fund the requests made by these departments and agencies in the 2011 and 2012 budget requests that address and build the capabilities and capacity required for the future success of the National Security Strategy. The Quadrennial Diplomacy and Development Review offers important contributions to both improving efficiencies and allowing us all to better understand how our partners operate.

92. Senator CORNYN. General Mattis, under current DOD organization, Iraq and Afghanistan fall within CENTCOM's AOR. However, within the DOS organizational structure, they fall under two separate regional bureaus. Similarly, Pakistan and India fall under the same DOS regional bureau, but under two different DOD unified combatant commands. These problems are not limited to the DOD and DOS maps. It would seem that this misalignment of geographic regions between Federal agencies would cause inherent challenges in the area of interagency coordination. In your opinion, does this lack of common demarcation of the world's regions hamper effective interagency cooperation and coordination on national security?

General MATTIS. No. Differences in the Areas of Responsibility geographic demarcations do not restrict accomplishment of assigned missions among COCOMs and

civilian leaders across the Federal Government, to include diplomatic coordination, interagency cooperation, advancing U.S. interests, and protecting U.S. national security.

IRANIAN INTERFERENCE IN IRAQ

93. Senator CORNYN. General Mattis, you noted in your testimony that Iran's Islamic Revolutionary Guard Corps-Qods Force (IRGC–QF) is equipping militants in Iraq and Afghanistan who have attacked U.S. and coalition forces, undermining stability and governance in both nations. Through these actions, Iran has essentially been waging a proxy war against U.S. troops. Your testimony also highlights a recent January 2011 large-caliber improvised rocket-assisted mortar attack against U.S. forces in Iraq that, in your words, "demonstrated Iran's malicious intent and ability to escalate violence when they desire." What concerns do you have regarding the potential for the Iranian regime to obtain a greater, destabilizing influence in Iraq following the planned withdrawal of U.S. troops in December 2011?

General MATTIS. IRGC–QF will likely continue to support Shia militant groups in Iraq after U.S. forces withdraw, just as IRGC–QF continued to support Lebanese Hizballah after the withdrawal of Israeli forces from Lebanon in 2000. IRGC–QF will likely attempt to replicate the Hizballah model in Iraq via Shia militia groups such as Kata'ib Hizballah, Asaib Ahl al-Haqq and Muqtada al Sadr's Promise Day Brigade. Their intent is to have a loyal proxy with legitimate seats in the Iraqi Government and a capable, responsive militia. These militia groups, backed by IRGC–QF and Lebanese Hizballah, could collectively destabilize the security gains made in Iraq should Iran and these militias believe increased violence would benefit their interests and increase their influence.

94. Senator CORNYN. General Mattis, in your view, what is the best strategy, short of contingency operations, that the United States can employ to deter Iran's destabilizing activities in the region?

General MATTIS. I believe the most effective strategy is one that mobilizes the international community to implement sufficient diplomatic and economic pressure to further isolate Iran forcing the regime to change its destabilizing behavior. In the meantime, CENTCOM will continue to work through institutions, alliances, and coalitions to dissuade Iran from developing a nuclear weapon. To this end, we will continue to pursue security cooperation with our allies and regional partners while helping to strengthen their defensive capabilities. We will also continue to support interagency efforts that blend economic, diplomatic, informational, and military tools to deter Iran.

B–1 BOMBERS

95. Senator CORNYN. General Mattis, the B–1 bomber has been operating over Afghanistan in support of our troops on the ground and has proven itself a critical component of our long-range strike operations overseas. Senior U.S. military leaders have consistently acknowledged that the B–1 fleet is doing an outstanding job. In a recent confirmation hearing, General David Petraeus stated that the B–1 is a "great platform" and a "very capable bomber." In your view, what role has the B–1 fleet played within CENTCOM's AOR, and what unique capabilities has it brought to the table, as compared to other platforms?

General MATTIS. The B–1 is a very capable combat aircraft that combines precision targeting and guided munitions. The B–1 can deliver up to 48,000 pounds of munitions and can loiter for 7 hours before needing aerial refueling. During the first 6 months of OEF, the B–1 dropped 38 percent of all weapons delivered while flying only 5 percent of the overall sorties. In addition, the bomber dropped twice as many precision munitions as the coalition partners combined. In Operation Iraqi Freedom, the aircraft flew less than 1 percent of the combat missions while delivering approximately 43 percent of the precision munitions.

[Whereupon, at 11:47 a.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, MARCH 8, 2011

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

DEPARTMENT OF THE NAVY

The committee met, pursuant to notice, at 9:48 a.m. in room SD–G50, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Reed, Webb, McCaskill, Hagan, Manchin, Shaheen, Blumenthal, McCain, Inhofe, Wicker, Brown, Ayotte, and Collins.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Jonathan D. Clark, counsel; Creighton Greene, professional staff member; Jessica L. Kingston, research assistant; Gerald J. Leeling, counsel; Jason W. Maroney, counsel; Thomas K. McConnell, professional staff member; William G.P. Monahan, counsel; John H. Quirk V, professional staff member; and Russell L. Shaffer, counsel.

Minority staff members present: David M. Morriss, minority staff director; Adam J. Barker, professional staff member; Daniel A. Lerner, professional staff member; Lucian L. Niemeyer, professional staff member; Christopher J. Paul, professional staff member; and Michael J. Sistak, research assistant.

Staff assistants present: Kathleen A. Kulenkampff, Brian F. Sebold, and Breon N. Wells.

Committee members' assistants present: Christopher Griffin, assistant to Senator Lieberman; Carolyn Chuhta, assistant to Senator Reed; Nick Ikeda, assistant to Senator Akaka; Gordon I. Peterson, assistant to Senator Webb; Tressa Guenov, assistant to Senator McCaskill; Roger Pena, assistant to Senator Hagan; Patrick Hayes and Joanne McLaughlin, assistants to Senator Manchin; Chad Kreikemeier, assistant to Senator Shaheen; Ethan Saxon, assistant to Senator Blumenthal; Anthony J. Lazarski, assistant to Senator Inhofe; Joseph Lai, assistant to Senator Wicker; Charles Prosch, assistant to Senator Brown; Ryan Kaldahl, assistant to Senator Collins; and Taylor Andreae, assistant to Senator Graham.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. I want to welcome Secretary Mabus, Admiral Roughead, and General Amos to the committee this morning to testify on the plans and programs of the Department of the Navy in our review of the fiscal year 2012 annual budget and Overseas Contingency Operations (OCO) request of the administration. We are pleased to welcome General Amos to his first posture hearing as Commandant and to welcome Admiral Roughead for what will probably be his last posture hearing before the committee as Chief of Naval Operations (CNO).

We are grateful to each of you for your great service to our Nation and for the valorous and truly professional service of the men and women under your command, and we're grateful to their families for the vital role families play in the success of careers and missions of our Armed Forces.

As we discuss the budget issues here at home, our eyes are principally focused on places far from here. Nearly 20,000 marines are partnered with an equal number of Afghan security forces (ASF) in Helmand Province, in the effort to bring security and stability to the people of southern Afghanistan. The marines have seen some tough fighting in clearing those areas of Taliban. They have also performed brilliantly in working with ASFs and local Afghan leaders to keep these communities free of insurgent control and to help the Afghan people build a better future. These efforts are showing progress, with villages secured in the central Helmand River Valley, market bazaars are reopening, and children are returning to school.

The marines are also helping to establish community watch groups throughout Helmand Province, which are enabling local villagers to provide for their own security and to prevent a return of the Taliban.

When we met for the Navy posture hearing last year, the Marine Corps was completing its drawdown of forces in Iraq and was in the midst of its redeployment to Afghanistan. The Navy has also been contributing directly to the war effort in U.S. Central Command (CENTCOM) as well and has 14,000 Active and Reserve sailors on the ground and another 10,000 at sea in CENTCOM, including ongoing individual augmentee support to operations in Iraq and Afghanistan.

New challenges have emerged in recent days. Two ships with a Marine Expeditionary Unit (MEU) of over 1,000 marines aboard are in the Mediterranean. Missile-launching ships are available should the President choose to use them to strike Libyan targets, including military aircraft, air defenses, airstrips, command centers, and bases.

Before exercising any use of force option, the President is appropriately seeking support from the international community, in particular the support of other countries in the Arab and Muslim worlds and in the region. It has been reported that some Arab states are apparently considering coordinating with the African Union in support of imposing a no-fly zone over Libya. Also, France and the United Kingdom are drafting a resolution for possible use at the United Nations (U.N.). Meanwhile, discussions are ongoing

at the North Atlantic Treaty Organization (NATO) headquarters in advance of a defense ministerial meeting on March 10 and 11.

Under the War Powers Act, the administration would need to consult with Congress before exercising a military option involving the use of force and to notify Congress promptly if a decision were made to use force.

The use and possible use of our forces overseas makes it even more important that our budget provides for their success and their wellbeing. Our witnesses this morning are faced with a number of critical issues that confront the Department of the Navy and the budget, such as balancing modernization needs against the costs of supporting ongoing operations. We also know that you are facing serious complications due to the fact that the Department of Defense (DOD) does not have a full year budget for the current fiscal year.

Many of the ongoing challenges facing the Department of the Navy (DON) center on acquisition programs. For instance, we have had great concerns about cost problems in the shipbuilding arena, including the Littoral Combat Ship (LCS) program. Since last year, we approved a revised acquisition strategy for LCS that will result in $2.9 billion in savings compared to the previous shipbuilding plan and has also contributed, at least in part, to the fact the Navy is buying additional ships in this budget and has added purchases of additional 41 F–18 aircraft to help address a potential shortfall in tactical aviation.

We will be monitoring closely to ensure that the DON actually achieves these savings and gets costs under control in other acquisition programs. The Navy has made modest progress in achieving the goal of a 313-ship fleet by increasing the size of the Navy fleet, and that has increased from a low of 274 ships in March 2007 to a planned level of 288 during fiscal year 2012.

We need to see more success stories, such as the savings from the LCS program or the savings from more efficient production of the *Virginia*-class submarine or the savings from the F–18 multiyear program if the Navy is going to make continued progress in building the size of the fleet. The future strength of the Navy depends on holding firm on these cost reduction efforts and expanding them across the whole acquisition portfolio.

The Marine Corps has announced their intention to cancel the Expeditionary Fighting Vehicle (EFV) program. DON acknowledges the importance of the Marine Corps' amphibious assault mission and of the continuing relevance of that mission and capability to the Nation's defense. This mission in turn depends on an ability to move ashore from 20 to 30 miles out to sea with armored vehicles. That has been the purpose of the EFV program. So we need to hear this morning on the status of the alternatives to the EFV to achieve that mission.

The Weapons Systems Acquisition Reform Act of 2009 has dictated that DOD make significant changes in its regulations and procedures governing the acquisition system. While I'm certain that this legislation will help correct past problems, I also know that we will succeed only through concerted efforts within the executive branch to implement that legislation and improve past behav-

ior within DOD. We look forward to hearing this morning how the Navy is proceeding to implement the provisions of that act.

Another concern surrounds future ship and aircraft force levels. As I have previously mentioned, the Navy budget would buy an additional 41 F–18 aircraft, but the budget would buy fewer Marine Corps and Navy versions of the F–35 Joint Strike Fighter (JSF). Additionally, the Navy is planning to conduct a Service Life Extension Program (SLEP) on some 150 F–18 aircraft already in our inventory. We need to understand the net effect of all these changes and how that alters the prospect of having empty carrier air wings later in this decade.

Readiness continues to be a major concern for our committee. Without a final fiscal year 2011 appropriations act to match this committee's 2011 authorization of additional resources for readiness, the Navy readiness posture is in great jeopardy. Specifically, the funding needed in this fiscal year, in addition to the original budget request, is roughly $60 million for aircraft depot maintenance and $34 million for ship depot maintenance.

During last year's budget review cycle, this committee authorized those additional resources to meet the CNO's identified unfunded priorities for fixing shortfalls in the Navy aircraft and ship depot maintenance accounts in the fiscal year 2011 budget. While the Senate Appropriations Committee matched that additional funding, there has been no final appropriations act. Delaying the final appropriations act for fiscal year 2011 has already had a negative effect on readiness. The Navy has cancelled five ship availabilities. Further delay on appropriations will result in additional cancellations.

The fiscal year 2012 budget continues an inadequate request for ship and aircraft depot maintenance, as I mentioned. For these two areas, the Navy budget request is short some $367 million, which would only exacerbate an already stressed state of naval readiness.

Turning to operational energy issues, I want to commend Secretary Mabus for his foresight and aggressive goals and his successful testing of alternative fuels from renewable sources. The sooner we can free ourselves from the shackles of fossil fuels, the better off our Armed Forces will be along with the Nation.

I understand that last year one Marine company deployed to Afghanistan with renewable power systems to recharge batteries and laptops and energy-efficient lighting for tents, among other items. Since then, fuel use has decreased 90 percent and two patrol bases now operate entirely upon that renewable energy. I congratulate you, Secretary Mabus and the Marines, for that initiative.

I also want to commend Secretary Mabus on his recent announcement that DOD will take new steps to enhance cooperation on clean energy and energy security by furthering last year's Memorandum of Understanding between DOD and the Department of Energy.

Last year's committee report on the National Defense Authorization Act for Fiscal Year 2011 contained language expressing this committee's concerns with the planned relocation of 8,000 marines and their families from Okinawa to Guam. We recommended a reduction of $320 million from the request for construction of aircraft parking, site preparation, and utilities on Guam, since we con-

cluded that these funds were budgeted ahead of need. The committee also recommended that authorization for the construction of future projects be deferred until we were provided with essential and relevant information. To date, the committee has not received that information on any of these six items that we requested.

This year's budget request contains $181 million in similar projects. DOD has not yet shown that tangible progress has been made to implement a final decision on the replacement facility that meets the operational requirements for the marines on Okinawa, and we should not proceed with such an important, costly endeavor until we have complete, detailed information and realistic plans. To do otherwise would risk billions in taxpayers' dollars and could potentially put our strategic posture in a crucial region in jeopardy.

So we look forward to hearing testimony this morning from our witnesses on these and other issues that are facing the Navy, and again we strongly commend you on your great service to the Nation and on the initiatives that you have taken.

Senator McCain.

STATEMENT OF SENATOR JOHN McCAIN

Senator MCCAIN. Thank you, Mr. Chairman.

I thank the witnesses for being here today and I thank them for their service to the country. They join us in interesting times. There are a lot of issues that are now before us and the President and the Joint Chiefs and also our military leadership have to handle various situations that are unfolding in the world, some of it on a day-to-day basis. So, I'm very interested in hearing General Amos' and Admiral Roughead's assessments of some of these situations.

I remain concerned—by the way, in case—I know that our witnesses didn't miss it, but the Chinese announced a 12 percent or 12.5 percent increase in their defense budget. We all know that that is not a true reflection of their defense spending, and a lot of their recent behavior in my view has emphasized the need for a naval presence in that part of the world, a very significant one, which may in future years turn our attention again to our overall maritime strategy.

The JSF is an issue that we have been over and over and over again both in hearings and with the witnesses. General Amos, I would really appreciate it if you would keep us informed almost on a monthly basis. Secretary Gates has said, as we all know, that the Marine Corps version of the F–35 is on "probation." This has really been a—I hate to keep throwing around the word "disgraceful," but the cost overruns and delays have been unfortunately characteristic of a lot of our acquisition problems and challenges over the past several years.

I know, General Amos, that you will keep us informed. But we don't want to be surprised about anything that happens with the F–35. In these tough fiscal times, we do have an obligation to our citizens to make sure that—we always have that responsibility, but now in these tough times, that responsibility has even been increased.

General Amos, I appreciate your decision concerning the EFV. I know it was a tough one for you and I'll be very interested in hear-

ing your views on what we will do instead of the EFV in the future, particularly in light of my opening comments. Our whole shipbuilding costs are really something which is disturbing us. Secretary Mabus, how you're going to fit the submarines as well as our other shipbuilding requirements all into a very tight budget, I would be very interested in hearing how you're going to approach that.

Finally, on the LCS, I would just quote not my own views, but from Norman Polmar. Over the years we learn to respect the views of certain individuals who are experts and I would quote from an article that Norman Polmar wrote called "A Crisis in Leadership" in January. He basically said: "And more recently, the Navy has again changed course on the LCS program. The program began a decade ago when the Navy awarded contracts to two industry teams to develop and build competitive LCS designs 'at the speed of light.' As successive CNO and surface warfare flag officers attested, each team was to build up to two ships." At the last hearing I went through the numbers of the ships that were begun and cancelled, at huge costs.

"After competitive evaluation, the Navy would select one design to fulfill the requirement for a total LCS force of about 55 ships."

I go on to quote Norman Polmar: "Into 2010, the Navy continued to praise this approach to the LCS program, even though both designs have been late and far above planned costs. The design selection also was delayed with the penultimate declaration by the Navy's leadership being that the winning design would be chosen in November 2010.

"Then, without warning, in November the Navy announced a 'split decision.' The leadership now wants to buy 10 additional ships from each builder. The claim is made that the existing competition had driven down costs for both designs.

"That is a questionable claim in view of the more than doubling of the costs of prototypes of both designs, major problems in development and producing their mission modules, and increased costs of supporting a large number of both LCS configurations in the fleet. The two LCS designs have different sensors, computers, software, tactical displays, propulsion systems, et cetera. Those will cause increased maintenance and support costs, increased personnel training costs, and restrict flexibility in personnel assignment, an important factor in view of the small LCS crew size. The different combat systems of the two LCS designs will create problems related to operating the mission modules. Developing a new common combat system for both designs could cost up to $1.8 billion, according to the Congressional Research Service. Adapting one of the combat systems to the other design would cost just under $1 billion."

That's Norman Polmar's view, and we'll see, Mr. Secretary. We'll find out. I'll be here for a few more years, and we'll see whether your decision was correct, or whether Norman Polmar and I were correct, when you made a snap decision in November that we had to approve two different shipyards to do the job that for years you told Congress and the American people that you were going to select one.

This kind of thing erodes, enormously erodes, the credibility of the Navy's plans and programs, at least for this member.

I look forward to hearing from the witnesses and I thank them for their service to their country.

Chairman LEVIN. Thank you, Senator McCain.

Secretary Mabus, let me call on you first.

Secretary Mabus.

STATEMENT OF HON. RAYMOND E. MABUS, JR., SECRETARY OF THE NAVY

Mr. MABUS. Mr. Chairman, Senator McCain, members of the committee: I have the honor of appearing here today representing the sailors, marines, civilians, and their families that make up our Department of the Navy. Today the Navy and Marine Corps are conducting missions across a full range of military operations. They remain the most formidable expeditionary fighting force the world has ever known and, thanks to your support, they will continue to meet the multitude of missions entrusted to them by our Nation.

As the chairman pointed out in his opening statement, today we face an immediate crisis, the absence of a defense appropriations bill and the increasingly serious problems of operating under a continuing resolution (CR). The pressure of the CR has already significantly impacted procurement and reduced the resources available to maintain readiness. If the CR continues for the entire year, we will be forced to reduce aircraft flight hours and ship steaming days, cancel up to 29 of 85 surface ship availabilities, defer maintenance on as many as 70 aircraft and 290 engines, and defer up to 140 maintenance and construction projects across the country.

In addition, lack of legislative action will prevent the construction of two *Arleigh Burke* destroyers, one *Virginia*-class submarine, and one mobile landing platform, prevent procurement of two nuclear reactor cores, and delay increased funding for the *Ohio*-class replacement, reduce Marine Corps procurement by a third after the Marine Corps rebalances its manpower accounts, create a $4.6 billion shortfall in operations and maintenance accounts, and create a nearly $600 million shortfall in combined Navy and Marine Corps manpower accounts.

These measures not only place additional stress on the force and on our families; they will weaken the industrial base and affect over 10,000 private sector jobs. The disruption to our fleet and shore maintenance and modernization schedules may take years to recover from and will come at a much greater cost. We strongly request congressional action to address the implications of the CR.

This is particularly important when considering that submission of the fiscal year 2012 budget was based on the fiscal year 2011 request.

The fiscal year 2012 President's budget request for the Navy of $161 billion, an increase of only one-half of 1 percent from fiscal year 2011, includes funds this year for 10 ships and 223 aircraft. It maintains our commitment to take care of our people, build a strong research and development and industrial base, and to grow the fleet.

The $15 billion request for OCO, which represents a drop of $3.5 billion from fiscal year 2011, includes funds to sustain operations,

manpower, infrastructure, as well as procure equipment to support operations in Afghanistan.

During the budget development, we were keenly aware of the fiscal position of the country and the necessity to be responsible stewards of taxpayers' dollars. The resulting request is a strategy-driven document, informed by fiscal realities. I think it balances competing requirements and does what is best for the country, the Navy and Marine Corps, and our sailors and marines.

We began this budget cycle by examining every aspect of what we do and how we do it. Consequently, $42 billion in the Navy efficiencies were identified over the 5 years. As a result of these efficiencies, we have been able to add one Aegis destroyer, three T–AOX fleet oilers, and one T–AGOS ocean surveillance ship to our shipbuilding plan. With our dual-block LCS strategy, this increases the total number of ships in the Future Years Defense Program (FYDP) from 50 to 56, including one Joint High-Speed Vessel to be built for the Army.

The savings allow us to buy additional F/A–18s, extend the service life of up to 150 aircraft as a hedge against delays in the deployment of the F–35B, and allow us to continue investing in unmanned systems, which are becoming increasingly important on the battlefield.

The upcoming year will see the deployment of Fire Scout to Afghanistan and continuing testing of the UCAS–D, the forerunner of an integrated carrier-based system.

In 2010, one of the most important efforts was the decision endorsed by Congress to pursue the new LCS through a dual-block buy procurement strategy. At an average cost of less than $440 million per ship and with the cost reductions we have seen on LCS–3 and –4, the new strategy will save taxpayers $2.9 billion. This plan is one that's good for the Navy, good for taxpayers, good for the country, and demonstrates what can be accomplished when sound acquisition principles are followed and enforced.

We heard the message from Congress very clearly. We need more ships, but they have to be affordable. The LCS strategy supports the industrial base by keeping workers employed at two shipyards and is indicative of DOD's push to ensure acquisition excellence. The fixed-price contracts used for LCS, I hope, will be a model. They are the result of effective competition, give the government full ownership of the technical data package used in construction, and afford greater congressional oversight. With the new strategy, we get more ships, more quickly, and more affordably.

As was pointed out, significant additional savings were also achieved through termination of the EFV. It's important to emphasize that this decision in no way changes our Nation's commitment to amphibious warfare. We have to maintain an amphibious assault capability that will put marines ashore ready for the fight.

But the EFV is simply not the vehicle to do this. Conceived in the 1980s, the EFV is a two-decade-old solution to a tactical problem that has since fundamentally changed. Its cost per unit would have consumed half the Marine Corps' total procurement from fiscal year 2018 to fiscal year 2025 and 90 percent of its vehicle-related operation and maintenance account.

In aviation programs, we, as you, are closely monitoring the JSF, particularly the Marine Corps variant, the F–35B. After a 2-year period of focused scrutiny, we'll be able to make an informed recommendation about resolving the technical and cost issues.

Ashore, we continue to confront rising health care costs caused by an increasing number of beneficiaries, expanded benefits, and increased utilization. To deal with these trends, we have to implement systematic efficiencies and specific initiatives to improve quality of care and customer satisfaction, but at the same time more responsibly manage costs. We concur with the recommendations made by the Secretary of Defense to ensure fiscal solvency and benefit equity for our retirees.

Finally, we are continuing efforts to invest in and develop alternative energy. The latest headlines from around the world reinforce the basic point: Energy is first and foremost an issue of national security. We cannot allow volatile regions of the world to control the price and affect the supply of the fuel we use.

Last year, the Navy and Marine Corps took huge steps forward, including, again as was pointed out earlier, flying an F–18 Hornet on biofuel, conducting a large expansion of solar power, and beginning expeditionary energy initiatives in Afghanistan. The Third Battalion, Fifth Marines, was the outfit that you talked about, Mr. Chairman, and in the middle of some of the heaviest fighting in Helmand Province they have demonstrated not only the ability to reduce their use of fossil fuels, but also to make them better fighters. One foot patrol saves 700 pounds of batteries that they don't have to lug through the battlefield, simply by using some of these renewable energy devices.

What we're doing there is already saving lives. We will continue these investments this year and will continue to move toward our goal of at least 50 percent alternative energy use by 2020.

In closing, I want to thank you again for your support. Thank you for always looking out for our sailors, our marines, their families, and for your support of efforts to make the Navy and the Marine Corps better, stronger, and better able to defend our great Nation. It's a solemn privilege to lead the naval services during an era of protracted war and of national challenge. I have been profoundly moved by the sacrifice and devotion that I have witnessed daily in the sailors and marines who defend us. The Navy and Marine Corps are and will remain ready to do any mission America gives them.

Thank you.

[The prepared statement of Mr. Mabus follows:]

PREPARED STATEMENT BY HON. RAYMOND E. MABUS, JR.

Chairman Levin and Ranking Member McCain, I have the honor of appearing here today on behalf of the nearly 900,000 sailors, marines, and civilians that make up the Department of the Navy. I have appeared before this committee on a number of occasions, and I am happy to be here again, along with the Chief of Naval Operations (CNO) and the Commandant of the Marine Corps, to report on the readiness, posture, progress, and budgetary requests of the Department. We consider ourselves privileged to lead the dedicated men and women of the Department who are selflessly serving the United States all around the world.

Today, your Navy and Marine Corps are conducting missions across the full range of military operations. They are engaged in combat in Afghanistan, stability operations in Iraq, deterrence and ballistic missile defense (BMD) in the Pacific, Arabian

Gulf, and the Mediterranean, as well as humanitarian assistance and disaster relief operations across the globe. Our unmatched global reach, endurance, and presence continue to allow the Navy and Marine Corps—in partnership with our sister Services—to secure and advance America's interests wherever challenges or crises have arisen, as well as operate forward to prevent crises from occurring. We remain the most formidable expeditionary fighting force the world has ever known, and with your continued support, the Navy and Marine Corps will continue to meet the multiplicity of threats that endanger international peace and security.

But today we are very concerned about the absence of a Defense Appropriations Bill for fiscal year 2011 and the negative effects of operating under a continuing resolution for the remainder of the year. We are equally concerned about passage of a bill that reduces the topline from the level requested in the fiscal year 2011 President's budget. Either course of action significantly impacts the resources available to grow the fleet and jeopardizes recent efforts to restore and maintain readiness levels commensurate with the standards expected of the Navy and Marine Corps.

Without legislative action, limiting fiscal year 2011 procurement accounts to fiscal year 2010 levels will:

- Prevent start of construction of one *Virginia*-class submarine to be built in Groton and Newport News which will break the existing multi-year contract.
- Prevent start of construction of one Mobile Landing Platform to be built in San Diego.
- Prevent start of construction of one or possibly both programmed *Arleigh Burke*-class destroyers to be built in Bath and Pascagoula due to DDG–1000/DDG–51 swap language that prevents award of either ship unless both are authorized and appropriated.
- Preclude fourth and final increment of full funding for construction of CVN–78 (USS *Gerald R. Ford*) and advance procurement for CVN–79.
- Prevent procurement of two nuclear reactor cores for refueling of one aircraft carrier and one ballistic missile submarine, as well as delay increased funding for research and development of the *Ohio*-class replacement and replacement of two Moored Training Ships that provide half of the force's nuclear training capability.
- Prevent completion of one *Arleigh Burke*-class modernization.
- Reduce Marine Corps procurement by $563 million. This would add to equipment shortfalls generated by 9 years of conflict and prevent equipment replacement or purchase of four H–1 helicopters, numerous LAVs, MTVRs, LVSRs; tech upgrades to counter IED jammers; communication and intelligence equipment; tactical fuel systems to power our vehicles and generators; engineering equipment to move ammo, gear and supplies; air conditioners and heaters to take care of marines and sensitive gear; and EOD improvements to protect them.

Reductions to expected procurement levels will create additional stress on the force, as units in service pick up additional commitments to cover the seams created by fewer available platforms.

Likewise, fixing fiscal year 2011 operations to fiscal year 2010 levels has created a $4.6 billion shortfall in Navy and Marine Corps operations, maintenance, and training accounts. Faced with this prospect, the Department began efforts in January to mitigate the impacts of operating under the continuing resolution, which over the course of the fiscal year will cause us to:

- Reduce aircraft flight hours and ship steaming days, including a reduction of four non-deployed air wings' flight hours to minimal flight-safety levels.
- Cancel up to 29 of 85 surface ship availabilities.
- Defer maintenance on 70 aircraft and 290 aircraft engines, bringing the combined backlog of aviation maintenance close to 1-year redlines.
- Defer 41 facilities maintenance projects and 89 new construction projects in Arizona, California, Florida, Georgia, Hawaii, Louisiana, Maryland, North Carolina, Rhode Island, South Carolina, Virginia, and Guam. These cuts equal an approximate 50 percent reduction and will eliminate, among many projects, dry dock certifications, bachelor quarters maintenance projects, repairs to explosive handling wharves at Bangor and Kings Bay that support ballistic missile operations, and modernization projects to support introduction of new training aircraft.

The combined effects of the continuing resolution will directly impact the strength of the industrial base and over 10,000 private sector jobs at shipyards, factories, and Navy and Marine Corps facilities across the country. The degradation or loss of per-

ishable skill-sets within our workforce, including many nuclear workers, and the disruption to both our fleet and shore maintenance and modernization schedules will take 3 years to recover based on rotational schedules alone—and only at significantly greater cost than requested in the fiscal year 2011 President's Budget.

Finally, there is almost a $600 million shortfall in Navy and Marine Corps manpower accounts. As a result of this shortfall, the Services must raid other accounts in order to meet payroll for the duration of the year. We are currently living within funding constraints by limiting or conducting short-notice permanent change of station moves; however, this tactic places significant hardship on our military families and is not sustainable over the entire fiscal year.

We strongly request congressional action to address the implications of the Continuing Resolution on our forces and our people by taking action to enact the fiscal year 2011 President's Budget.

DEPARTMENTAL PRIORITIES

As I testified last year, there are four imperatives I believe the Department of the Navy must address to maintain preeminence as a fighting force and successfully meet the challenges of the future. They are:

(1) Taking care of our sailors, marines, civilians, and their families
(2) Treating energy as a strategic national security issue
(3) Creating acquisition excellence
(4) Continuing development and deployment of unmanned systems

These priorities underpin every action of the Department, from supporting current operations to developing the current year's budget request, finding efficiencies within the Department, and preparing our Navy and Marine Corps for the future.

Fundamentally, it comes down to a question of resources, of ensuring that our people have what they need to do their jobs, ensuring the Nation that the Navy and Marine Corps uses our fiscal and energy resources wisely, and ensuring that seapower, as a resource, remains readily available to meet the Nation's policy requirements and the orders of the Commander in Chief.

SEAPOWER: A CRITICAL STRATEGIC ENABLER

It is clear that we live in a time of sweeping change and an era of strategic realignment. The President has stated that we "must pursue a strategy of national renewal and global leadership—a strategy that rebuilds the foundation of American strength and influence." Seapower has always been a part of that foundation and will continue to be an indispensible asset to American leadership and economic strength in the global community of nations. American seapower, as it has done for generations, continues to guarantee freedom of navigation and international maritime trade, underpinning global economic stability and facilitating continued global economic growth. No other component of American military power is as flexible or adaptable as seapower. I see one of my primary responsibilities as Secretary to be ensuring continuation of this responsiveness, flexibility, and adaptability through the policies we adopt and in the ships, aircraft, and weapons systems that we build.

Maritime nations have many inherent strategic advantages. Naval forces operating in the open ocean provide an effective conventional deterrent to those who threaten regional stability or promote extremism. Strong expeditionary forces can swiftly respond to crises and make potential adversaries pause before committing hostile actions. But should deterrence fail, our combat ready naval forces must be prepared to conduct sustained combat operations.

The Navy and Marine Corps are America's "Away Team." They exist primarily to protect our Nation far from home and respond quickly to crises wherever and whenever they occur. Exploiting their inherent mobility and maneuverability at sea, naval forces gather information, perform surveillance of seaborne and airborne threats, defend regional partners, deter prospective adversaries, interdict weapons of mass destruction, disrupt terrorist networks, conduct humanitarian assistance and disaster relief, and support the work of American diplomacy. This variety of capabilities is a primary feature of seapower, and it provides the President and our Nation with unmatched flexibility to deter conflict and, if necessary, project power from the sea to defend U.S. national security interests. The ability to accomplish these tasks without placing a large presence ashore and absent concerns of sovereignty is absolutely critical in our world of increasingly sophisticated threats and growing geopolitical complexity.

It is for these reasons, and in order to improve global force projection capabilities that the Navy, Marine Corps, and Air Force are working on an Air Sea Battle concept to improve joint capabilities and cooperation in addressing anti-access/area-denial challenges.

Unique in history, the blanket of maritime security and stability provided by American maritime power is the first to be used for the good of the whole world. But in order to ensure continued American leadership in issues of maritime policy and security, we strongly recommend accession of the United States to the Convention on the Law of the Sea, an action that has been similarly and repeatedly recommended by multiple Secretaries of the Navy and Chiefs of Naval Operation. Accession by the United States would enhance stability of the navigational rights inherent to the Convention and would strengthen our bargaining position in international discussions of Arctic Policy and access to resources and sea lines of communication.

CURRENT OPERATIONS

Over the past year, our forces have successfully navigated the world's growing complexity and have consistently demonstrated the utility, effectiveness, and flexibility of seapower and maritime forces.

Following completion of the Marines Corps' mission in Iraq, the primary operational focus of the Department has been supporting the war effort in Afghanistan. Over 30,000 marines and sailors are committed to the fight there, working all across the country, with the largest concentration operating as Regional Command-Southwest along the Helmand River Valley.

In my visits to the marines on the ground throughout the year, I had the opportunity to look firsthand at the progress made by our increased presence in Helmand. In December, I visited three Forward Operating Bases (FOBs) with increasing levels of stability in three separate districts of Helmand: Sangin, Marjah, and Nawa—or as the marines put it, I went to look at where the fight is, where the fight was, and where there is no fight.

In Nawa, I saw a strong partnership between the local government, Afghan National Police, the Afghan National Army, and our Marines—who have built the capacity of their partners so that they may shortly assume responsibility for their own security. The district is very safe, and because of the success of the counter-insurgency effort, Nawa is growing in both political strength and economic activity.

In Marjah, after successful operations to clear it last spring, the markets are open, schools are being built, and a local government is working to build capacity. In my visit just 3 months ago, I personally walked the streets of Marjah to witness the progress, something that even in the summer of 2010 would have been unthinkable. Then, just stepping outside the gates of our FOB would have generated a pitched battle. Now, it brought out street vendors and men on motorbikes.

I also went to Sangin District near the Kajaki Dam in Northern Helmand, which has been a Taliban stronghold for years and for the past few months has been the main effort of the fight in Helmand. Our marines in Sangin have been conducting intensive combat and security missions in support of the counterinsurgency strategy, and concurrently—even in the midst of the fight, have been testing new solar energy equipment to expand their operational reach. Together with their partners from the Afghan National Security Forces, they have taken the fight to the Taliban and are facilitating the Afghan Government's reestablishment of local control.

Elsewhere across Central Command, the Navy has over 14,000 sailors on the ground supporting joint and coalition efforts and another 10,000 sailors at sea supporting combat operations, including from our carriers operating in the Indian Ocean, where we are launching approximately 30 percent of the strike or close air support missions that watch over our marines and soldiers on the ground in Afghanistan.

In addition to combat operations, the Navy and Marine Corps remain globally engaged in a host of other security and stability operations. On any given day, more than 72,000 sailors and marines are deployed and almost half of our 286 ships are underway, ready to respond where needed.

It was the Navy and Marine Corps that were the first on scene after both the devastating earthquake in Haiti and the summer's catastrophic floods in Pakistan. Within hours of the January 12th earthquake, both Navy and Marine Corps assets were en route to Haiti. A total of over 10,000 sailors and marines and 23 ships, including the carrier USS *Carl Vinson*, the *Bataan* and *Nassau* Amphibious Ready Groups, and the hospital ship USNS *Comfort* ultimately participated in Operation Unified Response.

Halfway around the world, after Pakistan was struck by devastating August floods that impacted nearly a fifth of its population, helicopters from the USS *Peleliu* and the 15th Marine Expeditionary Unit supported the Government of Pakistan through delivery of 2,000 tons of relief supplies and by contributing to the res-

cue of over 10,000 people. Later, the ships of the *Kearsarge* Amphibious Ready Group deployed early to provide a continuous U.S. humanitarian presence.

In response to the administration's strategic direction, the Navy is scaling up our BMD force and their deployments to enhance our deterrent posture, especially in the defense of Europe. Our multi-mission, BMD-capable, Aegis cruisers and destroyers now routinely deploy to the Mediterranean and the Arabian Gulf, as well as the Western Pacific to extend our deterrent umbrella for our allies. I had the opportunity a few months ago to visit the destroyer USS *Ramage* after she completed her first BMD deployment, and I can assure you that the sailors on these ships are some of the most professional and dedicated men and women in the country, and they are incredibly excited about their work. We appreciate Congress' continued support of the destroyer and cruiser modernization programs that are bringing additional BMD capability to the fleet.

Our growing BMD capability is complemented by our traditional sea-based, strategic nuclear deterrent centered upon our globally deployed and proficient ballistic missile submarine force.

In the Western Pacific, as an integral part of U.S. diplomatic actions, several times last year the USS *George Washington* sortied to the South China Sea and the Sea of Japan in response to territorial disputes with North Korea and open North Korean provocation. In late November, after the North Korean artillery attacks on Yeonpyeong Island west of Inchon, the *George Washington* strike group conducted a training exercise with the South Korean Navy in order to demonstrate the continuing value and strength of our alliance.

We are also working to build regional capacity and resolve security issues of common international concern.

In support of our Maritime Strategy, both the Navy and Marine Corps routinely engage with nations all around the world to build capacity and forge stronger maritime partnerships. In the "Rim of the Pacific" or RIMPAC exercise, 32 ships, 5 submarines, and more than 170 aircraft from 14 nations participated in the world's largest multinational maritime exercise encompassing every aspect of traditional naval warfare.

Global Partnership Stations in Africa, South America, and the Pacific are training hundreds of sailors, marines, and coastguardsmen from dozens of nations and are bringing advanced medical and civil engineering assistance to those in need. The Africa Partnership Station alone has trained with 32 African and European partners since 2007. Between them, Pacific Partnership 2010—conducted by the USNS *Mercy*—and Continuing Promise 2010—conducted by the USS *Iwo Jima*—treated over 100,000 patients and conducted over 20 civil engineering projects.

In the Caribbean and South America, we continue to work with the Coast Guard-led Joint Interagency Task Force-South to synchronize forces from 13 nations and interdict the flow of illegal narcotics into the United States. In 2010 naval forces contributed to the seizure of over 133.2 tons of cocaine, 3.2 tons of marijuana, 92 boats and aircraft, and $2.7 billion in drug revenue.

In the Gulf of Aden and western Indian Ocean, the Navy remains committed to counter-piracy efforts with approximately 16 partner nations. Combined Task Force 151, in cooperation with forces from the EU, NATO, and other nations deploying individual units or task groups, is operating off of Yemen and in the Somali Basin to protect the safe passage of maritime commerce. Where our forces are located, pirate activity has fallen, but the areas involved are huge, and as Secretary of State Clinton said in April 2009, the solution to Somalia piracy lies largely with Somalia, through building its capacity to police itself and offering young pirates viable alternatives to that way of life. We are treating the symptoms of piracy, rather than its fundamental cause: Somalia's failure as a state. Despite the international community's commitment, piracy has both continued to increase and move further offshore, a measure of pirate resiliency and the strong economic incentives that underpin it. Nine of 10 pirates captured are ultimately freed as there is often insufficient evidence or political will to prosecute them, or to incarcerate them after conviction. We strongly endorse additional international efforts to address these concerns.

FISCAL YEAR 2012 BUDGET SUBMISSION

Over the past year, I have visited with thousands of sailors and marines stationed with our forward operating forces at sea and our combat forces in Afghanistan. I can report, based on both the direct observations I mentioned and from personal inputs from Joint and Combined commanders, that the quality of our sailors and marines is superb and we are continuing to protect America's interests abroad. But while we are prevailing today, we must also build the foundation for the Navy and Marine Corps of tomorrow.

During the development of the President's fiscal year 2012 budget submission our Navy and Marine Corps leadership team made numerous difficult tradeoffs to preserve current readiness while better posturing the Navy and Marine Corps for the challenges of the future. I believe that the result provides a balanced approach that will enable the Services we lead to successfully perform our assigned missions, even while setting a course for future success. It is important, however, to reiterate that the fiscal year 2012 budget was developed based upon ultimate passage of the President's fiscal year 2011 budget. If the continuing resolution now in place remains the de facto budget for the year, or if a Defense Appropriations Bill is passed that reduces the amounts requested in the fiscal year 2011 President's budget, the proposed fiscal year 2012 budget will not be sufficient to recover from delays, cancellations, and mitigations we have been forced to put in place this year.

Over the past year, we have examined every aspect of what we do and how we do it in order to eliminate waste and move every resource possible toward operations and successfully executing our missions now, and in the future. At the direction of the Secretary of Defense, in June 2010, the Services were formally asked to continue this process through an efficiencies review, which we developed through three complementary approaches; buying smarter, streamlining our organization and operations, and being more efficient in the way we use, produce, and acquire energy. This effort has had a substantial impact on our overall budget, allowing us to invest more in our core warfighting missions and enhance our acquisition plans. Savings were also derived from the Office of the Secretary of Defense (OSD)-mandated, Defense-wide efficiencies.

Since the review began, the Department of the Navy has identified approximately $35 billion in self-generated efficiencies over the next 5 years. When DOD-wide efficiencies are factored in we will achieve $42 billion in savings. These savings will facilitate adding one guided-missile Aegis destroyer, three T–AO(X) fleet oilers, and one T–AGOS ocean surveillance ship to our shipbuilding plan, which with our dual-block LCS strategy will increase the total number of ships in the Future Years Defense Program (FYDP) from 50 to 56, including one joint high speed vehicle to be built for the Army, an average of more than 11 ships per year. We were also able to accelerate a Mobile Landing Platform from fiscal year 2015 to fiscal year 2012 and increase R&D funding to support the accelerated procurement of the T–AO(X), and the development of the next amphibious dock-landing ship (LSD(X)).

The savings allowed additional investments in the Next Generation Jammer to provide greater protection for tactical aircraft, electronic warfare systems, ballistic missile sets, and the new air and missile defense radar that will equip our DDG–51 Flight III destroyers. The savings allowed increased funding for a new generation of sea-borne unmanned strike and surveillance aircraft; and gave us the ability to buy additional F/A–18s and extend the service life of 150 aircraft as a hedge against more delays in the deployment of the F–35B, the Short Take-Off and Vertical Landing (STOVL) variant of the Joint Strike Fighter.

We addressed Marine Corps needs by increasing equipment funding for units in dwell and for repair and refurbishment of Marine equipment used in Iraq and Afghanistan. Based on heavy usage rates, we requested $2.5 billion for Marine reset in the fiscal year 2012 OCO request, and estimate a $5 billion reset liability upon termination of the conflict in Afghanistan. We also added funding for fire and maneuver platforms, command and control capabilities, and intelligence, surveillance, and reconnaissance.

We found the $35 billion through a close and systematic review of our programs and by cutting excess capacity in our support establishment. Over the FYDP, with congressional support we will reduce Navy manpower ashore and reassign over 6,000 personnel to operational missions at sea; use multi-year procurement and production efficiencies to save more than $1.1 billion on the purchase of new airborne surveillance, jamming, and fighter aircraft; and disestablish both Second Fleet and excess staffs for submarine, patrol aircraft, and destroyer squadrons plus one carrier strike group staff.

Programmatically, one of the most important efficiency efforts was the decision endorsed by Congress to pursue the new Littoral Combat Ship (LCS) through a dual-block buy procurement strategy. Over the past years the message from Congress has been clear, we must build more battle force ships as affordably as we can, consistent with the statutory requirements laid out in the Weapons System Acquisition Reform Act of 2009. We heard that message clearly, and are grateful to the administration for its support and to the many Members of Congress who worked with the Navy to make the LCS program an example of what can be done right when strict acquisition standards are laid out and enforced.

With an average cost of $440 million per ship, and with the cost reductions we have seen demonstrated on LCS–3 and –4, the Navy will save taxpayers approxi-

mately $1.9 billion in fiscal year 2012 to fiscal year 2016. More importantly, the fact that prices were so dramatically reduced from the initial bids in 2009 will allow us to save an additional $1 billion—for a total of $2.9 billion—through the dual award of a 10-ship contract to each bidder. This plan is truly one that is good for the Navy, good for taxpayers, and good for the country.

At the recommendation of both the Commandant and myself, significant additional savings were also achieved by the Department of Defense through termination of the Expeditionary Fighting Vehicle (EFV) program. The nation absolutely must retain and rebuild an amphibious assault capability that will get marines from ship to shore in a protected amphibious tracked vehicle ready for the fight. This is a core capability the Marine Corps must have. But the EFV is not the vehicle to do this. Conceived in the 1980s, the EFV was the previous generation's solution to a tactical problem that has since fundamentally changed. Just as importantly, the EFV's cost per unit would have eaten up over half of the Corps' total procurement account and 90 percent of the Corps' vehicle-related operation and maintenance account; the requirements levied on the vehicle outstripped what could affordably be achieved.

We are committed to developing and fielding an effective, survivable and affordable amphibious capability that will meet the Corps' amphibious requirements. This will be done through upgrading existing vehicles, through service-life extensions, and by working with OSD and industry to go as fast as possible in the acquisition and contracting process to develop a successor program to the EFV, one that will meet today's requirements for this critical Marine Corps capability.

We are also closely overseeing the Joint Strike Fighter program. In particular, we are providing additional focused attention on the Marine Corps variant, the F–35B, which the Secretary of Defense has placed on a 2-year probation. During this time, solutions to the unique F–35B technical issues will be engineered and assessed while production will be held to a minimum sustaining production rate of six aircraft per year in fiscal year 2012 and fiscal year 2013. This low-production rate is required to ensure continuity in the engineering workforce involved in the design and assembly of the F–35B at the prime contractor and key vendors without a loss in learning and to sustain the supplier base of F–35B unique parts. After this 2-year period of focused F–35B scrutiny, an informed decision will be made about how to proceed with development and production of this variant, to include the potential for program cancellation.

I want to point out that it is only the F–35B (STOVL) variant that is on probation. The F–35C variant, which will be flown off of our aircraft carriers, is doing satisfactorily and will be procured by both the Navy and the Marine Corps.

The President's budget request of $161 billion will maintain our commitment to take care of our people, build a strong R&D and industrial base, and grow a fleet capable of sustaining our preeminence as the world's most formidable expeditionary force. The fiscal year 2012 request of $15 billion for contingency operations includes incremental costs to sustain operations, manpower, equipment and infrastructure repair as well as equipment replacement to support our operations in Afghanistan and elsewhere.

The fiscal year 2012 President's budget request includes funds for 10 Navy battleforce ships, including:

- two *Virginia*-class submarines,
- one *Arleigh Burke*-class destroyer,
- one Mobile Landing Platform ship,
- one Joint High Speed Vessel,
- one Amphibious Transport Dock Ship, and
- four Littoral Combat Ships.

In aviation, we have requested 223 aircraft in the fiscal year 2012 baseline budget, including:

- 13 F–35 Joint Strike Fighters for both the Navy and Marine Corps,
- 24 MH–60R and
- 11 P–8As to replace the aging current ASW and maritime patrol squadrons,
- 18 MH–60S for logistics support,
- one KC–130J,
- 25 H–1 variant helicopters,
- 30 MV–22 tilt-rotor aircraft,
- 28 F/A–18E/F fighter/attack planes,
- 12 EA–18G to continue replacing the veteran EA–6B,
- five E–2D Advanced Hawkeyes,
- 36 Joint Primary Aircraft Trainers for our student aviators, and

- 20 Unmanned Aircraft.

The fiscal year 2012 President's budget request also contains funding for the Navy Unmanned Combat Aerial System demonstration and continues development of the Broad Area Maritime Surveillance (BAMS) unmanned system.

The individual efficiency initiatives the Department has put in place will continue to further streamline our organizations and operations, will reshape and reduce both capacity and personnel associated with the Department's "tail," and will contribute to the dramatic transformation already underway in how the Department does its business. More importantly, they will sharpen the operating "tooth," free up critical resources for maintaining and accelerating our shipbuilding and aviation acquisition plan, maximize fleet capabilities, and help preserve a strong industrial base.

TAKING CARE OF SAILORS, MARINES, CIVILIANS, AND THEIR FAMILIES

The Navy and Marine Corps have continued to recruit and retain the high quality men and women we brought into the Services in the past years, and 2010 was no exception. Both the Navy and Marine Corps met or exceeded their mission quotas and quality standards.

We recognize that quality of life programs are important for morale and the military mission. We recruit sailors and marines, but we retain families. We continue to provide a wide array of readiness programs, including deployment support services, morale and welfare services, and child and teen programs. These award winning career management, training, and life-work balance programs are nationally recognized for their excellence not only by respected national human resource organizations, but even more by the marines and sailors that benefit directly from them.

Medical care for our Wounded Warriors, already outstanding, continued to get better throughout the year. Since Operations Enduring Freedom and Iraqi Freedom began, over 12,000 marines and sailors have been wounded in action. Their service and sacrifice mandates that we provide quality care for those who have given so much for our country. Our medical community continues to meet this challenge and make advances in dealing with the signature wounds of the current wars: traumatic brain injuries, mental health issues, amputation, and disfiguring injuries, and Navy Medicine continues to reach out to its colleagues in both civilian and Veterans Affairs hospitals to improve our understanding and improve overall care for our people.

But care for our Wounded Warriors does not end in the hospital. We have undertaken a commitment to bring our Veterans back into the workforce of the Department of the Navy through several Wounded Warrior outreach programs and hiring conferences. We are not there yet, but we are moving towards the goal of being able to say to every Wounded Warrior—if you want a job, we have one for you. As a representative example, in the past year alone, the Naval Sea Systems Command hired 200 Wounded Warriors. In 2011 we will continue to make employment opportunities for Wounded Warriors a priority for the Department.

It is important to note that rising health care costs within the Military Health System continue to present a fiscal challenge for the Department. Like the Secretary of Defense, both I and Departmental leadership are particularly concerned that the rate at which health care costs are increasing and the relative proportion of the Department's resources devoted to health care cannot be sustained; the Military Health System is not immune to the pressure of inflation and market forces evident in the civilian health care sector.

The military faces a growing number of eligible beneficiaries, expanded benefits, and increased utilization throughout the military health care system. As a Department, we must be resolute in our commitment to implement systemic efficiencies and specific initiatives which will improve quality of care and customer satisfaction but will at the same time more responsibly manage cost. We have made progress, but there is more to do. We concur with the recommendations made by the Office of the Secretary of Defense; we must create incentives such as the Home Delivery Pharmacy Program and implement modest fee increases, where appropriate, to both ensure the fiscal position of the system and ensure equity in benefits for our retirees.

Taking care of sailors and marines also means aggressively addressing the issues of sexual assault prevention and response. Last year, you supported the establishment of a new Office of Sexual Assault Prevention and Response (SAPRO) reporting directly to me to focus attention on the issue, develop effective training, and coordinate prevention and response programs across the Navy and Marine Corps. However, it is clear through sexual assault surveys that this crime remains a significant problem in the Services, and within some populations we have seen a negative trend

of an increased number of assaults. But I can assure you that we are not accepting this trend, and we will not rest while any cases of this awful crime continue to occur.

In 2010, the Department moved forward on expanding the opportunities for women in the Navy. We established a comprehensive plan to integrate women into the submarine force, beginning with our ballistic missile and guided missile *Ohio*-class submarines. This summer, the first 21 women officers were selected for nuclear training—and they have begun their approximately 15-month training pipeline. The first of these officers will get to their boats beginning in November 2011.

We are preparing to move forward with successfully implementing Congressional guidance with respect to repeal of "Don't Ask, Don't Tell" in 2011.

Overall, the fiscal year 2012 budget reflects a carefully crafted request for the fiscal support and resources necessary to sustain the force in light of the ongoing demands on our people and their families. Thank you for your continuing support.

ENERGY SECURITY AND LEADERSHIP

Energy consumption in the Navy and Marine Corps has become a strategic vulnerability, an operational Achilles' heel, and a readiness challenge. This has made our energy usage a national security issue of rising importance. As a Department, we rely too much on fossil fuels, making our forces susceptible to fluctuations in both price and supply. Dramatic shifts in cost and availability can be caused by a host of manmade or natural events in volatile areas of the world. Those potential shocks could have, in turn, strategic, operational, and tactical effects upon our forces. A survey of headlines around the world today demonstrates exactly the point we are trying to make—energy is first and foremost an issue of national security.

Without sustainable and reliable sources of energy and increased efficiency in our platforms, we may find ourselves paying an exorbitant price for operating our fleet, training our aviation and ground forces, and running our installations that support them. The ability to train and prepare forces for deployment could be curtailed. Worse still, our naval forces may find that future adversaries target our operational dependence on petroleum, as we see in attacks on fuel convoys in Afghanistan today. Our dependence on a fragile fuel distribution network increases our footprint, drains resources from the tip of the spear to supporting logistics lines, and ties up combat forces for security. Thus, energy diversity and efficiency are essential to maintain our warfighting capabilities and enhance our combat effectiveness.

This is a topic I have spoken on a great deal, in front of this committee last year, around the world in speeches to industry and military audiences, and in conversations with international leaders. Through these events and discussions, it has become clear that energy security is not just an American issue—it is an issue that affects both our allies and potential adversaries alike. History has taught us that competition for resources has been one of the fundamental causes of conflict for centuries, and today, competition for energy still provides one of the most inflammatory sources of potential conflict.

Energy, or more specifically denial of energy, could affect many of our NATO partners in Europe and indeed the strength of the alliance itself. Many of our partners are dependent upon external sources for their energy, so for them—denial of energy is a weapon, one just as real as the threat of tanks or airplanes.

For all these reasons, and in order to improve our long-term strategic position and enhance the future operational effectiveness of our forces, I have charged the Navy and Marine Corps with accelerating the exploration and exploitation of new ways to procure, produce, and use energy.

This effort began in October 2009, when I issued my five energy goals for the Department, the most important of which commits the Navy and Marine Corps to generate at least 50 percent of all the energy we use from alternative sources no later than 2020. Alternative sources include all renewable forms of energy such as solar, wind, geothermal, and ocean energy, as well as biofuels and nuclear energy.

We are on track to meet all our goals, and throughout 2010, we demonstrated progress through many energy programs, partnerships, and initiatives. Throughout the year, we successfully conducted both ground and airborne tests of an F/A–18 Hornet and MH–60 Seahawk helicopter, and ran a Riverine Command Boat (experimental) on renewable biofuel blends made from either camelina or algae. Recently, we also completed testing of a marine gas turbine engine that will enable us to certify our frigates, destroyers and cruisers for biofuel operations. In each case, there was no impact on performance and no degradation to engine reliability. Together, these tests represent critical milestones for the Department's goal of demonstrating the Great Green Fleet in 2012 and its planned deployment in 2016. In late 2010,

the Navy conducted concurrent but unrelated tests of a more efficient F/A–18 engine in order to generate an increase in the aircraft's range.

Afloat, as I discussed last year, the USS *Makin Island* is using a hybrid-electric drive to dramatically lower its fuel usage at slow speeds, which we estimate will generate life-cycle savings of up to $250 million at today's fuel prices. Over the next few years, we will continue to move forward with installation of a similar system on new construction DDGs and look at the feasibility of retrofitting the fleet with these systems in the course of routine shipyard availabilities.

The Marine Corps is also aggressively exploring energy efficiency solutions in its operating forces in theater and in the supporting establishment. The Marines realize that energy as a resource influences a Commander's operational freedom of maneuver, and its conservation and wise use can save lives on the battlefield. Reduced logistics support and fewer convoys for expeditionary forces would free up resources and limit the exposure of marines to ambush and IEDs. Energy efficiency equals better combat effectiveness.

At home, the Marine Corps demonstrated their traditional spirit of innovation by scouring the commercial world for rugged solutions, building two Experimental Forward Operating Bases (ExFOB) at Quantico and Twentynine Palms. New alternative energy technologies tested at the ExFOB deployed this fall with the Third Battalion, Fifth Marines (3/5), posted to Sangin District in the north of Helmand Province. Immediately upon arrival, they began evaluating expeditionary solar power generators at their FOBs and combat outposts to supplement or replace fossil fuels. They have done this even while engaged in near constant combat against a determined enemy in one of the most hotly contested districts of the war.

When I visited Sangin, I heard first-hand from a Marine First Lieutenant about what worked, what did not, and how his marines in India Company of 3/5 were using the equipment. Two patrol bases are operating entirely on renewable energy, and another with a 90 percent reduction. One of the team-portable systems, called GREENS (Ground Renewable Expeditionary Energy Network System), is being used to provide power for the Operations Center, small radios, and small electronic equipment. Across the battalion's operating area, manportable SPACES (Solar Portable Alternative Communications Energy System) are being used by individual squads to recharge their radios and other combat electronics. This capability made it possible for a foot patrol to operate for 3 weeks without battery resupply, reducing their burden by 700 pounds and saving more than $40,000.

By deploying these renewable solar energy technologies the marines in Sangin have been able to expand their operational reach, eliminate or minimize their need for fossil fuels in their generators, and dramatically reduce the need for often dangerous logistic support.

At Camp Leatherneck, the marines have likewise begun a small bio-fuel pilot project for Helmand Province, purchasing locally produced cotton oil from an Afghan facility to mix with their own fuel. At Leatherneck, a standard generator is producing power from a 20–80 mix of cotton oil to fuel, yielding a 20 percent reduction in demand for fuel, while simultaneously demonstrating to Afghan farmers that there are alternatives to opium, and demonstrating to Afghan leaders that they can power their own economy from within Afghanistan. I am monitoring its progress closely.

As the ExFOB gets all this feedback from returning marines, our expeditionary energy systems and programs will continue to improve and we will move even further down the road of energy efficient, combat effective forces.

In addition to these tactical and platform applications, we have implemented a number of energy projects at our facilities ashore. We are actively exploring for new geothermal resources to augment our existing 270 MW geothermal power plant at China Lake. Last year we established the Nation's first grid-connected wave buoy at MCB Kaneohe Bay, HI. Last December the marines completed a 1.5 MW solar installation situated atop six acres of a landfill. The installation was unique because the equipment foundations were designed not to perforate the membrane covering the garbage below. Our budget request asks for continued support of these and similar projects in order to enhance our efficiency and maximize our move to greater independence and more resilient infrastructure.

Finally, throughout the year we developed partnerships with a number of Federal agencies, states, academic institutions, and industry partners including the Departments of Energy and Agriculture, NASA, and the Small Business Administration.

It is precisely because of the spirit of innovation that these partnerships embody that our Nation remains a world leader in its unrivaled capacity to stimulate and exploit cutting-edge ideas and new technologies. The U.S. Navy has always been a technological leader and has excelled at embracing change, particularly in propulsion systems and energy sources. We moved from wind to coal in the 19th century,

from coal to oil early in the 20th century, and added nuclear power 60 years ago. In every transition there were opponents to change, but in every case these changes increased our combat effectiveness by an order of magnitude.

I have tasked the Navy and the Marine Corps to once again pioneer technological change through alternative energy sources. I am pleased with the progress to date, and expect it to sharply enhance the long-term strategic agility of our operating forces, as well as better posture the Department for an age of fiscal austerity and potential energy volatility. I want to stress, however, that every action and program we undertake is focused on generating improved warfighting capability and strategic flexibility, it is not just change for change's sake.

CREATING ACQUISITION EXCELLENCE

Our future combat readiness is dependent upon the design, development and acquisition of weapons, platforms, and information technology. The current ships and aircraft of the Navy and Marine Corps provide decisive advantages over today's threats. But that edge must be constantly sharpened and modernized against constantly evolving technologies. We must continue to invest in intelligence, precision missiles and munitions, networked command systems, stealth technology, unmanned vehicles and ground fighting systems.

To retain our advantage across multiple warfighting areas, we rely heavily upon both our dedicated personnel and the expertise resident in America's private sector. Throughout my tenure, I have taken the opportunity to visit shipyards, aircraft plants, vehicle factories, maintenance facilities, and warfare centers for detailed briefings and a firsthand look at the people responsible for designing and building our fleet and equipping our sailors and marines with vital weapon systems and technologies necessary to do their jobs. One cannot fail to recognize the creativity, dedication, and skills of our Nation's workforce.

Yet, with government spending increasingly constrained, affordability, cost containment and total ownership costs are more important than ever. Because acquisition costs are rising faster than our top-line and because replacement systems can be more expensive than the platforms or weapon systems being replaced, we are putting tomorrow's force at risk.

Both on our own and as a result of Secretary Gates' guidance, the Department has devoted considerable effort to finding efficiencies, reducing support costs, and scrubbing our acquisition process to mitigate this impact. In accordance with the Weapons System Acquisition Reform Act passed by Congress in 2009, we have made the requirements and acquisition processes more rigorous in order to better manage the resources entrusted to us by the American taxpayer, and we are working with OSD to develop a streamlined process for acquiring information technology in a more responsive manner to better equip the warfighter with emerging technologies and ward off the cyber threat.

This requires constant examination of every single one of our policies, practices, priorities, and organizations, with a clear focus on controlling cost. Our acquisition community has been extensively engaged with industry and the Services to streamline processes, and they are ruthlessly evaluating both requirements and the supporting analyses in order to get more value out of the overall acquisition system.

The Navy and Marine Corps will continue initiatives already in place to improve processes and to instill discipline in procurement. In 2010, we strengthened our cost estimating group and met statutory requirements to obtain independent cost estimates, and we have incorporated Defense-wide best practices in the formulation of all our major programs. We have made our cost estimates more realistic and are using these improved cost and schedule plans to make necessary capability tradeoffs and difficult investment decisions at the front end of the requirements process rather than during design or construction.

A professional acquisition workforce is a key element in our overall acquisition excellence initiative and a driver in our strategy to preserve our fighting edge at an affordable cost. Accordingly, and with your strong support, we are rebuilding the acquisition workforce within government to fulfill Federal oversight of the acquisition process and ensure that accountability to taxpayers is the foremost concern of our employees. In the last year, the Department has added nearly 1,300 acquisition professionals towards the goal of increasing the community by 5,090 over the FYDP.

Our acquisition strategies have been shaped to expand the use of fixed-price contracts, leverage competition, and tighten up on the use of incentive and award fees to ensure quality systems are consistently delivered on budget and on schedule. The new acquisition plan for the LCS epitomizes this strategy, and is indicative of the type of fixed-price contracts that will be the model for the future. The LCS block-buy contracts are the result of effective competition and give the government full

ownership of the technical data package used in construction. This will ensure our ability to pursue competitive strategies for LCS Seaframe requirements in fiscal year 2016 and beyond and affords greater congressional oversight of the program. With the new LCS strategy, we get more ships, at a faster rate, and at less cost.

The LCS dual-block procurement strategy also contributes to meeting another acquisition goal of both this Committee and the Navy through its strong support of the industrial shipbuilding base. Modernizing today's force and recapitalizing the fleet affordably cannot be accomplished without a healthy industrial base and strong performance by our industry partners. We have worked hard to procure our ships, aircraft, and weapon systems at a rate intended to bring stability to the industrial base and enable efficient production. The Navy's shipbuilding and aviation plans were developed with particular regard to maintaining the unique characteristics and strength of the industrial base and our efforts have promoted increased competition, greater innovation, and better capacity within the base.

Over the FYDP, we will continue to build upon our progress to date and we will work with our shipyards, aircraft manufacturers, weapon systems providers and systems integrators to build the best possible fleet for the future.

DEVELOPMENT AND DEPLOYMENT OF UNMANNED SYSTEMS

The complex nature of today's security environment, as well as current and future anti-access/area-denial threats faced by the United States, require that the Navy and Marine Corps continue to advance in unmanned systems and exploit the contributions they make to warfighting capability. Unmanned systems are unobtrusive, versatile, persistent, and they reduce the exposure of our sailors and marines to unnecessary threats or dangerous environments. They can perform a vast array of tasks such as intelligence, surveillance and reconnaissance, hydrographic monitoring, mine detection, targeting, and precision strike.

Navy and Marine Corps unmanned systems have already made key contributions to operations in Iraq and Afghanistan. In Operation Iraqi Freedom and Operation Enduring Freedom, unmanned aircraft systems have flown thousands of flight hours, enhancing the effectiveness of our combat operations and undoubtedly saving lives. Unmanned ground vehicles employed by the Marine Corps have conducted thousands of missions detecting and/or neutralizing improvised explosive devices. Off the Horn of Africa, unmanned systems contribute to surveillance and tracking of suspected or confirmed pirate vessels.

The range of tasks that these capabilities may fulfill will grow substantially over time. I am determined to ensure that your Navy and Marine Corps are at the cutting edge of this military capability.

Our vision for the future will exploit unmanned systems in every domain of our operating environment (sea, air, and land) while maintaining an affordable price. The Department's Unmanned Systems will move from adjunct capabilities supporting manned systems and platforms to providing autonomous, networked, and interoperable independent capabilities—much as naval aviation matured from an adjunct to the Battle Fleet to a combat capability in its own right in the first half of the 20th century.

We will field unmanned systems in the near term to:

- Provide sensing, influence and effects where manned systems are limited by range, endurance or risk.
- Shift from relying primarily on manned platforms to accomplish missions to combinations of manned platforms, robots, augmented human performance, and remotely operated and unmanned systems that make operational sense.
- Increase the combat effectiveness of sailors and marines, their platforms and combat organizations to better operate against multiple types of threats.

In implementing this vision, we will embrace Unmanned Systems as critical tools in our warfighting quiver of capabilities. We will integrate them into everything we do across the full range of military operations to enhance our combat effectiveness and efficiency. We will invest in the infrastructure to ensure we have the capabilities and capacity to properly task, collect, process, exploit and disseminate the information so the intelligence data gets to the decision makers and warfighters. The initiatives and investments contained in the fiscal year 2012 budget request will continue moving us along this desired track. I look forward to reporting our progress toward this vision throughout the year.

CONCLUSION

Today I have laid out our strategic posture as well as the goals and priorities that guide the Department's investment portfolio and future direction. These goals and programs will significantly influence our future capabilities and ensure we remain ready to deter regional conflict or respond rapidly and decisively to emerging crises. Our specific requests are reflected in the President's fiscal year 2012 budget submission.

In order to retain a ready and agile force capable of conducting the full range of military operations, we must carefully weigh risks and apply our available resources efficiently and carefully. This year's request reflects our strategy-driven priorities and the disciplined trade-offs that you and the American taxpayer expect of us. The Department's efficiency efforts have been beneficial in terms of enhancing our ability to invest in the future even while preserving and extending our force structure.

This is not a one-time event, as we will continuously work to increase efficiencies in every project, program, and operation, afloat and ashore. The budget request ensures that we will retain the world's most powerful and agile expeditionary force. The CNO, Commandant, and myself are committed to that aim and to being effective stewards of the Nation's resources.

As Secretary, I have seen firsthand the selfless courage of our young marines and sailors in Helmand; the dedication of our medical community caring for our wounded; the professionalism of our surface, submarine and aviation sailors; and the incredible technical skills of the maintenance crews that sustain them. I have also borne witness to the sacrifices of our personnel in hospitals in theater and at the National Naval Medical Center. A single visit to Bethesda will make you marvel at the resilience of the human spirit and the unflagging patriotism of our American service men and women.

Your Navy and Marine Corps are performing at a high operational tempo, at unparalleled levels of skill and dedication, and with remarkable results afloat, at depth, aloft, in cyberspace, and ashore. Thanks to your support, this level of performance has been sustained with the modern platforms, weapons systems, and training necessary to underwrite our readiness. Your continued support recognizes and sustains the sacrifice of our sailors, marines, civilians, and their families. The support of this committee for our key programs and our people has been instrumental to operational success of the Navy and Marine Corps and maintenance of the world's most flexible instrument of national policy—a modernized and ready naval expeditionary force.

It is a solemn privilege to lead the Naval Services during an era of protracted war and national challenge. I have been honored by the trust the President and Congress have placed in me, and even more honored by the sacrifice and sterling devotion I have witnessed by those sailors and marine who go forward into harm's way to defend us. Preserving our values and our way of life is ultimately dependent upon our being prepared to use decisive force against those who threaten them. The Navy and Marines have been ready to do so for 235 years, and will continue to be ready. You can count on it.

Thank you again for your support. Godspeed.

Chairman LEVIN. Thank you, Mr. Secretary.

Admiral Roughead.

STATEMENT OF ADM GARY ROUGHEAD, USN, CHIEF OF NAVAL OPERATIONS

Admiral ROUGHEAD. Thank you, sir. Chairman Levin, Senator McCain, members of the committee: It's my honor to appear before you in my 4th year as the CNO, representing more than 600,000 sailors, Navy civilians, and families who operate and live globally. I appreciate your continued support for them as they continue to carry out our maritime strategy.

Our Navy continues to meet operational commitments and respond to crises as they emerge. We're engaged in Afghanistan and in Iraq, with, as you mentioned, 14,000 sailors on the ground in those countries and with 2 aircraft carriers now in the CENTCOM area of operations, 14,000 at sea. From the carrier, we provide

about 30 percent of the fixed wing air sorties that fly in support of our troops in Afghanistan.

Our presence in the Middle East also gives us the flexibility to respond to the sweeping changes that we see taking place there. But our interests extend beyond that, and so do our operations. Today we have about 65,000 sailors and about 40 percent of our force deployed. They're globally present and they're persistently engaged. They provide deterrence in northeast Asia and presence in the western Pacific. They conduct counter-piracy operations in the Indian Ocean and they're building maritime partnerships in Africa, South American, and the Pacific.

The demand continues to grow for the offshore option our Navy and our Marine Corps team provides the Nation. We assume the lead for the first phase of the Phased Adaptive Approach for ballistic missile defense in Europe and we're working with the Missile Defense Agency (MDA) on providing that same capability ashore.

We created the new Information Dominance Directorate on my staff, which has enabled us to make better decisions and investments in countering anti-access and area denial strategies. We recently established the Tenth Fleet, our cyber fleet, which has demonstrated its expertise by conducting joint and naval operations in the cyber network cryptology and space arenas.

To deliver the above, we've been pushing the fleet hard. We have 288 ships today. That's the smallest that we have been since 1916, when our interests and our responsibilities were nowhere near what they are today. That's why 313 ships remains the floor of our future force and why sustaining fleet capacity is essential to reaching that floor.

Since I've become CNO, I've focused on ensuring the Navy is ready, that our quality of work and quality of life are fulfilling to the men and women of our Navy, and that we place underperforming programs back on track. We've introduced stability, affordability, and capacity into our shipbuilding and aviation plans, and with the assistance of Congress, we have advanced capabilities to meet the most likely evolving threats.

We've secured a fixed-price dual award for 20 LCSs. We've addressed the strike fighter capacity with a multi-year F–18 procurement, and pending resolution of the CR, we will build two *Virginia*-class submarines per year, another DDG–51, start the Mobile Landing Platform, construct and refuel our aircraft carriers as planned, and continue the design of our replacement strategic deterrent submarine.

I'm pleased with our accomplishments and I thank Congress for their continued support of our acquisition strategy.

Our fiscal year 2012 budget request is a balanced approach to increasing fleet capacity, maintaining warfighting readiness, and developing and enhancing our Navy total force. This budget goes beyond ships and aircraft. It enhances electronic warfare, information dominance, integrated air and missile defense, and anti-submarine warfare capabilities for evolving challenges.

It continues to develop a family of unmanned systems that will work in concert with our manned systems to secure access and establish maritime superiority when and where we choose. It continues our effort over the last 2 years to reduce total ownership

costs and leverages the opportunity presented by the Secretary of Defense's efficiencies to reduce excess overhead, improve readiness, and reinvest in warfighting capability and capacity that improves the long-term sustainability of our force.

Importantly, it supports the Secretary of Defense's health care initiatives included in the President's budget, which continue our efforts in health care to improve internal efficiency, incentivize behavior, ensure all our beneficiaries are treated equitably, and enhance our ability to deliver high-quality health care for years to come.

You can be exceptionally proud of our sailors and Navy civilians, who they are and what they do. Today's sailors are the best with whom I have ever served. I ask you for your strong support of our fiscal year 2012 budget request. I thank you for all you do to support the men and women of the U.S. Navy, our enduring global force for good.

Thank you.

[The prepared statement of Admiral Roughead follows:]

PREPARED STATEMENT BY ADM GARY ROUGHEAD, USN

Chairman Levin, Senator McCain, and members of the committee, it is my honor and pleasure to appear before you, in my 4th year as Chief of Naval Operations (CNO), representing the more than 600,000 sailors and civilians of the U.S. Navy. As we have done for more than 235 years, our Navy is forward-deployed around the world protecting our national security and prosperity. Today, our dedicated Navy men and women are operating globally at sea, on land, in the air, and in space and cyberspace. I appreciate your continued support for them and their families.

As the demand for our Navy continues to grow, our Maritime Strategy, which I issued more than 3 years ago with the Commandants of the Marine Corps and the Coast Guard, continues to guide our Navy's operations and investments. Its core tenets are enduring and our Navy is executing daily the six core capabilities it articulates for our sea Services: forward presence, deterrence, sea control, power projection, maritime security, and humanitarian assistance and disaster response.

With your support, since becoming CNO, our Navy has placed underperforming programs back on track; we have introduced stability, affordability, and capacity into our shipbuilding and aviation plans; and we have advanced capabilities to meet the most likely evolving threats. We improved the performance of several programs, most notably the Littoral Combat Ship. After cancelling the LCS ships we had planned for 2007 because of unacceptable costs, last year we were able to secure a price for 20 ships through a dual award strategy that will add new and needed capabilities to our Fleet, bring important stability to the industrial base, and get us closer to the minimum of 313 ships our Navy needs. I thank Congress for their support of this strategy. We delivered five new ships in 2010, including one *Virginia*-class submarine, two *Arleigh Burke* destroyers, and two T–AKE logistics ships. We commenced testing and low-rate initial production of the P–8A Poseidon Multi-Mission Maritime Aircraft and continued testing and low-rate initial production of the E–2D Advanced Hawkeye. Through multi-year procurement contracts for F/A–18E/F and EA–18G, and *Virginia*-class submarines, and planned multi-year procurements for the MH–60R/S and E–2D, we are introducing affordability in our aviation and shipbuilding plans and realizing significant savings. For example, on the *Virginia*-class Multi-Year Procurement alone, the savings has been $3.2 billion. We are advancing capability to meet emerging threats, particularly in Ballistic Missile Defense (BMD) and information dominance. In BMD, we assumed lead for the first phase of the President's Phased Adaptive Approach (PAA) for BMD of Europe and we are working with the Missile Defense Agency on providing Aegis Ashore capability to support the second phase of the PAA. Our newly-established Fleet Cyber Command/U.S. 10th Fleet demonstrated its expertise conducting joint and naval exercises and operations in the cyber, network, cryptology, signals intelligence, information warfare, electronic warfare, and space arenas. We also achieved the early operational deployment of the MQ–8B Fire Scout Vertical Takeoff and Landing Tactical Unmanned Air Vehicle, the first successful flight of our Navy Unmanned Combat Air System demonstrator, and a memorandum of agreement with the Air Force

to pursue increased commonality between the Global Hawk and Broad Area Maritime Surveillance programs.

Our Navy continues to meet planned operational commitments and respond to crises as they emerge globally. We remain engaged in operations in Afghanistan and in Iraq. Our Navy has more than 14,000 Active and Reserve sailors on the ground and another 10,000 at sea in Central Command, including ongoing Individual Augmentee support to both operations. Our aircraft carriers provide about 30 percent of the close air support for troops on the ground in Afghanistan and our Navy and Marine Corps pilots fly an even greater percentage of electronic attack missions there.

Because our national interests extend beyond Iraq and Afghanistan, so do the operations of our Navy. More than 40 percent of our Navy is underway daily; globally present and persistently engaged. Last year, our Navy provided deterrence against North Korea; conducted counter-piracy operations in the Indian Ocean with a coalition of several nations; trained local forces in maritime security as part of our Global Maritime Partnership initiatives in Africa and the Pacific; responded with humanitarian assistance and disaster relief to the earthquake in Haiti and the flood in Pakistan; and conducted the world's largest maritime exercise, which brought together 14 nations and more than 20,000 military personnel, to improve coordination and trust in multi-national operations in the Pacific. Navy sealift continues to deliver the lion's share of heavy war and humanitarian equipment in the Central Command and Pacific Command areas of responsibility, while Navy logisticians operate the seaport and airport facilities that ensure this vital materiel arrives on time. Our sailors remain forward throughout the world, projecting U.S. influence, responding to contingencies, and building international relationships that enable the safe, secure, and free flow of commerce that underpins our economic prosperity.

Our Navy's global presence guarantees our access and freedom of action on and under the sea. We are developing with the Air Force and Marine Corps the Air Sea Battle concept that will identify the doctrine, organization, training, procedures, and equipment needed for our Navy to counter growing military threats to our freedom of action. This joint effort will inform the conceptual, institutional, and material actions needed to employ integrated forces that support U.S. operations to project power and influence, protect allies and partners, and secure our national objectives in peace and war.

I remain committed to supporting our Active and Reserve sailors, Navy civilians, and their families. Our Navy continues to be recognized as a highly-ranked place to work as a result of its workforce planning, life-work integration, diversity, and training opportunities. We met or exceeded overall officer and enlisted active recruiting goals last year and we are accessing a force of extreme high quality. We continue to move forward on assigning women into our submarine force, with the first women submariners on track to report aboard SSBNs and SSGNs by the end of this year. We remain committed to performance as a criterion for promotion in our Navy, and have successfully transitioned the majority of our civilian personnel out of the National Security Personnel System (NSPS). Our remaining NSPS employees are scheduled to convert by the end of this year. I appreciate the support of Congress for our Fleet and the dedicated sailors, Navy civilians, and their families that serve our Nation every day.

My priorities for the Navy remain unchanged: to build tomorrow's Navy, to remain ready to fight today, and to develop and support our sailors, Navy civilians, and their families. We continue to advance our Navy in each of these areas thanks to your support.

Our Navy remains the most capable maritime force in the world; however, we are stretching our force to meet combatant commander demands. Since 2000, our Navy's ship-underway days have increased by approximately 15 percent, yet we have about 10 percent fewer ships in our Fleet. Greater demand for our forces has led to longer deployments and shorter dwell, or turnaround times, which increase stress on our sailors and drive up maintenance requirements for our ships and aircraft. We are implementing force management measures in the near term to stretch the capacity of our 286-ship force to meet increasing global requirements while providing the necessary maintenance our Fleet needs to reach its expected service life. Our Navy is different from other Services in that we reset our force "in stride"; that is, we rely upon regular maintenance of our ships and aircraft, and training and certification of our crews between deployments, to sustain our force. I thank Congress for their support of our fiscal year 2011 Operation and Maintenance (O&M) request, which would enable our Navy's continuous reset and translate into decades of service for each ship and aircraft, a significant return on investment.

Regrettably, the continuing resolution (CR) for fiscal year 2011 prevents us from applying the increased fiscal year 2011 O&M funding to improve our readiness, and

it negatively impacts our ability to procure our future Navy and support our sailors, Navy civilians, and their families. It has forced us to take mitigation measures that include: reducing operations, limiting numerous contracts for base operating support, slowing civilian hiring, reducing Permanent Change of Station notifications for our sailors from about 6 months lead time to less than 2 months, not initiating the Small Business Innovative Research program, and delaying procurement contracts for new capabilities and existing production lines. Starting this month, we will cancel or scale back ship maintenance availabilities in Norfolk, Mayport, and San Diego, and cancel more than a dozen Military Construction (MILCON) projects in several States. If the CR lasts all year, we will have no choice but to make permanent these mitigations and others, significantly reducing our operations, maintenance, and training. We will be forced to further reduce facilities sustainment, cancel training events and additional surface ship availabilities, and defer maintenance on our aircraft, which would result in almost a 1-year backlog in aviation maintenance. The impact of these actions will jeopardize the efforts we made in recent years to restore Fleet readiness. Without relief, we will procure only one *Virginia*-class submarine and break the multiyear contract. Agreements made with our surface combatant builders, as a result of the DDG–1000/DDG–51 swap, precludes us from awarding any DDG–51s in fiscal year 2011 unless both ships are appropriated. In addition, without relief, we will delay the new start Mobile Landing Platform; we will constrain aircraft carrier construction and refueling, negatively impacting operational availability, increasing costs, and delaying CVN–79 delivery by up to 1 year; and we will limit aviation and weapons procurement to fiscal year 2010 quantities, impacting E–2D and Standard Missile production. A full-year CR will also defer essential research and development in unmanned aerial systems and significantly delay the design of our replacement strategic deterrent submarine and the recapitalization of our nuclear operator training infrastructure. It will eliminate our ability to source out-of-cycle overseas contingency operations demands for increased Fleet presence and activated Navy Reserve sailors. Operating under a continuing resolution for a full year at the fiscal year 2010 level would have negative effects on our Fleet, on the ship and aviation industrial base, and on the many workers who support naval facilities. Your support in addressing this critical current and long term readiness issue is appreciated greatly.

Our fiscal year 2012 budget submission achieves the optimal balance among my priorities, but it is based on our funding request for fiscal year 2011. If the CR lasts all year, we will need to revisit our fiscal year 2012 request to properly balance our Navy for today and in the future. Our fiscal year 2012 budget request continues to rely on a combination of base budget and overseas contingency operations (OCO) funding, but it reduces the extent to which we rely on OCO funding for enduring missions. Our fiscal year 2012 request continues the effort we started 2 years ago to reduce the cost to own and operate our Fleet. We leveraged the opportunity presented by the Secretary of Defense to significantly reduce excess overhead costs, and apply the savings to warfighting capability and capacity, by executing a deliberate, thoughtful, and integrated approach to finding efficiencies that improve the long-term sustainability of our force. We are taking steps to buy smarter, streamline our organizations and operations, realign manpower, and pursue energy efficiencies. Through these efforts, and with your support, we will improve readiness and warfighting capabilities and optimize organizations and operations, including increasing the number of ships and aircraft in our procurement plans and enhancing or accelerating anti-access capabilities, unmanned systems, and energy initiatives.

Our fiscal year 2012 budget request supports our Maritime Strategy and continues to support our forces, take care of our people, rebalance our force to meet current and future challenges, and reform how and what we buy. Highlights follow.

BUILD TOMORROW'S NAVY

Since the release of our Maritime Strategy, I have stated our Navy requires a minimum of 313 ships to meet operational requirements globally. This minimum remains valid; however, we continue to examine this requirement to address increased operational demands and expanding requirements for BMD, intra-theater lift, and forces capable of confronting irregular challenges. Our fiscal year 2012 submission funds 10 ships, including 2 *Virginia*-class fast attack submarines, 1 Joint High Speed Vessel (JHSV), 1 LPD–17, 1 Mobile Landing Platform (MLP), 1 DDG–51, and 4 Littoral Combat Ships (LCS), which reflects our new LCS procurement plan under the dual award strategy. Our submission also supports the acquisition of an oceanographic ship. I thank Congress for their support of our LCS acquisition strategy and for our shipbuilding program. With your support over the last 3 years, we have been

able to improve the balance among capability, capacity, affordability, and executabilty in our shipbuilding plan.

As I reported last year, I remain concerned about the capacity of our Fleet in the future. Starting in the 2020s, many of our existing cruisers, destroyers, and submarines will reach the end of their service lives. During this period, it will be particularly critical to procure sufficient new ships to offset these decommissionings to avoid a rapid decline in force structure. In the same timeframe, we will begin to procure the replacement for our *Ohio*-class ballistic missile submarine, the most survivable leg of our Nation's nuclear deterrent triad. While we have reduced the cost of that submarine substantially, our total shipbuilding budget will be pressurized in that decade as we seek to recapitalize our surface and submarine forces while sustaining warfighting readiness and supporting our people. I am confident our near-term force structure plans provide the capability and capacity we need to meet demands today, but in this decade we must address how to best resource the shipbuilding programs required in the 2020s.

Our fiscal year 2012 program funds 203 manned aircraft. We have increased our procurement of P–8A Poseidon Maritime Patrol Aircraft to provide needed anti-submarine warfare capacity to our Fleet and facilitate a successful transition from our legacy P–3 Orion aircraft. Our fiscal year 2012 submission also procures 28 F/A–18 E/F aircraft, extending the F/A–18 procurement through fiscal year 2014 and purchasing 41 more aircraft than requested in last year's budget submission. I remain committed to the F–35 Joint Strike Fighter (JSF), and was pleased to see the first flight of the F–35C last year. The timely delivery of the F–35C remains critical to our future carrier airwing strike fighter capacity; however, we are procuring additional F/A–18 Super Hornets to address the decrease in strike fighter capacity we have identified. I thank Congress for their continued support of the F–35 program and our overall strike fighter fleet.

Our Navy is also looking beyond our ships and aircraft and investing in information capabilities that span space, cyberspace, and the electromagnetic spectrum. We moved boldly last year with the establishment of U.S. 10th Fleet and the Deputy CNO for Information Dominance. That restructuring has enabled us to focus on enhancing our electronic warfare, information dominance, integrated air and missile defense, and anti-submarine warfare capabilities. I request Congress' support for these programs as they position our Navy to successfully conduct operations in an evolving anti-access environment today and in the future.

A viable, highly technical, and specialized industrial base is essential to sustaining the capability and capacity of our future Navy. Our shipbuilding and aviation industrial base is a strategic national asset and a significant contributor to our Nation's economic prosperity, employing more than 97,000 uniquely-skilled Americans while indirectly supporting thousands more through second- and third-tier suppliers. The highly specialized skills in our shipbuilding base take years to develop; and, if lost, cannot be easily or quickly reconstituted. A viable shipbuilding industrial base, underpinned by predictable, level-loaded ship procurement, is essential to meet our Nation's naval requirements.

I remain committed to delivering a balanced and capable Fleet that will meet our national security requirements. I seek your support for the following initiatives and programs:

AVIATION PROGRAMS

Aircraft Carrier Force Structure

Our nuclear-powered aircraft carrier fleet is capable of flexibly employing capabilities that span from power projection and deterrence to humanitarian assistance and disaster response. Our 11-carrier force structure is based on worldwide presence and surge requirements, while also taking into account training and maintenance requirements. Our Navy has put in place measures to minimize the impact of the 10-carrier period between the inactivation of USS *Enterprise* (CVN–65) and commissioning of USS *Gerald R. Ford* (CVN–78). After the delivery of CVN–78, we will maintain an 11-carrier force by continuing the refueling program for *Nimitz*-class ships and delivering our *Ford*-class carriers at 5-year intervals starting in 2020.

CVN–78, which is approximately 20 percent complete, is the lead ship of our first new class of aircraft carriers in nearly 40 years. These new carriers incorporate an innovative flight deck design that provides greater operational flexibility, a nuclear propulsion plant that generates more than 50 percent greater energy while decreasing maintenance requirements, and a combination of measures that reduce manning by more than 1,200 sailors. Among the new technologies being integrated in these ships are the Dual-Band Radar, the Electromagnetic Aircraft Launch System (EMALS), and the Advanced Arresting Gear (AAG), which will enable the carrier

to increase its sortie generation rate by 25 percent and lower total ownership costs. AAG is currently undergoing commissioning testing at our land-based testing facility and, in December, EMALS successfully launched an F/A–18 aircraft. Both systems are on schedule to support delivery of CVN–78 in September 2015.

Strike Fighter Capacity

I remain committed to the F–35 JSF program. The timely delivery of the F–35C carrier variant is critical to our future carrier airwing strike fighter capability and capacity. As a result of delays in the F–35 program, we are closely managing our strike fighter inventory to address the decrease in strike fighter capacity that is projected to peak in 2018 as our F/A–18A–D aircraft reach the end of their service life. Our actions include managing the service life of our A–D aircraft, extending the service life of our A–D aircraft, buying new F/A–18E/F Super Hornet aircraft, and maintaining wholeness in the F–35C program. With these measures, we can manage our current strike fighter inventory to meet TACAIR requirements.

F–35 Lightning II Joint Strike Fighter

The F–35 program gives us the advanced sensor, precision strike, firepower, and stealth capabilities our Fleet needs. I continue to base our Initial Operating Capability (IOC) timeline for the F–35C on the level of capability delivered at the completion of Initial Operational Test and Evaluation of the F–35C equipped with Block 3 software. We are reviewing the results of the in-depth Technical Baseline Review and restructuring of the System Development and Demonstration (SDD) phase to determine our IOC. While the overall system demonstration and development schedule has slipped, we have not reduced the total number of airplanes we plan to buy. Our fiscal year 2012 request procures seven F–35C aircraft. We are monitoring the program closely and managing our existing strike fighter capacity to meet power projection demands until the F–35C is delivered. Procurement of an alternate engine for the F–35 increases our risk in this program. The Navy does not have a requirement for an alternate engine; indeed, we would only take one model to sea. Its additional costs threaten our ability to fund currently planned aircraft procurement quantities, which would exacerbate our anticipated decrease in strike fighter capacity throughout the remainder of this decade.

F/A–18A–D Hornet and F/A–18E/F Super Hornet

Our F/A–18A–D Hornet aircraft were originally designed for a service life of 6,000 flight hours. Through a life assessment program and High Flight Hour (HFH) inspections, which have been in place for 3 years, we have been able to extend the service life of our legacy F/A–18A–D aircraft to 8,600 flight hours. Our fiscal year 2012 budget requests funding to pursue a Service Life Extension Program (SLEP) for 150 F/A–18A–D aircraft, commencing in fiscal year 2012 at a rate of about 40 per year, that would further extend the service life of these aircraft to 10,000 flight hours. We are also conducting a life assessment program for our Super Hornet aircraft to extend their original 6,000-hour service life design to 9,000 hours. The F/A–18A–D HFH and SLEP are necessary measures to address our strike fighter inventory while preserving our investment in F–35C. To further reduce risk, we are accelerating the transition of 10 legacy F/A–18C squadrons to F/A–18 E/F Super Hornets, and our fiscal year 2012 budget requests funding to procure more F/A–18E/F Super Hornets than we requested last year. I thank Congress for their support of the F/A–18 program as we introduce F–35C into our Fleet.

EA–18G Growler

The Navy has been a leader in Airborne Electronic Attack (AEA) for more than half a century and AEA is in high demand. AEA provides one of the most flexible offensive capabilities available to the joint warfighter and is becoming increasingly important as technology capable of manipulating the electromagnetic spectrum matures. We are leveraging the mature and proven F/A–18E/F Super Hornet airframe to recapitalize our AEA capability with the EA–18G Growler. Although the EA–18G currently utilizes the same ALQ–99 Tactical Jamming System as the EA–6B, we are developing a new system, the Next Generation Jammer, as a replacement for the aging ALQ–99. The Next Generation Jammer will incorporate a Modular Open System Architecture and improved reliability and maintainability to provide a robust, flexible jamming capability that can evolve to address emerging threats. The EA–18G is in full rate production and we have accepted delivery of 43 aircraft. We have transitioned three EA–6B Prowler squadrons to EA–18G Growlers and two more squadrons are currently in transition. Our first EA–18G squadron deployed in November to Iraq. Our program of record will buy 114 total EA–18G aircraft, recapitalizing 10 carrier-based EA–6B squadrons and 4 expeditionary squadrons, all to be

stationed at NAS Whidbey Island. The program continues to deliver on schedule and our fiscal year 2012 budget requests funding for 12 EA–18Gs.

P–3C Orion and P–8A Poseidon Multi-Mission Maritime Aircraft

Our P–3C Orion aircraft remain in high demand today across a range of missions including Anti-Submarine Warfare, Anti-Surface Warfare, and time-critical Intelligence, Surveillance and Reconnaissance. Our Maritime Patrol Aircraft (MPA) force is a direct enabler for troops on the ground in Central Command while also ensuring access and battlespace awareness at sea. Because we are operating our P–3Cs at a high rate, about 100 P–3 aircraft have been grounded since February 2005 for fatigue life and we anticipate continued groundings through the remainder of the P–3 program. Through significant Congressional support for P–3C wing repairs and sustainment, as of February, we have a current inventory of 84 mission aircraft; a 58 percent increase since last year. Our fiscal year 2012 budget requests about $100 million to continue our P–3C sustainment program. Continued investment in this program and in the modernization of our P–3s is critical to ensure we retain sufficient capacity to conduct maritime battlespace awareness and support to land forces in Central Command, while successfully transitioning to the P–8A.

The P–8A Poseidon Multi-Mission Maritime Aircraft is ideally suited for regional and littoral operations, and is our pre-eminent airborne capability against submarine threats. Procurement of P–8A will deliver needed capacity for these missions. The P–8A is scheduled to reach initial operating capability and will begin replacing our aging P–3 Fleet in 2013. The current delivery schedule enables transition of two squadrons per year. Our fiscal year 2012 budget requests funding for 11 P–8A aircraft. I request Congress' support for the P–8A program schedule and for our P–3 sustainment and modernization program, the combination of which is essential to our transition to the next generation of MPA capability while avoiding future gaps in our MPA force.

E–2D Advanced Hawkeye

The E–2D Advanced Hawkeye aircraft, will replace the E–2C and represents a two-generation leap in airborne radar surveillance capability. The E–2D will improve nearly every facet of tactical air operations and add overland and littoral surveillance to support theater Integrated Air and Missile Defense (IAMD) against air threats in high clutter, complex electro-magnetic and jamming environments. The airborne radar on the E–2D, with its improved surveillance capability, is a key pillar of the Navy Integrated Fire Control-Counter Air (NIFC–CA) concept. Four test aircraft have been delivered to the Navy and we will commence operational test and evaluation in late 2011. The first Fleet squadron transition is planned for 2013, with an IOC scheduled for late 2014. Our fiscal year 2012 budget requests six E–2D aircraft. We plan to procure 75 aircraft, with the final aircraft procurement in 2019 and Full Operational Capability (FOC) in 2022.

MH–60R/S Multi-Mission Helicopter

The MH–60R and MH–60S are in full rate production. The MH–60R multi-mission helicopter replaces the surface combatant-based SH–60B and carrier-based SH–60F with a newly manufactured airframe and enhanced mission systems. With these systems, the MH–60R provides focused surface warfare and anti-submarine warfare capabilities for our strike groups and individual ships. The MH–60S supports surface warfare, combat logistics, vertical replenishment, search and rescue, air ambulance, airborne mine counter-measures, and naval special warfare mission areas. We have delivered 85 MH–60R and 187 MH–60S to our Fleet and our fiscal year 2012 budget requests funding for 24 MH–60R and 18 MH–60S helicopters.

SURFACE SHIP PROGRAMS

Littoral Combat Ship (LCS)

LCS is a fast, agile, networked surface combatant optimized to support naval and joint force operations in the littorals with capability to support open-ocean operations. It will operate with focused-mission packages to counter mine, small boat, and submarine threats in the littorals. The modular design and open architecture of the seaframe and mission modules provide the inherent flexibility to add or adapt capabilities as new technologies mature or to counter threats that emerge beyond the Mine Countermeasures, Surface Warfare, and Anti-Submarine missions currently planned for LCS. These ships will employ a combination of manned helicopters and unmanned aerial, surface, and undersea vehicles.

USS *Freedom* (LCS–1) completed her first operational deployment to the Southern and Pacific Commands in April 2010, 2 years early. While deployed, USS *Freedom* successfully conducted counter-drug missions and validated its open ocean capa-

bility, allowing us to learn valuable lessons from these real-world operations. USS *Independence* (LCS–2) was commissioned in January 2010 and is currently in Norfolk undergoing post-delivery tests and trials. We are seeing demonstrated performance and stability in the construction of LCS–3 and LCS–4 that captures lessons learned from the first ships. PCU *Fort Worth* (LCS–3) was launched and christened in December and is completing final construction. PCU *Coronado* (LCS–4) is almost 50 percent complete and is scheduled to be launched and christened later this year. Both LCS–3 and LCS–4 are experiencing minimal change and are scheduled to be delivered to the Navy in 2012 on cost and on schedule.

I thank Congress for approving the Navy's dual award strategy in December 2010. This strategy enables the Navy to save over $2 billion in acquisition costs and acquire these ships well below the congressionally-mandated $480 million cost cap set in 2009. It allows our Navy to acquire an additional Littoral Combat ship, increasing needed capacity in our Fleet. I am impressed and satisfied with the capabilities of both LCS designs and remain committed to procuring 55 of these ships. Consistent with the dual award strategy, our fiscal year 2012 budget requests four LCS seaframes at a total cost of $1.8 billion. The budget also requests two mission packages in fiscal year 2012. These packages provide the vital center for LCS's combat capability and we have aligned LCS mission module procurement with that of our LCS seaframes. I request your continued support as we continue to acquire the future capacity and capability the Fleet requires.

Ballistic Missile Defense

The Navy's mature and proven maritime BMD capability will play a primary role in the first phase of our Nation's Phased Adaptive Approach (PAA) for the missile defense of our NATO Allies in Europe. Our fiscal year 2012 budget requests funding to increase our current BMD ship capacity from 21 ships (5 cruisers and 16 destroyers) to 41 BMD capable ships by 2016. This planned capacity expansion will eventually include all of the Navy's *Arleigh Burke*-class destroyers and nine *Ticonderoga*-class cruisers. Until we grow our BMD ship capacity, our existing BMD ships may experience longer deployment lengths and less time between deployments as we stretch our existing capacity to meet growing demands.

As part of the PAA, we are working with the Missile Defense Agency to adapt Navy's proven and flexible Aegis BMD capability for use in an ashore configuration by repackaging components of the afloat Aegis Weapons System into modular containers for deployment to pre-prepared forward sites. The Aegis Ashore Missile Defense Test Complex is currently under development, with fabrication to begin in Kauai, HI, in 2013. This complex is a key enabler of the Aegis Ashore capability, which will be tested prior to shore placement overseas in 2015. This phased approach provides needed technology and capacity to pace the threat; it serves as a conventional counter to trends in global ballistic missile technology; and it allows for technological maturation through 2020.

DDG–51 Flight IIA and Flight III

To keep pace with the evolving air and missile defense threats, we restarted the DDG–51 Flight IIA production line in the fiscal year 2010 and fiscal year 2011 budgets with advanced procurement buys for DDG–113, –114, and –115. The restarted DDG–51 Flight IIA destroyers provide Navy with a proven multi-mission combatant that fills critical warfighting needs across the spectrum, and is the first warship built from the keel up to conduct maritime BMD. They will be the first Aegis ships to be built with the Open Architecture Advanced Capability Build (ACB)–12 Aegis Combat System. ACB–12 will allow these surface combatants to be updated and maintained with commercial off-the-shelf (COTS) technology, yielding reduced Total Ownership Cost and enhancing the ability to adapt to future military threats. Our fiscal year 2012 budget requests funding for the construction of DDG–116 as part of our plan to build seven more of the Flight IIA class over the FYDP (an increase of one DDG–51 over last year's budget). We also request just over $75 million to support research and development for ACB–12, which will support the integration of this critical system on DDG–113 and our development of Aegis Ashore.

The follow-on to DDG–51 Flight IIA is the DDG–51 Flight III, which will commence with the construction of DDG–123. Flight III ships will be tailored for Integrated Air and Missile Defense (IAMD) and include the Air and Missile Defense Radar (AMDR), upgraded command and control software and hardware, and enhanced electrical power and cooling. Our fiscal year 2012 budget requests funding for a total of eight DDG–51 Class ships, including funding for the first Flight III ship in fiscal year 2016.

Modernization

To counter emerging threats, we continue to make significant investments in cruiser and destroyer modernization to sustain our combat effectiveness and to achieve the 35 year service life of our Aegis fleet. Our destroyer and cruiser modernization program includes Hull, Mechanical, and Electrical (HM&E) upgrades, as well as advances in warfighting capability and open architecture to reduce total ownership costs and expand mission capability for current and future combat capabilities. In addition to HM&E upgrades, key aspects of our destroyer and cruiser modernization programs include the installation or upgrade of the Aegis weapons system to include an open architecture computing environment, addition of the Evolved Sea Sparrow Missile (ESSM), an upgraded SQQ–89A(V)15 anti-submarine warfare system, and improved air dominance with processing upgrades and Naval Integrated Fire Control-Counter Air capability. Our destroyers also receive integration of the SM–6 missile, while our cruisers receive installation of the AN/SPQ–9B radar and an upgrade to Close-In Weapon System (CIWS) Block 1B. Maintaining the stability of the cruiser and destroyer modernization program is critical to our ability to provide relevant capability and capacity in our future Fleet. Our fiscal year 2012 budget requests funding for the modernization of four cruisers (three Combat Systems and one HM&E) and three destroyers (one Combat System and two HM&E).

DDG–1000

The DDG–1000 Zumwalt guided missile destroyer will be an optimally crewed, multi-mission surface combatant optimized for long-range precision land attack. In addition to providing offensive, distributed and precision fires in support of forces ashore, these ships will serve as test-beds for advanced technology, such as integrated power systems, a sophisticated X-Band radar, and advanced survivability features, which can inform future ship designs. Following a Nunn-McCurdy breach due to the reduction in procurement to three ships, we restructured the DDG–1000 program to remove the highest risk technology, the Volume Search Radar, from integration into the platform. DDG–1000 is more than 37 percent complete and is scheduled to deliver in fiscal year 2014 with an initial operating capability in fiscal year 2016.

Joint High Speed Vessel

The JHSV will deliver a new level of organic logistic and maneuver flexibility for combatant commanders. JHSV is a high speed, shallow draft ship. Its unique design allows the ship to transport medium payloads of cargo and/or personnel to austere ports without reliance on port infrastructure. JHSV–1 and –2 are currently under construction by Austal USA in Mobile, AL and are scheduled to be delivered in fiscal year 2012 and 2013. Our fiscal year 2012 budget requests funding for the construction of the third JHSV. We are currently developing a Memorandum of Agreement with the Army that would transfer programmatic oversight and responsibility for the entire JHSV program, including operations and maintenance, to the Navy. Upon the signing of the agreement, all JHSVs when delivered would be operated by the Navy's Military Sealift Command and manned by civilian or contract mariners.

SUBMARINE PROGRAMS

Virginia-class SSN

The *Virginia*-class submarine is a multi-mission submarine designed to dominate the undersea domain in the littorals, access denied environments, and the open ocean. Now in its 14th year of construction, the *Virginia* program is demonstrating its continued ability to deliver this critical undersea asset affordably and on time. The Navy continues to realize a return on investment in the *Virginia* cost reduction program and construction process improvements through enhanced shipbuilder performance on each successive ship. A majority of the submarines contracted via multiyear procurement have delivered under budget and ahead of schedule, and their performance continues to exceed expectations with every ship delivered. I am pleased with the accomplishments of the combined Navy-Industry team and anticipate additional improvements as we ramp up production to two submarines per year, as requested in our fiscal year 2011 and 2012 budget submissions.

SSBN and Ohio Replacement

The Navy remains committed to recapitalizing the Nation's sea-based strategic deterrent, the most survivable leg of our nuclear triad. With a fleet of 14 *Ohio*-class ballistic missile submarines (SSBN), we have been able to meet the strategic needs

of the Nation since 1980. This class will begin retirement after more than 40 years of service in 2027.

The 2010 Nuclear Posture Review reaffirmed that our Nation will continue to rely on a reliable and survivable sea-based strategic deterrent for the foreseeable future. To ensure the Navy is able to meet the Nation's demand in this critical capability, our fiscal year 2012 budget requests research and development funds for the design of the *Ohio*-class replacement, enabling construction of the class beginning in 2019. The *Ohio* replacement will possess the endurance and stealth required for continuous, survivable strategic deterrence for decades to come. Appropriate R&D investment is essential to design a reliable and survivable submarine capable of deterring all potential adversaries. Over the past year, the *Ohio* replacement program has been thoroughly reviewed and all aspects of the program were aggressively challenged to drive down engineering and construction costs. Our fiscal year 2012 request represents best balance of needed warfighting capabilities with cost. The *Ohio* replacement program will leverage the many successes of the *Virginia* SSN program to achieve acquisition and total ownership cost goals. These efficiencies and a record of acquisition excellence are critical to minimize risk to our total force structure while recapitalizing sea-based strategic deterrence between fiscal year 2019 and fiscal year 2033.

AMPHIBIOUS WARFARE SHIPS

LPD–17 Class Amphibious Warfare Ship

The *San Antonio*-class LPD (LPD–17) amphibious warfare ships provide the Navy and Marine Corps the ability to embark, transport, control, insert, sustain, and extract combat marines and sailors on missions that range from forcible entry to forward deployed crisis response. These ships have a 40-year expected service life and will replace four classes of older ships: the LKA, LST, LSD–36, and the LPD–4. Of the 11 ships in our program of record, 5 ships have been delivered, 3 have completed their initial deployments, and 4 are under construction. We continue to resolve material reliability concerns with the class and apply the lessons learned during initial operation of the early ships to those under construction. Quality continues to improve with each ship delivered as we work closely with the shipbuilder to address cost, schedule, and performance issues. Our fiscal year 2012 budget requests funding to procure the final ship in the program.

LHA Replacement (LHA(R))

LHA(R) is the replacement for our aging *Tarawa*-class ships, which will reach the end of their extended service life between 2011–2015. LHA(R) will provide flexible, multi-mission amphibious capabilities by leveraging the LHD–8 design. The *America* (LHA–6) is now more than 30 percent complete and on schedule for delivery in fiscal year 2014. Beginning with LHA–8, the Navy will reintegrate the well deck into the large deck amphibious assault ships. Our fiscal year 2012 budget requests funding for research and development to support reintegration of the well deck into the design of the large deck amphibious ship and the construction of LHA–8 in fiscal year 2016.

Mobile Landing Platform

Based on commercial technology, the Mobile Landing Platform (MLP) will enable the transfer of equipment, personnel, and sustainment at-sea, and delivery ashore in support of a wide range of contingency operations. Our fiscal year 2012 budget requests funding for one MLP and we intend to procure a total of three MLPs. We expect the first ship to deliver in fiscal year 2013 and project initial operating capability and incorporation into the Maritime Prepositioning Force (MPF) for 2015. In the Maritime Preposition Force, each of our existing Maritime Preposition Squadrons will be augmented by one MLP, one T–AKE combat logistics ship, and a Large Medium-Speed Roll-on/Roll-off cargo ship. The three T–AKE are all under contract with projected delivery dates beginning this year and going through fiscal year 2013.

INFORMATION DOMINANCE PROGRAMS

Unmanned Systems

Our Navy is developing a "family" of unmanned systems over, on, and under the sea to provide unique capability, in concert with our manned platforms, to rapidly secure access and establish maritime superiority at the time and place of our choosing. We are developing information architecture that will allow us to rapidly assimilate data into information for our commanders, enabling shorter decision cycles that will give us an advantage in joint and maritime operations.

Unmanned Aircraft Systems (UAS)

Our unmanned aircraft family of systems includes the Broad Area Maritime Surveillance (BAMS) UAS, which will enhance our situational awareness and shorten the sensor-to-shooter kill chain by providing persistent, multiple-sensor capabilities to Fleet and Joint Commanders. Through our recent memorandum of agreement with the Air Force, we are pursuing greater commonality and interoperability between BAMS and the Air Force's Global Hawk UAV. Our Vertical Take-off and Landing Tactical Unmanned Air Vehicle (VTUAV) is on its second deployment aboard the USS *Halyburton* (FFG–40) and will deploy in an expeditionary role to support combat operations in Afghanistan later this year. Our fiscal year 2012 budget includes about $12 million in research and development funding to facilitate development of a weapons-capable VTUAV ready for deployment in late fiscal year 2012. Our fiscal year 2012 request also includes funding to develop a medium range maritime-based UAS and a Small Tactical Unmanned Aerial System that will support a variety of ships, Naval Special Warfare and Navy Expeditionary Combat Command units, and Marine Corps elements.

The Navy Unmanned Combat Aircraft System Demonstration (NUCAS–D) will prove carrier suitability of an autonomous, unmanned, low-observable, carrier-based aircraft. This effort includes maturing technologies for aircraft carrier catapult launches and arrested landings, as well as integration into carrier-controlled airspace. Initial flight tests to demonstrate carrier suitability are scheduled to start next year and autonomous aerial refueling demonstrations are planned for 2014. We will leverage the lessons learned from operating the demonstrator in developing a low-observable unmanned carrier-launched airborne surveillance and strike system (UCLASS). The UCLASS program will shorten the timeline to find, fix, track, target, engage, and assess time sensitive targets. UCLASS will integrate with the carrier air wings and increase the flexibility, versatility, and capability of the carrier force. We are currently developing the UCLASS acquisition strategy with OSD.

Unmanned Underwater Vehicles

Unmanned Underwater Vehicles (UUV) provide an innovative technological solution to augment manned platforms. Our Navy has logged more than 85,000 hours of UUV operations to improve battlespace awareness. Our small-body Littoral Battlespace Sensing (LBS) oceanographic autonomous undersea gliders have demonstrated the ability to conduct 6-month long autonomous operations and will achieve Initial Operating Capability this year. Our fiscal year 2012 budget requests about $13million for research, development, and procurement of the LBS glider. We are also developing Large Diameter UUVs (LDUUV) with the capability to autonomously deploy and manage a variety of sensors and payloads. The development of these highly capable vehicles will require investment in commercially and militarily beneficial alternative energy technologies, including refinement of fuel cell technology and cutting edge battery technologies. Our fiscal year 2012 budget requests about $47 million to develop an LDUUV, and I remain committed to conduct fully independent UUV missions with durations of 2 months by 2017. This capability will allow full scale employment and deployment of LDUUV squadrons in the 2020s.

Mobile User Objective System

Our Maritime Strategy demands a flexible, interoperable, and secure global communications capability that can support the command and control requirements of highly mobile and distributed U.S. and coalition forces. Satellite communications give deployed forces a decisive military advantage and often offer the only communication means to support ongoing operations. Rapidly expanding joint demand for more access at ever-higher data rates requires moving beyond our current legacy Ultra High Frequency (UHF) satellite capabilities. The Mobile User Objective System (MUOS) will help satisfy those demands when initial operational capability is reached in fiscal year 2012. The first satellite in our planned constellation of five is scheduled for on-orbit capability in May 2012. Our fiscal year 2012 budget submission continues our investment in MUOS to replace the aging UHF Follow-On (UFO) constellation. I request your continued support of MUOS and the critical narrowband communication capability it will provide to the joint warfighter.

Next Generation Enterprise Network

The Next Generation Enterprise Network (NGEN) is a Department of the Navy enterprise network that will provide secure, net-centric data and services to Navy and Marine Corps personnel after the current Navy-Marine Corps Intranet (NMCI) network stands down. In July, Navy awarded Hewlett Packard Enterprise Services with the NMCI continuity of services contract to transition the Navy out of NMCI and into NGEN. NGEN will sustain the services currently provided by NMCI, while

increasing government command and control of our network and enabling secure, reliable, and adaptable global information exchange. The initial NGEN contracts are expected to be awarded in the first quarter of fiscal year 2012. Our fiscal year 2012 budget requests an additional $22 million to support government command and control of our networks and improve our network situational awareness and defense.

Remain Ready to Fight Today

Our Navy continues to experience a high tempo of global operations which I expect to continue even as combat forces draw down in Afghanistan. Global trends in economics, demographics, resources, and climate change portend an increased demand for maritime power and influence. America's prosperity depends upon the seas: 90 percent of world trade moves on the world's oceans and underwater telecommunications cables facilitate about $3.2 trillion of commerce each year. As new trade patterns emerge, such as those that will result from the expansion of the Panama Canal and the opening of the Arctic, and as disruption and disorder persist in our security environment, maritime activity will evolve and expand. Seapower allows our Nation to maintain U.S. presence and influence globally and, when necessary, project power without a costly, sizeable, or permanent footprint ashore. We will continue to maintain a forward-deployed presence around the world to prevent conflict, increase interoperability with our allies, enhance the maritime security and capacity of our traditional and emerging partners, confront irregular challenges, and respond to crises.

High operational demand for our force over the last decade has led to longer deployments, lower dwell time, and reduced maintenance time for our surface ships. If these trends continue, our force will be less ready and less available than it is today because of increased stress on our sailors and a reduction in our Fleet capacity as ships fail to reach their expected service lives. We have initiatives currently underway to address these trends. We are moving approximately 1,900 sailors from shore billets onto our ships to meet operational demands while maintaining acceptable Fleet readiness levels and sailor dwell time. To enhance the material readiness of our Fleet, we are improving our ability to plan and execute maintenance by increasing manning at our Regional Maintenance Centers (RMCs), and by institutionalizing our engineered approach to surface ship maintenance, converting the successes of our Surface Ship Lifecycle Maintenance initiative I began 2 years ago into the Surface Maintenance Engineering Planning Program Activity. I remain focused on ensuring our Navy has a force that is maintained and trained to provide the capability and forward presence required in the two areas of interest identified in our Maritime Strategy, the Western Pacific and the Arabian Gulf, while preserving our ability to immediately swing from those regions and our Fleet concentration areas in the United States to respond to contingencies globally.

Our fiscal year 2012 base budget and Overseas Contingency Operations (OCO) funding requests balance the need to meet increasing operational requirements, sustain our sailors' proficiency, and conduct the maintenance required to ensure our ships and aircraft reach their full service lives. It does not address the potential impacts of a full-year continuing resolution on our ongoing operations and maintenance afloat and ashore. Highlights follow of initiatives that ensure our Navy remains ready to fight today.

Depot Level Maintenance

Our ships and aircraft are valuable capital assets that operate in unforgiving environments. Keeping these assets in acceptable operating condition is vital to their ability to accomplish assigned missions and reach their expected service lives. Timely depot level maintenance, based on an engineered assessment of expected material durability and scoped by actual physical condition, will preserve our existing force structure. Continued investment in depot level maintenance is essential in achieving and sustaining the force structure required to implement our Maritime Strategy. Our combined fiscal year 2012 base budget and OCO funding requests fulfill 94 percent of the projected ship depot maintenance requirements necessary to sustain our Navy's global presence and 95 percent of our aviation depot maintenance requirements, servicing 742 airframes and 2,577 engines. The actual extent of our depot maintenance requirements will be determined by the final funding levels for fiscal year 2011. I request that you fully support our baseline and contingency funding requests for operations and maintenance to ensure the effectiveness of our force, safety of our sailors, and longevity of our ships and aircraft.

Shore Readiness

Our shore infrastructure enables our operational and combat readiness, and is essential to the quality of life and quality of work for our sailors, Navy civilians, and their families. High operational demands, rising manpower costs, and an aging fleet

of ships and aircraft cause us to take deliberate risk in shore readiness, specifically in sustaining our shore infrastructure. We have focused our facilities sustainment, restoration, and modernization funds on improving our housing for unaccompanied sailors and investing in energy efficient building modifications. To source these enhancements, we have temporarily cancelled our demolition program and reduced our facilities sustainment posture to 80 percent of the modeled requirement. We have targeted our shore readiness investments in areas that have the greatest impact on achieving our strategic and operational objectives. These areas include support to our warfighting missions and capabilities, nuclear weapons security, quality of life for our sailors and their families, and energy enhancements. We remain on track in our Homeport Ashore initiative to provide sufficient accommodations to our junior single sailors by 2016, and we continue our support for family services. We plan to complete an expansion of 7,000 child care spaces in fiscal year 2011, allowing us to meet OSD's mandate of providing child care for 80 percent of the potential need in fiscal year 2012.

Training Readiness

Our Navy is leveraging modeling and simulation (M&S) extensively across the Fleet training continuum to reduce at-sea training requirements and associated operating costs and energy use. These virtual environments stress critical command and control warfare skills and fine tune basic warfighting competencies without going to sea. They provide synthetic events that are scalable and repeatable, including the ability to train multiple strike groups simultaneously. Synthetic training provides a complex, multi-faceted threat environment that cannot be efficiently recreated at sea on a routine basis. Ship command and control simulations, in conjunction with the Fleet Synthetic Training (FST) program, support unit level and integrated pre-deployment training and certification, including Joint Task Force Exercises, Ballistic Missile Defense Exercises, and LCS qualification and certification training. In fiscal year 2012, our Navy's use of simulators will reduce steaming days by 603 days for a savings of $30 million, and flying hours by 5,400 hours, for a savings of $35 million. The Fleet has placed FST as a top training priority with the objective to increase simulator use and synthetic training to reduce Fleet operating costs.

Although we are maximizing our use of synthetic training, it cannot completely replace our need to conduct live training. Simulators cannot replicate the physical environment, risks, stress, or experiences that live training provides. Naval units must be able to practice and hone their skills in the air and at sea. Having the right facilities and the ability to practice skill sets in a live operating environment are necessary for the proficiency and safety of our sailors and for the warfighting effectiveness of our Fleet.

The proliferation of advanced, stealthy submarines continues to challenge our Navy's ability to guarantee the access and sustainment of joint forces. Robust antisubmarine warfare (ASW) training with active sonar systems is vital for our Navy to effectively address this threat. The Navy remains a world leader in marine mammal research and we will continue our investment in this research in fiscal year 2012 and beyond. Through such efforts, and in full consultation and cooperation with other Federal agencies, we have developed effective measures that protect marine mammals and the ocean environment from adverse impacts of mid-frequency active (MFA) sonar while not precluding critical Navy training. We continue to work closely with our interagency partners to further refine our protective measures as scientific knowledge evolves. It is vitally important that any such measures ensure the continued flexibility necessary to respond to future national security requirements.

In January, we announced our plan to initially focus JSF homebasing on the west coast in accordance with 2010 Quadrennial Defense Review direction and the JSF Transition Plan. We also announced that we are suspending work on the Outlying Landing Field (OLF) draft environmental impact statement (EIS) planned for the East Coast until at least 2014. At that time, we will re-evaluate the requirement for an OLF based on our east coast JSF basing and training requirements. We continue to experience capacity shortfalls at our current East Coast field carrier landing practice sites that present challenges to meeting our current training requirements under both routine and surge conditions for existing Navy aircraft. We will continue to ensure we meet all our training requirements by implementing the measures necessary to use all available facilities.

Energy and Climate Change

The Secretary of the Navy and I are committed to advancing our energy security. I consider energy an operational imperative and I established the Navy's Task Force

Energy more than 2 years ago to improve combat capability, assure mobility, and green our footprint. We will achieve these goals through energy efficiency improvements, consumption reduction initiatives, and the aggressive adoption of alternative energy and fuels. Reducing our reliance on fossil fuels will improve our combat capability by increasing time on station, reducing time spent alongside replenishment ships, and producing more effective and powerful future weapons.

Our tactical energy efforts fall into two categories: technical and behavioral changes that use energy more efficiently, and testing/certification of alternative fuels. We are making good progress on our efficiency initiatives. The USS *Makin Island* (LHD–8) uses hybrid propulsion and we are installing the same system on LHA–6 and LHA–7. We are developing a hybrid electric drive system for the DDG–51 class and I anticipate a land-based test as early as this summer. We continue to introduce advanced hull and propeller coatings and solid state lighting in our ships, and we are developing the Smart Voyage Planning Decision Aid to achieve more efficient ship routing. We are also implementing policies that encourage sailors to reduce their personal energy usage. These incremental initiatives add up to significant efficiency improvements.

Our alternative energy programs are progressing. We are aggressively certifying elements of our operational force for biofuel use. To date we have operated the "Green Hornet" F/A–18 and MH–60S on camelina-based JP–5 fuel and the RCB–X riverine craft on algal-based F–76 fuel. Operational testing of energy efficiency upgrades to the Allison 501k engine completed last month and is a key milestone toward certification of our Navy combatants with marine gas turbine engines.

We have reduced our energy use ashore by more than 14 percent since 2003, as a result of our energy efficiency efforts, including energy efficiency building upgrades, energy management systems, procurement of alternative fuel vehicles, and achievement of sustainable building standards for all new construction and major renovation projects. Our continued investments in advanced metering and energy audits will help identify further opportunities for efficiency gains and alternative energy use. Our approach remains focused on integrating the right technology at the right time in the right place while transforming Navy culture and behavior for long term sustainability.

Since establishing Task Force Climate Change in 2009, our Navy has taken several actions to better understand and address the potential impacts of climate change on our Navy. We have increased our operational engagement in the Arctic, participating this past summer in Operation Nanook/Natsiq with Canada. We are re-assessing regional security cooperation, through our African, Southern, and Pacific Partnership station missions to include consideration of climate change adaptation, especially with respect to improving water security. We are also participating with the National Oceanographic and Atmospheric Administration and other Federal agencies to survey in the Arctic and improve our environmental observation and prediction capability worldwide. Scientific observations indicate that current changes to the climate are occurring on a decadal scale, giving our Navy enough time to conduct the studies and assessments necessary to inform future investment decisions.

Second East Coast Carrier-Capable Homeport

The Navy continues to focus on achieving the 2010 Quadrennial Defense Review direction to upgrade the carrier port of Mayport. Much like the dispersal of west coast aircraft carriers between California and Washington, a second homeport on the east coast to maintain aircraft carriers is prudent in the event of a natural or man-made disaster in Hampton Roads. The dredging project funded in fiscal year 2010 is underway and will ensure unimpeded access to Mayport. Our fiscal year 2012 budget requests funding for the Massey Avenue corridor improvement projects. We plan to request funding for the Wharf F recapitalization in fiscal year 2013, and the remaining projects within the FYDP, to establish Naval Station Mayport as a nuclear carrier-capable homeport by 2019.

United Nations Convention on the Law of the Sea

The Navy has consistently supported a comprehensive and stable legal regime for the exercise of navigational rights and other traditional uses of the oceans. The Law of the Sea Convention provides such a regime with robust global mobility rules. I believe it essential that the United States become a full Party to the treaty. The Convention promotes our strategic goal of free access to and public order on the oceans under the rule of law. It also has strategic effects for global maritime partnerships and American maritime leadership and influence. Creating partnerships that are in the strategic interests of our Nation must be based on relationships of mutual respect, understanding, and trust. For the 160 nations who are parties to

the Law of the Sea Convention, a basis for trust and mutual understanding is codified in that document. The treaty provides a solid foundation for the United States to assert its sovereign rights to the natural resources of the sea floor out to 200 nautical miles and on the extended continental shelf beyond 200 nautical miles, which in the Arctic Ocean is likely to extend at least 600 nautical miles north of Alaska. As a non-Party to the treaty, the United States undermines its ability to influence the future direction of the law of the sea. As the only permanent member of the U.N. Security Council outside the Convention, and one of the few nations still remaining outside one of the most widely subscribed international agreements, our non-Party status hinders our ability to lead in this important area and could, over time, reduce the United States' influence in shaping global maritime law and policy. The Law of the Sea Convention provides the norms our sailors need to do their jobs around the world every day. It is in the best interest of our Nation and our Navy to ratify the Law of the Sea Convention. We must demonstrate leadership and provide to the men and women who serve in our Navy the most solid legal footing possible to carry out the missions that our Nation requires of them.

DEVELOP AND SUPPORT OUR SAILORS, NAVY CIVILIANS, AND THEIR FAMILIES

Our sailors, Navy civilians, and their families are the backbone of our Maritime Strategy. They make us who we are. Their skill, innovation, and dedication turn our ships, aircraft, weapons and systems into global capabilities that prevent conflict, build partnerships, and, when necessary, project combat power to prevail in war. Our investment in our sailors, Navy civilians, and their families ensures our Navy's continued maritime dominance today and in the future.

Our fiscal year 2012 budget requests authorization and funding for 325,700 Active and 66,200 Reserve end strength. This request includes the migration of more than 1,800 military billets from shore and staff activities into the Fleet to man new ships and squadrons, restore optimal manning cuts, add needed information technology and nuclear operators to our force, and restore billets for fiscal year 2013 to extend USS *Peleliu* in commission. This migration will enhance our forces afloat; however, the transition will present challenges to our ability to maintain sea-shore flow for some of our enlisted sailors and sustain manning levels across the force. We are aware of these challenges and believe the transition is manageable. Our fiscal year 2012 end strength request also begins to move end strength previously supported by OCO funding, namely our Navy Individual Augmentees (IAs), into our baseline program. We will execute a phased draw down of our OCO end strength as we project a gradual reduction of IA demands in Iraq and Afghanistan. Should IA demand remain at current levels, or increase over time, we will be challenged to meet manning requirements for our Fleet. Our Navy continues to size, shape, and stabilize our force through a series of performance-based measures designed to retain the skills, pay grades, and experience mix necessary to meet current and future requirements.

Our fiscal year 2012 end strength reflects efficiencies in our manpower account that reduce excess overhead by disestablishing several staffs, but not their associated ships and aircraft, for submarine, patrol aircraft, and destroyer squadrons, as well as one Carrier Strike Group staff. We are disestablishing the headquarters of Second Fleet and transferring responsibility for its mission to U.S. Fleet Forces Command. These efficiencies streamline our organizations and allow us to reinvest the savings into warfighting capability and capacity.

I would like to touch briefly on the issue of changes to the health care benefit. Navy Medicine has been a leader in implementing pilot testing for the Department in a new concept called the Patient-Centered Medical Home. Beneficiaries have welcomed Navy Medicine's Medical Home Port initiative and it shows in their satisfaction scores. I am convinced that our beneficiaries will readily accept very modest changes to copayments as long as we continue to invest in these transformational approaches to delivering high quality health care. The proposals in the President's budget are consistent with our efforts over the last several years: a focus on internal efficiency, incentivizing the health behaviors we want, and ensuring all of our beneficiaries are treated equitably. I request you support these timely and appropriate efforts.

The tone of our force continues to be positive. In 2010, we conducted the Navy Total Force Survey, which was the first of its kind to assess the work-related attitudes and experiences of Active and Reserve sailors and Navy civilians. The survey reported that Navy personnel are, overall, satisfied with the quality of their leadership, benefits, compensation, and opportunities within the Navy for personal growth and development. The survey results reaffirmed what more than 20 national awards

have recognized: that our Navy is a "Top 50" organization and an employer of choice among today's workforce.

Our fiscal year 2012 budget request represents a balanced approach to supporting our sailors and their families, sustaining the high tempo of current operations, and preserving Fleet and family readiness. Highlights follow of our efforts to develop and support our sailors, Navy civilians, and their families.

Recruiting and Retention

Our Navy has enjoyed strong recruiting success over the past 3 years, and we expect this trend to continue through fiscal year 2011. Fiscal year 2010 marked the third consecutive year Navy met or exceeded its overall enlisted recruiting goals in both the Active and Reserve components and we continue to exceed Department of Defense quality standards in all recruit categories. We accessed the highest quality enlisted force in history last year, with more than 97 percent having traditional high school diplomas. Active officer recruiting for fiscal year 2010 also exceeded our overall goals. Reserve officer recruiting exceeded our fiscal year 2009 levels, but achieved only 95 percent of our fiscal year 2010 goal. Reserve medical officer recruiting continues to be our greatest challenge as the requirement for medical officers has increased by more than 100 percent since fiscal year 2008. We continue to explore new avenues for recruiting, including expanding our social media engagement to maintain a dialogue with potential applicants and influencers nationwide.

Navy will remain competitive in the employment market through the disciplined use of monetary and non-monetary incentives. Using a targeted approach, we will continue our recruiting and retention initiatives to attract and retain our best sailors, especially those within high-demand, critical skill areas that remain insulated from economic conditions. We are taking advantage of current high retention rates and success in accessions by reevaluating all special and incentive pays and bonuses and reducing them where possible. Judicious use of special and incentive pays remains essential to recruiting and retaining skilled professionals in the current economic environment, and will increase in importance as the economic recovery continues. Our goal remains to maintain a balanced force, in which seniority, experience, and skills are matched to requirements.

To ensure we stay within our congressionally-authorized end strength, we are executing force stabilization measures that include Perform-to-Serve (PTS) for enlisted sailors and a series of Selective Early Retirement (SER) boards for Unrestricted Line (URL) captains and commanders. PTS considers the manning levels in each enlisted rating and reviews the record of sailors eligible for reenlistment to determine if the sailor should remain in the rating, convert to an undermanned specialty, transition to the Reserves, or separate from the Navy. The SER boards will address the excess inventory of Active component captain (O6) and commander (O5) URL officers in our Navy to ensure sufficient senior officers are available at the right time in their careers to serve in critical fleet billets. We project approximately 100 URL captains and 100 URL commanders will be selected for early retirement through this process. With these performance-based measures, we expect to meet our fiscal year 2011 authorized Active end strength of 328,700 and Reserve end strength of 65,500 by the end of the fiscal year. We will be challenged to meet our Active and Reserve end strength targets in fiscal year 2012 using existing force shaping measures. As a result of continued high retention and low attrition across the force, we are facing increasing pressure to use involuntary force shaping measures to remain within our authorized end strength.

Diversity

Demographic projections estimate that today's minorities will make up more than one third of our Nation's workforce by 2020; by 2050, that projection increases to about half of our workforce. Our ability to access and retain the talents of every component group in our society is critical to our mission success. Recruiting and retaining a diverse workforce, reflective of the Nation's demographics at all levels of the chain of command, remains a strategic imperative and a focus area for leaders throughout our Navy. To foster a Navy Total Force composition that reflects America's diversity, we are focusing our efforts on outreach, mentoring, leadership accountability, training, and communication. Our diversity outreach efforts have contributed to our 2014 U.S. Naval Academy and Naval Reserve Officers Training Corps classes being the most diverse student bodies in our history. We have increased diverse accessions through targeted recruiting in diverse markets, developing relationships with key influencers in the top diverse metropolitan markets, and aligning Navy assets and organizations to maximize our connection with educators, business leaders and government officials to increase our influencer base. We continue to expand our relationships with key influencers and science, technology,

engineering, and mathematics-based affinity groups to inform our Nation's youth about the unique opportunities available in our Navy. We are also building and sustaining a continuum of mentorship opportunities that includes the chain of command, individual communities, social networking, peer-to-peer relationships, and affinity groups. We will continue to ensure that all sailors are provided with opportunities to develop personally and professionally.

Women on Submarines

After notifying Congress last year of our intent to assign women to submarines, the Secretary of the Navy and I have authorized female officers to serve aboard *Ohio*-class SSBN and SSGN submarines. This will enable our submarine force to leverage the tremendous talent and potential of the women serving in our Navy. The first 18 female submarine officers commenced the standard 15-month nuclear and submarine training pipeline in 2010, and will begin arriving at their submarines at the end of this year. These officers will be assigned to two ballistic missile (SSBN) and two guided missile (SSGN) submarines which have the space to accommodate female officers without structural modification. The plan also integrates female supply corps officers onto SSBNs and SSGNs at the department head level. In December, the Secretary of Defense notified Congress of Navy's intent to expend funds to commence design and study efforts regarding reconfiguration of existing submarines to accommodate female crew members, as well as to design the *Ohio* replacement SSBN with the flexibility to accommodate female crew members.

Don't Ask, Don't Tell

I am pleased Congress voted to repeal section 654 of title 10, U.S.C., commonly referred to as the "Don't Ask, Don't Tell" (DADT) statute. Legislative repeal affords us the time and structured process needed to effectively implement this significant change within our Armed Forces. As I testified in December, we will be able to implement a repeal of DADT in our Navy. I assess the risk to readiness, effectiveness, and cohesion of the Navy to be low. Our implementation process will be thorough, but timely. We are preparing the necessary policies and regulations to implement this change in law and training sailors and leaders at all levels to ensure they understand what repeal means to them, their families, and the Navy. Before repeal can occur, the President, Secretary of Defense, and Chairman of the Joint Chiefs must certify that the change can be made in a manner consistent with the standards of military readiness, military effectiveness, unit cohesion, and recruiting and retention of the Armed Forces. I will provide Navy's input to the certification process and I remain personally engaged in this process.

Sailor and Family Continuum of Care

We remain committed to providing our sailors and their families a comprehensive continuum of care that addresses all aspects of medical, physical, psychological, and family readiness. Our fiscal year 2012 budget request expands this network of services and caregivers to ensure that all sailors and their families receive the highest quality healthcare available.

Navy Safe Harbor is at the forefront in Navy's non-medical care for all seriously wounded, ill, and injured sailors, coastguardsmen, and their families. We have expanded our network of Recovery Care Coordinators and non-medical Care Managers to 12 locations across the country. Safe Harbor continues to provide exceptional, individually tailored assistance to a growing enrolled population of more than 600 individuals. Over 116,000 sailors and their spouses have participated in Operational Stress Control (OSC) training, which actively promotes the psychological health of sailors and their families by encouraging them to seek help for stress reactions early, before they become problems. The Warrior Transition Program (WTP) and Returning Warrior Workshops (RWW) are essential to post-deployment reintegration efforts. The WTP offers an opportunity for IA sailors redeploying from a combat zone to decompress, turn in their gear, and receive tools that will help them ease their transition back to their home and families. The RWW is designed to address personal stress that may be generated by deployment activities and it supports and facilitates the reintegration of the deployed sailor with his/her spouse and family. The RWW also provides a safe, relaxed atmosphere in which to identify and address potential issues that may arise during post-deployment reintegration.

Stress on the Force

While the overall tone of our force remains positive, current trends suggest that high operational tempo, increasing mission demands, lean manning, force shaping, and economic conditions are placing increased stress on our Navy personnel. Our fiscal year 2012 budget requests increased funding to improve our program manager-level support of our suicide prevention and stress control programs.

Suicide dramatically affects individuals, commands and families. Over the last year, we expanded our approach to preventing suicides from historic suicide surveillance and annual awareness training to include more comprehensive resilience building and tailored suicide prevention training, peer intervention, research and analysis. We saw a reduction in our number of suicides from 46 in calendar year 2009 to 38 in calendar year 2010. Our calendar year suicide rate also decreased from 13.3 per 100,000 sailors in 2009 to 10.9 per 100,000 sailors in 2010. Our 2010 suicide rate is below the national rate of 19.0 per 100,000 individuals for the same age and gender demographic; however, any loss of life as a result of suicide is unacceptable. Suicide prevention is an "all hands, all the time" effort involving our sailors, families, peers, and leaders. We continue to work towards a greater understanding of the issues surrounding suicide to ensure that our policies, training, interventions, and communications are meeting intended objectives.

We are integrating our suicide prevention efforts into the broader array of programs we offer to improve the resilience of our force. These programs, aimed at reducing individual stress, address issues, such as substance abuse prevention, financial management, positive family relationships, physical readiness, and family support.

We continue our efforts to eliminate sexual assault by fostering a culture of prevention, victim response and offender accountability. Sexual assault is incompatible with our Navy core values, high standards of professionalism, and personal discipline. We have organized our efforts in this critical area under the Navy Sexual Assault Prevention and Response (SAPR) program. The SAPR program and the Naval Safety Center and Alcohol and Drug Prevention Program are currently developing an integrated approach to sexual assault prevention that includes clear leadership communication, bystander intervention training for sailors to help them recognize and interrupt risky situations, and training for military investigators and lawyers on issues specific to sexual assault investigation and prosecution.

Learning and Development

Education and training are strategic investments that give us an asymmetric advantage over adversaries. To develop the highly-skilled, combat-ready force necessary to meet the demands of the Maritime Strategy and the Joint Force, we have 15 learning centers around the country providing top-notch training to our sailors, Navy civilians and members of the other Services. In fiscal year 2010, we completed learning and development roadmaps for all enlisted ratings, providing sailors with detailed information about the required training, education, qualifications and assignments they need to succeed in their career fields. We continue to leverage a blended training approach, integrating experienced instructors, advanced technology, and state-of-the-art delivery systems with modularized content in order to provide the right training at the right time in a sailor's career. We are balancing existing education and training requirements with growth in important mission areas such as cyber defense, missile defense, and anti-submarine warfare. Cultural, historical, and linguistic expertise remain essential to successfully accomplishing the Navy's global mission, and our budget request supports our Language, Regional Expertise, and Culture (LREC) program as well as the Afghanistan-Pakistan Hands Program sponsored by the Joint Staff. Last year the LREC program provided language and cultural training to more than 120,000 sailors en route to overseas assignments. We recognize the importance of providing our people meaningful and relevant education, particularly Joint Professional Military Education (JPME), which develops leaders who are strategically-minded, capable of critical thinking, and adept in naval and joint warfare. Our resident courses at Naval War College, nonresident courses at Naval Postgraduate School and in the Fleet Seminar program, and distance offerings provide ample opportunity for achievement of this vital education.

CONCLUSION

You can be exceptionally proud of our sailors. They are our Nation's preeminent force at sea, on land, and in air, space, and cyberspace. While the future is not without challenges, I am optimistic about our future and the global opportunities our Navy provides our Nation. Our fiscal year 2012 budget request represents a balanced approach to increasing Fleet capacity, maintaining our warfighting readiness, and developing and enhancing our Navy Total Force. I ask for your strong support of our fiscal year 2012 budget request and my identified priorities. Thank you for your unwavering commitment to our sailors, Navy civilians, and their families, and for all you do to make our U.S. Navy an effective and enduring global force for good.

Chairman LEVIN. Thank you so much, Admiral, and again, thank you for your extraordinary service over the decades.

General Amos.

STATEMENT OF GEN. JAMES F. AMOS, USMC, COMMANDANT OF THE MARINE CORPS

General AMOS. Chairman Levin, Ranking Member McCain, and members of the committee: It is indeed my honor to appear before you today for the very first time as the Commandant of the Marine Corps to articulate the posture of your Corps. Today the Corps serves as America's expeditionary force in readiness, a balanced air, ground, logistics team of 202,000 Active, 39,000 Reserve, and 35,000 civilian marines. Our ability to serve as our Nation's principal crisis response force is due in large part to this committee's and Congress' continued strong support. Thank you for that.

Today, there are over 32,000 marines forward-deployed around the world. As we sit here, it's half past 7 in the evening in Afghanistan. The rainy season has hit. The evenings remain cold and damp in this nation, where 20,000 of our young men and women are engaged in full-spectrum combat and counterinsurgency operations.

I'm encouraged by the significant progress they have made in the Helmand Province and you have my assurance that this effort remains my top priority. Sergeant Major Kent and I spent Christmas with our marines and sailors in Afghanistan and I am happy to report that their morale is high and their belief in their mission is strong.

Partnered with the U.S. Navy, we are forward deployed and forward engaged. This past year alone, our afloat forces conducted humanitarian assistance operations in Pakistan, Haiti, and the Philippines. They recaptured the pirated ship Magellan Star, rescuing its crew from Somali pirates, and partnered with allied forces in engagement missions in the Pacific Rim, Latin America, Africa, and Eastern Europe.

Right now over 400 marines from the First Battalion, Second Marine Regiment, who deployed last week from Camp Lejeune, NC, within 20 hours of notification, are embarked aboard two amphibious vessels with a full complement of fixed and rotary wing assets. These marines are poised in the Mediterranean, prepared to do our Nation's bidding.

Our role as America's crisis response force necessitates that we maintain a high state of readiness. You're either ready to respond to today's crisis with today's force today or you risk being late and thus irrelevant.

I am keenly aware of the fiscal realities confronting our Nation. During these times of constrained resources, the Marine Corps remains committed to being the best stewards of scarce public funds. We maintain a longstanding tradition with Congress as DOD's penny-pinchers. Our institutionalized culture of frugality positions us as the best value for the defense dollar. For approximately 8.5 percent of the annual defense budget, the Marine Corps provides the Nation 31 percent of its ground operating forces, 12 percent of its fixed wing tactical aircraft, and 19 percent of its attack helicopters.

This year's budget submission was framed by my four service-level priorities. We will: number one, continue to provide the best trained and equipped marines in Afghanistan; number two, rebalance our core and posture it for the future; number three, better educate and train our marines to succeed in increasingly complex environments; and lastly, number four, we will keep faith with our marines, our sailors, and our families.

While these priorities will guide our long-term plan for the Marine Corps, there are pressing issues facing our Corps today that concern me, issues for which I ask Congress' continued assistance in solving. Our equipment abroad and at home stations has been heavily taxed in the nearly 10 years of constant combat operations. The price tag for reset is $10.6 billion, of which $3.1 billion has been requested in fiscal year 2011 and $2.5 billion is being sought in fiscal year 2012. The remaining $5 billion will be needed upon the completion of our mission in Afghanistan.

The F–35B Short Takeoff and Vertical Landing (STOVL) JSF is vital to our ability to conduct expeditionary operations. Continued funding and support from Congress for this program is of utmost importance. During the next 2 years of F–35B scrutiny, I will be personally involved with the program and closely supervising it.

Both the Secretary of Defense and the Secretary of the Navy have reaffirmed the necessity of the Marine Corps' amphibious assault mission. We must develop an affordable and capable amphibious combat vehicle to project marines from sea to land in permissive, uncertain, and in hostile environments. I ask for your continued support to reach this goal.

To ensure the Marine Corps remains a relevant force with a capacity and capability to respond to the demands of future security environments, we recently conducted a detailed internally-driven force structure review. The results of this effort provide America a strategically mobile, middleweight force, optimized for forward presence, and rapid crisis response.

As we look to the future, the Marine Corps is committed to finding ways to be more energy efficient. Since 2009, we have aggressively pursued energy-efficient capabilities that will make marine units more energy self-sufficient, increase our combat effectiveness, and protect the lives of our young men and women. Two weeks ago, I signed our new bases to battlefield energy planning guidance, with such goals, metrics, and a plan for implementation.

Finally, I would like to comment on the impact of the current CR as it has impacted our operations and our programs. As of today, $567 million in military construction (MILCON) contracts have not been awarded. $2.4 billion of MILCON is at risk for the remainder of this year. These projects impact the lives of marines, the local economies of the communities around our bases and stations, and are projected to generate over 63,000 jobs from the Carolinas to Hawaii.

If the CR extends through the entire fiscal year, 13 bachelor enlisted quarters (BEQ) totaling 5,000 affected spaces will not be built, thus stymieing our BEQ modernization efforts. These 13 BEQs will allow 8 infantry battalions to move out of 50-year-old Cold War barracks.

Finally, the CR could prove catastrophic to our procurement accounts, resulting in the loss of almost one-third of our procurement budget capabilities.

Lastly, you have my promise that in these challenging times ahead, the Marine Corps will only ask for what it needs, not what it might want. We will make the hard decisions before coming to Congress and we will redouble our efforts toward our traditional culture of frugality.

As has been the case for over 235 years, your Marine Corps stands ready to respond whenever the Nation calls, wherever the President may direct.

Once again, I thank each of you for your continued support. I'm prepared to answer your questions.

[The prepared statement of General Amos follows:]

PREPARED STATEMENT BY GEN. JAMES F. AMOS, USMC

AMERICA'S EXPEDITIONARY FORCE IN READINESS

The Marine Corps is America's Expeditionary Force in Readiness—a balanced air-ground-logistics team. We are forward-deployed and forward-engaged: shaping, training, deterring, and responding to all manner of crises and contingencies. We create options and decision space for our Nation's leaders. Alert and ready, we respond to today's crisis, with today's force . . . TODAY. Responsive and scalable, we team with other Services, allies and interagency partners. We enable and participate in joint and combined operations of any magnitude. A middleweight force, we are light enough to get there quickly, but heavy enough to carry the day upon arrival, and capable of operating independent of local infrastructure. We operate throughout the spectrum of threats—irregular, hybrid, conventional—or the shady areas where they overlap. Marines are ready to respond whenever the Nation calls . . . wherever the President may direct.

—GENERAL JAMES F. AMOS

America's Expeditionary Force in Readiness

Today, your U.S. Marine Corps is foremost America's Expeditionary Force in Readiness. Established originally by an act of the Second Continental Congress on November 10, 1775, your Marine Corps has evolved over 235 years into a balanced air-ground-logistics team that is forward deployed and forward engaged: shaping, training, deterring, and responding to all manner of crises and contingencies.

Through the ongoing support of Congress and the American people, your Marine Corps is a cohesive force of 202,100 Active Duty marines; 39,600 Selected Reserve marines; and 35,000 civilian marines. At any given time, approximately 30,000 marines are forward deployed in operations supporting our Nation's defense.[1] This year, as our Nation recognizes a decade since the tragic events of September 11, your Marine Corps has been conducting Overseas Contingency Operations for an equal amount of time. From Task Force 58 with 4,400 marines launching from 6 amphibious ships to secure critical lodgments in Afghanistan in late 2001 to our counterinsurgency efforts in the Al Anbar province of Iraq and to our current operations in the Helmand River Valley of Afghanistan, your marines have been forward deployed in the Service of our Nation.

Yet, during this time the Marine Corps has not been confined solely to major combat operations and campaigns. From our rapid response aiding fellow Americans and enabling joint and interagency relief efforts following Hurricane Katrina's floods, to our noncombatant evacuation operation of 14,000 American citizens from Lebanon in 2006, to our numerous and ongoing security cooperation missions with nations of Africa, Eastern Europe, the Pacific Rim, and Latin America, the U.S. Marine Corps continues to demonstrate the agility and flexibility expected of America's

[1] As of December 2010, there were approximately 20,700 marines in Afghanistan including marines serving in external billets (e.g. transition teams and joint/interagency support, et cetera); 6,200 at sea on Marine Expeditionary Units; and 1,600 marines engaged in various other missions, operations and exercises. The 30,000 statistic excludes over 18,000 marines assigned to garrison locations outside the continental United States such as in Europe, the Pacific, et cetera.

principal crisis response force. Over the course of the past year alone, your brave men and women who wear the Marine uniform and who bring a diversity of talent in service to our Nation, have simultaneously:

- Waged an aggressive full-spectrum counterinsurgency operation in Afghanistan while concurrently increasing combat power nearly two-fold (i.e. from 10,600 to 19,400) in accordance with the President's December 2009 Afghanistan-Pakistan strategy;
- Successfully completed our mission in Iraq, bringing stability to Al Anbar province. This achievement was not without sacrifice and suffering in that 1,022[2] marines gave their lives and 8,626 marines were wounded in action;
- Partnered with allied forces in engagement missions throughout every Geographic Combatant Commander's Area of Responsibility;
- Conducted foreign humanitarian assistance and disaster relief missions in Pakistan, Haiti, and the Philippines;
- Participated in maritime security operations to ensure freedom of navigation along vital sea lines of communication, to include the recapture of the vessel Magellan Star and rescue of its crew from Somali pirates; and
- Rapidly reinforced U.S. Embassies in Port au Prince, Haiti; Conakry, Guinea; Bishkek, Kyrgyzstan; and most recently Cairo, Egypt to assist and protect diplomatic personnel amidst crises in these foreign capitals.

Their actions align with the functions of our Corps as seen in the new Department of Defense (DOD) Directive 5100.01, Functions of the Department of Defense and Its Major Components, and are a critical link to the continued prosperity and security of our Nation and the survival of our friends, allies, and partners. The performance of your marines on the global stage adds to our storied legacy of sacrifice and success—under even the most adverse conditions—inspiring a sense of pride and confidence in the American public that their marines are able to respond quickly, ensuring the Nation's interests will be protected.

Future Security Environment

Public law, defense policy, our doctrine and operating concepts, and the future security environment shape how we organize, train, and equip our forces. As we look ahead, we see a world of increasing instability, failed or failing states, and conflict characterized by:

- Poverty, unemployment, urbanization, overpopulation, and extremism;
- Competition for scarce natural resources; and
- Rapid proliferation of new technologies to include capabilities to disrupt cyber networks, advanced precision weaponry, and weapons of mass destruction.

These troubling socio-economic and geopolitical trends converge in the littorals—regions along the world's coastline where the sea joins with the land. The majority of the world's population lives near the sea. The trend towards accelerated birth rates in the developing world, coupled with ongoing migration from rural to urban landscapes, results in hyper-populated coastal regions, burdened by the cumulative stressors of criminality, extremism, and violence.

Littoral cities increasingly may assume what some have called feral qualities, raising the potential for conflict, providing a measure of sanctuary for our adversaries, and posing challenges to governmental sovereignty and regional security. It is in this complex environment that your U.S. Marine Corps will operate. We stand optimally postured to conduct a range of operations for Joint Force commanders, bridging the gap between operations at sea and on land.

Nonetheless, we are committed to the prevention of conflict as we are to responding to it. Indeed, 21st century security challenges require expansion of global engagement—facilitated through persistent forward naval presence—to promote collective approaches to addressing common security concerns. Accordingly, forward deployed Marine forces will increasingly conduct theater security cooperation activities and will build partnership capacity through security force assistance missions with our allies and partners around the globe. The goal of our engagement initiatives is to minimize conditions for conflict and enable host nation forces to effectively address instability as it occurs.

Role of the Marine Corps

The United States is a maritime nation with global responsibilities. With a naval tradition as the foundation of our existence, we remain firmly partnered with the U.S. Navy. Forward deployed, we retain the ability to come from the sea rapidly

[2] 1022 deaths = 851 killed in action (hostile) and 171 deceased (non-hostile).

to conduct missions across the range of military operations. Our persistent forward presence and multi-mission capability present an unparalleled ability to rapidly project U.S. power across the global commons—land, sea, air, space, and cyber.

Amphibious forces with robust and organic logistical sustainment provide a maritime Super Power significant advantages, including the ability to overcome the tyranny of distance and to project power where there is no basing or infrastructure—a strong deterrent capability for our Nation. To Marines, 'expeditionary' is a state of mind that drives the way we organize our forces, train, develop and procure equipment. By definition, our role as America's crisis response force necessitates a high state of unit readiness and an ability to sustain ourselves logistically. We must be ready to deploy today and begin operating upon arrival, even in the most austere environments. The U.S. Marine Corps affords the following three strategic advantages for our Nation:

- A versatile "middleweight" capability to respond across the range of military operations. We fill the gap in our Nation's defense as an agile force capable of operating at the high and low ends of the threat spectrum or the indistinct areas in between.
- An inherent speed and agility that buys time for national leaders. Our flexibility and rapid response capability present unique opportunities to develop strategic options, shape the environment, and set conditions to deploy the full capabilities of the Joint Force and other elements of national power.
- An enabling and partnering capability in joint and combined operations. Our unique forward posture aboard amphibious ships, manned by well-trained, uniformed sailors, positions us to be the 'first to fight.'

USMC Priorities

My four service level priorities informed this year's budget submission. These priorities were influenced by and derived from a number of factors to include our understanding of the 21st century battlefield based on lessons learned over nearly a decade at war, our examination of the future security environment, our doctrine and operating concepts, and our current and future budgetary and programmatic requirements.

These priorities are aligned with the principal recommendations of the 2010 Quadrennial Defense Review, meeting its end state of ensuring that the Marine Corps is able to "prevail in today's wars, prevent and deter conflict, prepare to defeat adversaries and succeed in a wide range of contingencies, and preserve and enhance the All-Volunteer Force." My priorities also support America's four enduring strategic interests as identified in the 2010 National Security Strategy.[3] To that end, we will:

- Continue to provide the best trained and equipped Marine units to Afghanistan;
- Rebalance our Corps, posture it for the future, and aggressively experiment with and implement new capabilities and organizations;
- Better educate and train our marines to succeed in distributed operations and increasingly complex environments; and
- Keep faith with our marines, our sailors, and our families.

The above priorities guide my long-term plan for the Marine Corps; however, there are pressing issues facing our Corps today that give cause for concern.

- Equipment: Our equipment abroad and at home station has been "heavily taxed" in the nearly 10 years of constant combat operations. We require funding to reset equipment being utilized overseas and to reconstitute home-station equipment and modernize for the future. This is critical to maintaining readiness throughout the Corps.
- The Short Take-Off and Vertical Landing F–35B Joint Strike Fighter: The F–35B is vital to our ability to conduct combined arms operations in expeditionary environments. Continued funding and support from Congress for this program is of utmost importance.
- Amphibious Combat Vehicle: We will begin the development of an affordable and capable amphibious combat vehicle to replace the recently-cancelled Expeditionary Fighting Vehicle program. The capability inherent in

[3] (1) Security of the United States, its citizens, and U.S. allies and partners; (2) A strong, innovative, and growing U.S. economy in an open international economic system that promotes opportunity and prosperity; (3) respect for universal values at home and around the world; and (4) an international order advanced by U.S. leadership that promotes peace, security, and opportunity through stronger cooperation to meet global challenges. 2010 National Security Strategy Pg, 7.

a ship-to-shore connector is critical to our expeditionary nature, as affirmed by the Secretary of Defense.

• End Strength: The drawdown of our Active component from 202,100 to 186,800 must be conditions-based, and only after completion of our mission in Afghanistan. We must keep faith with our Marine Corps family by allowing appropriate time and support for those departing the force and to ensure the resiliency of our units still engaged in war.

• Family Readiness Programs: Like our equipment, marines and their families have been "heavily taxed" since September 11. We will continue to fund family readiness and family support programs that are vital to the health and welfare of our entire Marine Corps family.

• Amphibious Ships: The Navy and Marine Corps have determined a minimum force of 33 ships represents the limit of acceptable risk in meeting the 38-ship amphibious force requirement for the Assault Echelon. Marines are best postured to engage and respond to the Nation's security interests from amphibious ships.

The Marine Corps needs the continued support of Congress in confronting these critical issues and the many others discussed below. My promise to Congress is that we will do our part by continuing to be good stewards of our taxpayers' dollars.

Fiscal Year 2012 Budgetary Submission

The Marine Corps maintains a longstanding tradition in DOD as being "Penny Pinchers." A prime example of our many noteworthy cost-saving measures is our practice of units deploying to Afghanistan utilizing equipment sets maintained and repaired in country—a measure saving significant funds annually on costs associated with the cycle of deployment and redeployment. Our institutionalized culture of frugality, streamlined business practices, lean structure, and multi-mission capability, position us as the "best value" for the defense dollar. This fiscal year we are seeking over $40 billion[4] to fund ongoing operations, provide quality resources for our marines, sailors, and their families, conduct reset of equipment stressed from nearly 10 years at war, and prepare our forces for future missions. For approximately 8.5 percent[5] of the annual Defense budget, the Marine Corps provides the Nation approximately 31 percent of its ground operating forces (Combat, Combat Support and Combat Service Support), 12 percent of its fixed wing tactical aircraft, and 19 percent of its attack helicopters.

During these times of constrained resources, the Marine Corps remains committed to streamlining operations, identifying efficiencies, and reinvesting savings to conserve scarce public funds. At the direction of the Secretary of Defense in June 2010, the Services conducted an efficiencies review and our fiscal year 2012 budget is the result of a thorough study of all of our business activities. Already one of the most economical of the Military Services, we achieved our DOD efficiency goal. We captured overhead efficiency savings by focusing on three main efforts:

• Buying smarter through acquiring platforms more intelligently
• Streamlining our operations
• Being more efficient in the way we use, produce, and acquire energy

This effort has had a marked impact on our overall budget, allowing us to invest more in our core warfighting missions and enhancing our acquisition plans. The efficiency initiative drove adjustments to our programs and ensured restoration of funding in areas where needed most. Additionally, we used funds realized from efficiencies to support programs originally not funded. We reinvested savings into critical warfighting programs to enhance readiness. We anticipate unit equipment readiness to increase by fiscal year 2014 through the purchase of additional equipment beginning in fiscal year 2012. This readiness increase will allow the Marine Corps to equip, train, and prepare units earlier in the pre-deployment cycle. Other expansions that we were able to address include enhancing funding for facilities with direct operational impact, energy and water investments at bases and installations, command and control and logistics programs, and equipment modernization.

In addition to our frugality and aggressive pursuit of finding efficiencies to enhance our warfighting capacity inherent in our budget request, your Marine Corps remains the first and only military Service whose financial statements have been deemed audit ready. We are continually striving to be good stewards of the public

[4] This sum includes both "Blue in Support of Green" funding, Overseas Contingency Operation funding, and other Navy funding for USMC needs (e.g. chaplains, medical personnel, amphibious ships, et cetera.)

[5] Based on provisions of the National Defense Authorization and Appropriation Acts for Fiscal Year 2010.

trust and know the ongoing financial audit will serve to both strengthen our financial management practices and give us actionable business intelligence to support our decisionmaking process in supporting our operational forces at home, abroad, and in harm's way.

PRIORITY #1: CONTINUE TO PROVIDE THE BEST TRAINED AND EQUIPPED UNITS TO AFGHANISTAN

Operation Enduring Freedom

We have made great progress in Afghanistan; this effort remains our number one priority until we attain our national objectives. At present over 20,000 marines are deployed in Afghanistan. This mission ultimately involves almost 60,000 marines, or just under one-third of our Active-Duty Force, factoring in deployment, redeployment, training cycles and other direct support. We will continue providing forces in Afghanistan capable of full-spectrum combat and counterinsurgency operations, while balancing our capabilities to perform what the Nation will likely ask of us in the future. We will ensure that marines, sailors, and the units in which they serve, receive the best possible training and equipment to succeed in the many types of missions we are conducting in this complex, dynamic environment.

Our successes within Helmand Province are paving the way for economic development and governance. Marine commanders on the ground and Afghan officials indicate that freedom of movement for the local populace has improved. Bazaars and markets are flourishing; critical infrastructure projects are underway. Today, 10 of 13 districts in Helmand Province are under the control of the Afghan central government. Daily, 135,000 children attend school, which is more than a 60 percent increase from 2008 levels. Formerly dangerous places like Marjah, Now Zad, and Garmsir, untrafficable due to improvised explosive devices just 1 year ago, now have significant activity occurring in commercial centers. Yet, other challenges remain as we now seek to capitalize on our 2010 successes. We are currently expanding battlespace northward into other hostile locations such as the district of Sangin, where our forces are going "head-to-head" with Taliban resistance.

As America's Expeditionary Force in Readiness, we are ready to execute any mission assigned in support of crisis and contingency response. In addition to our Afghanistan commitment, we continue to source forward-based and deployed forces to meet Geographic Combatant Commander requirements. In light of our operational demands, and through the support of Congress in authorizing our end strength of 202,100 Active-Duty Forces, our combat units are beginning to realize an approximate 1:2 dwell time.[6] Other units vary at more favorable dwell-time levels depending on their mission. We anticipate the 1:2 dwell ratio for combat units to remain relatively stable provided current deployed force levels are not increased; however, increased operational demands in Afghanistan or elsewhere may result in dwell times inconsistent with fostering a resilient Total Force.

Some marines in select military occupational specialties continue to fall into what is known as a high-demand, low-density status. This is a key indicator that the combat demand for Marines with these skills does not match, or exceeds, the current manpower requirement and/or inventory. In addition, there are currently 14 of 211 occupational specialties where the on-hand number of marines is less than 90 percent of what is required.[7] Our recently completed force structure review addressed all these concerns. We are working actively to recruit, promote, and retain the right number of Marines in the right occupational specialties thus promoting resiliency of our Total Force.

Training for Full Spectrum Counterinsurgency Operations

Our comprehensive training program conducted at our premiere desert training base in Twentynine Palms, CA, has been credited by leaders throughout the Corps with providing a dynamic environment that replicates the many tasks, challenges, and requirements required of units in a counterinsurgency setting. Our newly-instituted Infantry Immersion Trainers are realistic, reconfigurable, and provide comprehensive training environments that develop small unit tactics and individual skills for deploying infantry squads. The Infantry Immersion Trainer supports essential training such as control of supporting arms, language, improvised explosive device recognition and defeat measures, human terrain understanding and close

[6] Infantry battalions will continue to remain just below 1:2 dwell time due to relief in place/transfer of authority requirements.

[7] Our most stressed occupational specialties based on percentage of marines beyond a 1:2 dwell are: (1) Geographic Intelligence Specialist, (2) Imaging Analyst/Specialists, (3) Signals Collection Operator/Analyst, (4) Unmanned Aerial Systems Operator/Mechanic, and (5) European, Middle East, and Asia-Pacific Cryptologic Linguists.

quarters battle. Introducing battlefield effects simulators, culturally appropriate role players, and interactive avatars at the Infantry Immersive Trainers teaches marines to make legally, morally, ethically, and tactically sound decisions under situations of great stress. It also contributes to reducing the effects of combat stress. I view this training program to be of vital importance to our Operating Forces.

Equipping for the Afghan Effort

Marine units are operating in Afghanistan with high rates of ground equipment readiness. Through the generosity of Congress, we have received funds for the rapid fielding of urgent need items in support of our Afghanistan effort. The Mine-Resistant Ambush-Protected (MRAP) vehicle program continues to meet urgent requirements while we actively pursue vehicle upgrades to outpace emerging threats, enhance mobility, and improve vehicle performance. We can accomplish this goal through engineering changes and capability insertions in current production, planned orders, and fielded vehicles. We have a requirement for 3,362 vehicles in the family of MRAP vehicles, including 1,454 MRAP All-Terrain Vehicles. To date, we have fielded 1,214 MRAP All-Terrain Vehicles to our units in Afghanistan and have met the theater requirement.

To date, we have fielded 34 Assault Breacher Vehicles, 5 of which are in Afghanistan, to enhance the mobility of the Marine Air Ground Task Force (MAGTF). We plan to field a total of 52 Assault Breacher Vehicles. Production of the remaining 18 vehicles remains on schedule and is fully funded with final delivery scheduled for the second quarter of fiscal year 2012.

In our continuing efforts to find improvised explosive devices by all possible means, we are tripling our successful Improvised Explosive Device Dog Detection program and are also undertaking a research and development effort to train dogs with improved detection capabilities with fielding expected this fall. This year, we will have fielded 647 specially trained Labrador retrievers who work off-leash, supporting our infantry units in ground combat operations. We also have fielded a wide array of intelligence collection sensors and analytic and processing systems to include the Multimedia Archival Analysis System, the Ground Based Observational Surveillance System, the Tactical Remote Sensor System, the Communication Emitter Sensing and Attacking System, and improvements to the Tactical Exploitation Group, to name a few.

Lastly, in December 2010, we deployed a reinforced company of 17 M1A1 Main Battle Tanks to join our efforts in Regional Command SouthWest to provide increased force protection and firepower. Today, these tanks are fully integrated with our forces operating in our most highly-contested regions, and are rapidly proving their utility in this environment by enabling our marines to increase operational tempo. They also demonstrate the commitment of Coalition Forces to the security of Southern Afghanistan.

PRIORITY #2: REBALANCE THE CORPS, POSTURE FOR THE FUTURE, AND AGGRESSIVELY EXPERIMENT WITH AND IMPLEMENT NEW CAPABILITIES AND ORGANIZATIONS

Posture for the Future and Force Structure Review

The Marine Corps has deployed MAGTFs in support of irregular warfare missions such as our counterinsurgency effort in Afghanistan, humanitarian assistance and disaster relief efforts in Pakistan, Haiti, and the Philippines, and engagement missions such as our theater security cooperation exercises in support of every Geographic Combatant Commander.

Despite these and many other operational successes over the past decade, new challenges await us requiring the same spirit of innovation and institutional flexibility that have been the bedrock of our Corps for 235 years. The 2010 Quadrennial Defense Review highlights an expanding need over the next two decades for military forces skilled at countering irregular threats,[8] and the 2010 National Security Strategy signals a need for increased engagement activities. Both of these thrusts necessitate marines who are not only fighters, but also trainers, mentors, and advisors. The 2011 National Military Strategy advances the idea that "strengthening international and regional security requires that our forces be globally available, yet regionally focused."[9] Likewise, Geographic Combatant Commanders have continued to

[8] "The wars we are fighting today and assessments of the future security environment together demand that the United States retain and enhance a whole-of-government capability to succeed in large-scale counterinsurgency, stability, and counterterrorism operations in environments ranging from densely populated urban areas and mega-cities, to remote mountains, deserts, jungles, and littoral regions." 2010 Quadrennial Defense Review Report, Pg. 20.

[9] 2011 National Military Strategy of the United States, pg. 10.

register their growing need for forward-postured amphibious forces capable of conducting security cooperation, regional deterrence, and crisis response.[10]

This past fall, we conducted a detailed force structure review to develop the optimum mix of capabilities for our role as America's Expeditionary Force in Readiness in the post-Afghanistan security environment. The force structure review addressed 21st century challenges confronting our Nation and its Marine Corps, aiming to build on our historic role as the Nation's crisis response force. The review sought to provide the "best value" in terms of capability, cost, and readiness relative to the operational requirements of our forward-engaged Geographic Combatant Commanders. The results of that effort provide for a strategically mobile, "middleweight" force optimized for forward-presence and rapid crisis response. We will be light enough to leverage the flexibility and capacity of amphibious ships, yet heavy enough to accomplish the mission when we get there. Sea-based forces, in particular, will be invaluable for discreet engagement activities, rapid crisis response, and sustainable power projection.

Our review also aimed for a force structure that provides capability and capacity across the range of military operations, while simultaneously providing for resiliency in our Total Force. With likely reductions in forward basing and strategic transportation, the importance of regionally-focused headquarters and forces, both forward-postured and immediately deployable with a minimum of strategic lift, is paramount. We have thus built a Joint Task Force-capable headquarters at several Geographic Combatant Command locations. As we aim to implement signature outcomes of the force structure review, marines on a day-to-day basis will be forward-deployed and engaged, working closely with our joint and allied partners. When crises or contingencies arise, these same marines will respond—locally, regionally, or globally if necessary—to accomplish whatever mission the Nation asks of us.

To best meet Geographic Combatant Commander needs and ensure optimal configuration as America's Expeditionary Force in Readiness, we require Congressional support to reset our equipment, develop new organizational structures, and begin implementing initiatives from our force structure review. These measures ultimately will improve our ability to function within the Joint Force, execute distributed operations, command and control in complex environments, and conduct persistent engagement missions. As we are entrusted with the resources and funding to posture ourselves for the future, we will continue to conduct responsible examination required of a disciplined force to ensure that we implement every refinement—from the smallest to the most sweeping—in a manner that provides the Nation with a lean force, capable of rapidly projecting the Nation's power and strategic influence.

EQUIPPING

Reset of the Total Force. Resetting the Marine Corps for the future after nearly a decade at war is my number one equipping priority. This past year, we completed our mission in Iraq, effecting the retrograde of more than 25,000 marines,[11] 382,000 items of equipment, 10,800 short tons of aviation support equipment, and nearly 11,000 containers from Al Anbar province via Jordan and Kuwait to the U.S. and elsewhere. This drawdown of equipment over the course of 1 year was a significant logistical and operational achievement. We also accomplished the rapid shift of critical equipment from Iraq to Afghanistan in support of the deployment of the 2d Marine Expeditionary Brigade. This shift of materiel within a theater of operation became one of the largest redeployments in U.S. history, both in terms of equipment moved and distances involved.

The Marine Corps is currently sourcing highly-trained and ready forces to meet global combatant commander requirements.

- Approximately 98 percent of deployed units report the highest levels of readiness for their assigned mission.

However, high deployed-unit readiness has come at the expense of home-station, nondeployed units, which have sourced organic equipment and personnel to meet the needs of our deployed forces.

- Approximately 68 percent of nondeployed units report degraded levels of readiness. The largest contributing factor is equipment; approximately 37 percent of nondeployed forces report degraded levels of equipment supply. This lack of equipment impacts the ability of nondeployed forces to respond rapidly to other potential contingencies and represents lost core training op-

[10] In the past 20 years, U.S. amphibious forces have responded to crises and contingencies 114 times—a response rate double that during the Cold War.

[11] At present, approximately 100 marines remain in Iraq serving in individual augment, transition team and other miscellaneous billets.

portunities early in the deployment cycle in preparation for Overseas Contingency Operations.

The equipment redeployed from Iraq to Afghanistan in support of the 2009 surge included most of our deployed medium tactical fleet, the majority of our fleet of MRAP vehicles, light armored reconnaissance vehicles, other hard-to-move equipment, and theater-specific items. While shifting this equipment directly to Afghanistan enabled the Marine Corps to meet critical operational timelines, it resulted in the deferment of previously-planned post-Operation Iraqi Freedom reset actions. These same assets comprise a significant portion of the Marine Corps' total reset liability and depot maintenance costs. Thus, a consequence of delaying reset actions on this equipment is the acceptance of considerable risk in the long-term readiness and future availability of our ground equipment. In addition, increased usage rates of our ground equipment and harsh operating environments over these many years at war have resulted in our ground equipment far exceeding planned peacetime usage rates by a factor of six.

It is vital that we reset our equipment from nearly 10 years at war to maintain the necessary levels of readiness to posture ourselves for the future.

- We estimate the cost of reset for the Marine Corps to be $10.6 billion. $3.1 billion has been requested in fiscal year 2011 to reduce this liability, leaving a $7.5 billion deficit. $5 billion of the $7.5 billion reset liability will be incurred upon termination of the conflict in Afghanistan. (Note: $2.5 billion has been requested for reset in fiscal year 2012. These estimates assume no reset generation beyond fiscal year 2012 and thus do not include any reset requirements for fiscal year 2013 and fiscal year 2014.)

This funding will support the depot-level maintenance of our Operation Enduring Freedom equipment, procurement of combat vehicles and major weapons systems, engineering equipment, ammunition expenditures, and combat losses. The reset estimate is based on current circumstances and will change as operational requirements are re-evaluated. Moreover, as long as the war continues, our costs for reset will grow accordingly.

Reconstitution of Equipment

Our experiences in combat operations over the past decade have shown us that our legacy 20th century tables of equipment are inadequate with regard to the demands of the modern battlefield. As we move towards finalizing our force structure review by conducting a thorough Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities assessment, we will finalize determination on the costs associated with modernization of equipment sets necessary to support our future operations.

- However, at this time, our initial estimate of reconstituting our tables of equipment is $5 billion, which is an amount entirely separate from our reset costs. We have begun to address our reconstitution shortfall by requesting $253 million in fiscal year 2012 for equipment procurement.

As our force structure review is implemented, we will continue with deliberate assessments of the modernization requirements for equipment that optimizes our post-Afghanistan posture while simultaneously reinforcing our frugal and responsible roots. Our Service Reconstitution Equipment Strategy will guide the identification of emerging requirements for refining the capabilities of our status as a middleweight force, our support to the Geographic Combatant Commanders, our service level prioritization, and resource allocation.

Marine Aviation

We are transitioning our entire inventory of fixed and rotary wing aircraft to support our future force and require ongoing support from Congress for this comprehensive aviation modernization effort. The continued development and fielding of the short take-off and vertical landing (STOVL) F–35B Joint Strike Fighter remains the centerpiece of this effort. The capability inherent in a STOVL jet facilitates our maneuver warfare doctrine and fills our need for close air support in the many austere conditions and locations where we will likely operate in the future. Around the world, there are 10 times as many 3,000-foot runways capable of handling a STOVL jet as there are 8,000-foot runways required of conventional fighter aircraft. Additionally, we maintain the organic ability to build an expeditionary 3,000-foot runway in a matter of days in support of aviation operations. The capabilities of the STOVL F–35B enable the Marine Corps to replace three legacy aircraft types—F/A–18, EA–6B, and AV–8B—which once fielded will save DOD approximately $1 billion per year in operations and maintenance costs. The F–35B program has made significant progress to date including 22 successful vertical landings so far this year which is

more than double that achieved all last year. I am confident that we will field this aircraft in accordance with responsible timelines. This matter has my unwavering attention, and I am personally overseeing this program. With a fully-fielded fleet of F–35Bs, the Nation will maintain 22 capital ships—11 carrier and 11 amphibious assault—with fifth generation strike assets aboard—a significant deterrent and response capability for our Nation.

Our legacy aircraft supporting operational missions are consuming service life at a rate up to three times faster than scheduled. Averaged across our complete fleet, we are consuming aircraft service life at a rate 1.85 times faster than planned. This reality results in compressed timelines between re-work events and in earlier retirement of aircraft than originally programmed. The majority of our legacy platforms are nearing the end of their service lives, and most production lines are closed. New aircraft with low average ages and robust service life projections are the future of our aviation force and its support of Marine Corps and joint operations. As we transition to these new capabilities, we are mindful of the need to ensure a fully-integrated and networked force to provide Marine aviation to the MAGTF and the Joint Force.

We are exploring the viability of transformational platforms such as the Cargo Unmanned Aircraft System. The Cargo UAS will facilitate the delivery of logistics to remote locations when weather or threat systems preclude manned aviation sorties or overland resupply convoys.

Our new aircraft will provide increased range, speed, standoff, time on station, lift capability, and will be critical to tomorrow's MAGTF. By 2020, we will transition more than 50 percent of our aviation squadrons to new aircraft and complete fielding of the tilt-rotor MV–22 Osprey assault support aircraft and the upgraded UH–1Y Huey utility helicopter. We will field new close air support platforms such as the AH–1Z attack helicopter and the STOVL F–35B. We also will have new platforms for intelligence, surveillance and reconnaissance and an entirely new family of Unmanned Aircraft Systems. Lastly, we will introduce greater lifting power to the MAGTF with a new model of the heavy-lift CH–53 cargo helicopter.

Ground Combat and Tactical Vehicle Strategy

The priority for our Ground Combat Element is our ship-to-shore tactical mobility. The seamless transition of our Operating Forces from the sea to conduct sustained operations ashore, in particular to support three balanced Marine Expeditionary Brigades (i.e. two sea-based Joint Forcible Entry Marine Expeditionary Brigades reinforced by a third Maritime Prepositioning Force-based Marine Expeditionary Brigade) as well as for conducting irregular warfare missions, necessitates an appropriate mix of ground combat vehicles. We are focusing our efforts on developing and fielding a family of vehicles with a balance of performance, protection, payload, transportability, fuel efficiency, and affordability that supports the rapid concentration and dispersion of combat power, supports strategic deployment concepts and meets our worldwide operational commitments.

Our Ground Combat and Tactical Vehicle Strategy is currently in its third phase of development. Its overall goal is to field a ground combat vehicle portfolio structured to support the ground combat element. Vehicles in this portfolio include the Joint Light Tactical Vehicle, the Marine Personnel Carrier, and a new amphibious combat vehicle.

In the complex future security environment, the execution of amphibious operations requires the use of the sea as maneuver space. An amphibious combat vehicle is essential to our ability to conduct surface littoral maneuver and seamlessly project ready-to-fight Marine units from sea to land in permissive, uncertain, and hostile environments. As the Secretary of Defense affirmed earlier this year, the cancellation of the Expeditionary Fighting Vehicle (EFV) is by no means a rejection of the Marine Corps amphibious assault mission.

The standing, validated requirement for, and development of, an amphibious combat vehicle will ensure we continue to develop the right platform—at the right price—to support rapid ship-to-shore movement. To that end, we are now pursuing an integrated new vehicle program with three components, crafted from inception for affordability and leveraging the investment made in the EFV. We intend to mitigate risks associated with a new vehicle program and to maximize value by use of an integrated acquisition portfolio approach. This approach will have three synchronized efforts:

- Acceleration of the procurement of Marine Personnel Carriers
- Investment in a service life extension program and upgrades for a portion of the existing amphibious assault vehicles
- Development of a new amphibious combat vehicle

We intend to manage these complementary capabilities, requirements and acquisitions from a portfolio perspective.

NAVY SUPPORT

The Navy Marine Corps Team. As part of the Joint Force, the Marine Corps and the Navy partner to leverage the significant advantages provided by amphibious forces—a point reinforced by joint doctrine.[12] The Navy and Marine Corps team will be postured and engaged forward to be most operationally relevant to the needs of our Nation. Together, we provide the capability for massing potent forces close to a foreign shore while maintain a diplomatically sensitive profile. When needed, we are able to project this power ashore across the range of military operations at a time of our Nation's choosing, collectively demonstrating the essence of naval deterrence.

Amphibious Shipping

The Marine Corps' requirement to deploy globally, rapidly respond regionally, and train locally necessitates a combination of tactical airlift, high-speed vessels, amphibious ships, maritime preposition shipping, organic tactical aviation, and strategic airlift. The inherent flexibility and utility of amphibious ships is not widely understood, as evidenced by the frequent—and erroneous—assumption that "forcible entry capabilities" alone define the requirement for amphibious ships. The same capabilities that allow an amphibious task force to deliver and support a landing force on a hostile shore enables it to support forward engagement and crisis response. In fact the most frequent employment of amphibious forces is for steady state engagement and crisis response. The Geographic Combatant Commanders have increased demand for forward-postured amphibious forces capable of conducting security cooperation, regional deterrence, and crisis response reflecting the operational value of amphibious forces for missions across the range of military operations.[13] In an era of declining access and strategic uncertainty, I anticipate that this upward demand trend will continue.

Our principal contribution to U.S. Global Defense Posture is our "rotationally responsive" forces aboard amphibious ships. These forces combine the advantages of an immediate, yet temporary, presence, graduated visibility, and tailored, scalable force packages structured around the MAGTF. Rotational Amphibious Ready Groups/Marine Expeditionary Units forward deployed in three Geographic Combatant Command areas of responsibility, not only provide the capability for crisis response, but also present a means for day-to-day engagement with partner nations. Rotational forces also offer additional flexibility for decisionmakers in the event that forces are required to rapidly re-deploy across divergent regions and conflicts.

In January 2009, the Navy and Marine Corps agreed that the force structure requirement to support a 2.0 Marine Expeditionary Brigade lift is 38 total amphibious assault ships. In light of the fiscal constraints, the Department of the Navy agreed to sustain a minimum of 33 total amphibious ships in the assault echelon. This number gives a capability needed for steady state operations and represents the minimum number of ships needed to provide the Nation with a sea based power projection capability for full spectrum amphibious operations—including the amphibious assault echelon of two Marine Expeditionary Brigades.

The Marine Corps is committed to the spiral development of the America Class LHA (R), which is 27 percent complete. We expect the Navy to take delivery of LHA–6 in fiscal year 2014 with availability to deploy beginning in fiscal year 2017. In terms of LHA–7, we anticipate the contract award in late fiscal year 2011 with fabrication commencing the following year. These two ships are maximized for aviation, and I believe it is essential that a well-deck be reintroduced in LHA–8 as currently planned. The ongoing procurement and commissioning of the final two of our planned 11 *San Antonio*-class LPD–17 "Common Hull Forms" is critical to providing the lift capacities and operational capabilities to support the full range of military operations up to and including forcible entry.

Maritime Prepositioning Assets

The Maritime Prepositioning Force (MPF) program exists to enable the rapid deployment and engagement of a Marine Air Ground Task Force anywhere in the

[12] "Timely response to crisis situations is critical to U.S. deterrent and warfighting capabilities. The timeliness of U.S. response is a function of U.S. forward deployed forces and prepositioned forces with adequate organic movement capability . . . ." Joint Publication 3–35, Joint Deployment and Redeployment Operations, 7 May 2007, pg I–8.

[13] Since September 11, U.S. amphibious forces have responded to crises and contingencies at least 50 times, a response rate more than double that of the Cold War.

world in support of our National Military Strategy. The current MPF, which has been employed 55 times since 1985, is composed of a fleet of 16 ships divided into 3 Maritime Prepositioning Ships Squadrons located in the Mediterranean Sea, Indian Ocean (Diego Garcia), and Pacific Ocean (Guam and Saipan). With the restructure of the Maritime Prepositioning Force-Future, the Marine Corps and Navy have focused on an interim solution to enhance current MPF with three new ships to enable future sea-basing concepts. The addition of three Mobile Landing Platforms (MLP) and three T–AKE auxiliary dry cargo ships to the Maritime Prepositioning Ship Squadrons, coupled with existing Large, Medium-Speed, Roll-On, Roll-Off (LMSR) cargo ships, will enable the MPS squadrons to conduct at-sea, sea-state three, selective offload of vehicles, personnel, and equipment without complete reliance on fixed ports ashore. The introduction of MLPs, T–AKEs, and LMSRs provide the Navy and Marine Corps team a substantial step in enhancing our current sea-basing capabilities.

The Department of the Navy is currently funding the full MPF program of 16 ships through fiscal year 2012; however, the DoN POM–13 places one Maritime Prepositioning Squadron (6 ships) in a Reduced Operational Status beginning in fiscal year 2013. We will continue to optimize the MPF program to remain responsive and relevant to Geographic Combatant Commander requirements.

Naval Surface Fire Support

The Marine Corps has an enduring requirement for fire support from naval vessels in the range of 41–63 nautical miles to support amphibious operations in the littorals. These fires are needed by tactical commanders to maneuver towards battlefield objectives once ashore, contributing to joint doctrine for assured access. They serve as a component of the balanced and complementary joint triad of fires. Yet, unlike tactical aviation and ground fire systems, naval surface fires are unique and vital for their volume, lethality, accuracy, and all-weather capability.

Planned reductions in the procurement of certain naval ships along with cancellation of specific weapons programs over the past few years have led to a deficiency in systems available for naval surface fires. Completed in 2009, the Joint Expeditionary Fires Analysis of Alternatives identified the optimum U.S. Navy programs to support Marine Corps naval surface fire support requirements. This study established the baseline capabilities of the current naval surface fire support program of record (13nm projectile of the 5-inch gun and the Advance Gun System of the DDG–1000) to be insufficient in mitigating fire support gaps. The study determined that extended range 5-inch munitions would serve as a complementary alternative to the three DDG–1000s. Dramatic improvements in 5-inch projectiles can extend the naval surface fire support maximum range, across the 106 guns in the surface fleet, from 13 to 52 nautical miles with precision, high angle attack for use in operations in urban terrain, and potential effectiveness against moving targets. We also support ongoing research and development of transformational technologies like the electromagnetic rail gun with its potential to revolutionize the reach, coverage, and responsiveness of ship-based naval gunfire to ranges in excess of 200 nautical miles.

Assured Access

We remain vigilant of burgeoning anti-access/area denial threats proliferating around the globe, particularly in the Pacific Rim. The family of guided rockets, artillery, mortars, missiles and subsurface systems like mines and quiet submarines, pose a challenge to the power projection capability of seaborne expeditionary forces and threatens DOD's ability to prevent and deter conflicts and prepare for a wide range of contingencies.

Marine Air Ground Task Forces ashore and aboard amphibious shipping will support operations to ensure the freedom of action of U.S. and Allied forces by establishing expeditionary bases and airfields or defending advance bases. Marine Short Take-off and Vertical Landing aviation assets will be of particular value in overcoming adversary anti-access and area denial capabilities since they can operate from short or degraded airfields, can be rapidly dispersed, and can utilize both large carriers and amphibious ships for attack, maintenance, force protection, and dispersal purposes. The Joint Force Commander can leverage these unique capabilities to ensure the sea control necessary for the conduct of subsequent joint operations, whether they be power projection, forcible entry, or freedom of navigation.

In this regard, we are partnered with the joint community to develop an overarching concept to attain operational access. This year, we will employ our wargaming capability in Expeditionary Warrior 2011 to examine operations designed to overcome anti-access challenges. We are partners with the U.S. Navy and the U.S. Air Force in the development of the Air-Sea Battle Concept aimed at integrating capabilities to defeat these advanced weapon systems in maritime areas of

strategic interest. We also continue to participate in the U.S. Army's Joint Forcible Entry Warfighting Experiment, examining capabilities to conduct airborne and amphibious forcible entry operations.

PERSONNEL AND ORGANIZATONAL INITIATIVES

People. Today's Marine Corps represents less than 1/10 of 1 percent of the U.S. population, and the individual Marine remains our most valuable asset. Our 202,100 Active Duty and 39,600 Selected Reserve end strength allow us to meet current operational commitments while promoting resiliency throughout our Total Force. In fiscal year 2010 Marine Corps Recruiting Command accessed 1,703 officers (100.18 percent of the 1,700 officer goal). Our fiscal year 2011 accession mission is 1,650 active duty officer accessions with the same goal projected in fiscal year 2012. In terms of enlisted accessions, we are exceeding our internal quality standards of 95 percent enlisted recruits entering the Marine Corps possessing a high school diploma and 63 percent qualifying in the DOD I–IIIA mental group categories (DOD quality standards are 90 percent and 60 percent respectively). We will achieve our mission of 31,500 enlisted Active component non-prior service recruits in fiscal year 2011. Enlistment Bonuses remain vital to meeting the continuing requirement for high demand skills. We are continuing to experience unprecedented retention in both first-term and career marines.

We will continue to shape our Total Force to provide the ideal grade and military occupational specialty mix needed for sustainment. Our force structure review developed ways to increase unit readiness within our operating forces to ensure 99 percent manning of enlisted billets and 95 percent manning of officer billets. At the close of the Future Years Defense Program, we will work with the Secretary of Defense on a responsible drawdown of our end strength that is aligned with the future mission demands of a post-Operation Enduring Freedom security environment. I am determined to "keep faith" with our marines and their families by designing and executing a responsible drawdown from our current 202,100 end strength such that we avoid reduction-in-force actions and early retirement boards.

The Marine Corps is committed to making concerted efforts to attract, mentor, and retain the most talented men and women who bring a diversity of background, culture and skill in service to our Nation. Our diversity effort is structured with the understanding that the objective of diversity is not merely to achieve representational parity, but to raise total capability through leveraging the strengths and talents of each and every marine. The success of our pioneering Female Engagement Team program in Afghanistan, which is an offshoot of a similar effort we employed in Iraq, is one way that the Marine Corps utilizes diversity within our ranks for operational benefit.

We are currently developing a comprehensive, Service-wide strategy on diversity, an effort facilitated through our standing Diversity Review Board and a Diversity Executive Steering Committee chartered to establish the foundations for diversity success in the Total Force. The Marine Corps has established minority officer recruiting and mentoring as the highest priority in our recruiting efforts. Along with the other Services, we have provided timely input to the congressionally-sanctioned Military Leadership Diversity Commission and look forward to release of the Commission's final report scheduled for March 2011.

Marine Air Ground Task Force Enhancements

To further posture ourselves for the future, we are evaluating the internal workings of our MAGTFs to account for the distributed operations, decentralized command and control, dispersed forces and diffuse threats inherent on the modern battlefield. We are implementing a diverse suite of command and control systems within all elements of the MAGTF. We continue to work to build the capacity of new organizations like the Marine Corps Information Operations Center to achieve nonlethal effects in today's irregular and complex environments. We are ensuring the rapid analysis, fusion, and dissemination of intelligence down to the tactical level by continuing implementation of the Marine Corps Intelligence, Surveillance, and Reconnaissance Enterprise. We also aim to reorganize our intelligence collection and exploitation capabilities, increasing the ratio of resources to users. We will also capitalize on the capabilities of unmanned aircraft systems via an increase in capacity.

We are developing regionally-focused Marine Expeditionary Brigade command elements that are joint task force capable, with habitually aligned subordinate elements, to improve Geographic Combatant Commander effectiveness and speed of response. We have recently stood up one such element in Bahrain in support of U.S. Central Command. To better standardize operations and training for units and staff in our ground combat element, we established the Marine Corps Tactics and Operations Group, which reached full operational capability in May 2010. Among other

measures, this organization's mission is to support the refinement of our doctrine, including how our infantry companies will fight in the future. Building on the successes of the Marine Corps Tactics and Operations Group for the ground combat element, we are also developing and establishing a Marine Corps Logistics Operations Group capability for the Logistics Combat Element along with reorganizing Marine Logistics Groups to establish standing Combat Logistics Battalions habitually aligned to specific Marine Expeditionary Units and infantry regiments.

Over the past decade, we have become more reliant on equipment sets resulting from the emergence of new threats, perhaps most notably the improvised explosive device. This trend has resulted in the acquisition of some resources that are incompatible with the ethos of an agile, expeditionary force. To that end, we have begun an effort known as "Lightening the MAGTF," a measure aimed at reducing the size, weight, and energy expenditure of our forces from the individual rifleman to wholesale components of the MAGTF.

Sustained combat operations and worldwide theater security cooperation and training commitments over the last decade point towards an essential requirement for the Marine Corps Reserve to continue focusing at the operational, rather than strategic level of warfare. Since September 11, our Marine Corps Reserve has engaged continuously in combat operations as well as in regional security cooperation and crisis prevention activities in support of the Geographical Combatant Commanders. This operational tempo has built a momentum among our warfighters and a depth of experience throughout the ranks that is unprecedented in generations of Marine Corps reservists. In fact, today's Marine Corps Reserve is more highly trained, capable, and battle-tested than at any time since the Korean War.

The transition in utilization of the Marine Corps Reserve from a strategic to operational Reserve, as affirmed by our force structure review, expands our ability to perform as America's Expeditionary Force in Readiness. Sharing the culture of deployment and expeditionary mindset that has dominated Marine Corps culture, ethos and thinking since our beginning more than 2 centuries ago, the Marine Corps Reserve is optimally organized, equipped, and trained to perform as an Operational Reserve.

Institutions for Irregular Warfare

Irregular operations (e.g. Counterinsurgency, Stability Operations, Foreign Internal Defense, Unconventional Warfare and Counterterrorism) often occur in response to crisis and are executed in austere conditions—situations often entailing employment of marines. Our experiences countering irregular threats in "Small Wars" is a result of responding to complex crises involving a mix of security, economic, political, and social issues—usually under austere physical conditions. Our approach to irregular warfare is based on the understanding that people, ideas and organizations—not platforms and advanced technology—are the keys to success in operating in complex and irregular warfare environments. Naval forces conducting theater security operations and security force assistance to build partnership capacity also provide the Nation the potential for immediate crisis response capability and options for escalation or de-escalation. Building on our lessons learned in Iraq and Afghanistan, we are developing options to re-organize, consolidate, and strengthen our institutions that emphasize our irregular warfare and multi-mission capability such as the Center for Advanced Operational Culture and Learning, the Security Cooperation Training and Education Center, and the Center for Irregular Warfare. The objective is to gain unity of effort, increase effectiveness and efficiency, and reduce redundant capacity.

We established the Marine Corps Training and Advisory Group (MCTAG) within the past 5 years to train, equip, and deploy Marines for Security Force Assistance missions in support of Geographic Combatant Commander theater security cooperation plans. The MCTAG provides conventional training and advisor support to Host Nation Security Forces. This organization also offers planning assistance to Marine regional component commands in developing and executing partner nation training programs. The MCTAG is scheduled to reach full operating capability in September 2011 and to date has directly trained more than 180 marines and sailors and assisted in the training of more than 600 marines and sailors, who themselves have conducted in excess of 150 deployments to more than 50 countries worldwide. The MCTAG has also developed programs of instruction to train joint service advisors/trainers deploying on theater security cooperation missions as well as programs of instruction to train light infantry battalions from the Republic of Georgia in executing combat operations in Afghanistan.

Because the Marine Corps functions in an integrated fashion throughout all traditional domains—land, sea, air, and space—it is a logical step forward for us to be optimally organized, trained and equipped to operate synergistically on the modern

battlefield, which now includes the cyber domain. As U.S. Cyber Command matures and sponsors initiatives to increase cyber operational capacity, we are taking deliberate steps to build additional Marine Corps cyber capability and capacity to meet joint and service-level demands.

We see the continued development of organic cyber capabilities, capacities, and awareness as a critical element to retain speed, precision, and lethality across the entire spectrum of operations. We are working to incorporate scenarios into our exercises to increase opportunities for marines to leverage cyber capabilities while also training marines to operate where cyber-enabled warfighting capability may be degraded and/or contested. Additionally, we are integrating tailored cyber education into our officer and enlisted professional education programs. We are continuing to examine our options for recruiting, training and retaining our cyber workforce. This is especially challenging given the highly specialized skill sets and the competition for such in both the Federal and Private sectors.

Formed in 2006, Marine Special Operations Command (MARSOC) is currently conducting an internal reorganization into three mirrored battalions. Upon completion of this reorganization in fiscal year 2014, MARSOC will have one regiment consisting of 3 battalions, 12 companies, and 48 Marine Special Operations Teams. Since December 2009, MARSOC has maintained an enduring battalion-level Special Operations Task Force headquarters and 2 companies in Afghanistan along with persistent Marine Special Operations Team engagements in other high priority regions.

Since its inception, the Marine Corps has resourced MARSOC with significant investments in military construction for training facilities, barracks and headquarters. In the near term, MARSOC will have 2,678 personnel. Our force structure review recently evaluated ways to increase the number of combat support and combat service support marines (e.g. logisticians, intelligence personnel, et cetera) enabling MARSOC's operations. I intend to add 1,001 marines to MARSOC, which will increase its capacity by 44 percent. These marines, who are above and beyond the planned fiscal year 2014 personnel increase, will better enable it for effective special operations.

The Marine Corps serves as the DOD Non-Lethal Weapons Executive Agent responsible for developing program recommendations and stimulating non-lethal weapons requirements. Non-lethal effects are part of the DOD portfolio of capabilities that enhance the Joint Force Commander's ability to act in a timely manner to detect, deter, prevent, defeat, or, if necessary, mitigate the effects of an attack. Non-lethal capabilities provide the Joint Force the ability to selectively target hostile threats, covered or concealed by civilian assets, while avoiding collateral damage. Geographic Combatant Commands are registering increased demand for non-lethal weapons options to include items such as arresting nets, dazzler lasers, acoustic hailing devices, electric stun guns, blunt impact munitions, and non-lethal warning munitions. The Joint Non-Lethal Weapons Program continues to support joint and combined non-lethal weapons research, development, training and exercises in support of all Geographic Combatant Commands.

Expeditionary Energy

The Marine Corps is leading the development of expeditionary energy solutions for DOD and the Department of the Navy—reducing energy demand in our platforms and systems, increasing the use of renewable energy, and instilling an ethos of energy and water efficiency in every marine. Our priority is force protection—saving lives by reducing the number of marines at risk on the road hauling fuel and water. We also aim to help marines travel lighter and move faster through the reduction in size and amount of equipment and the dependence on bulk supplies.

In February 2011, we issued a "Bases to Battlefield" Expeditionary Energy Strategy Implementation Planning Guidance, which sets goals, performance metrics, and a plan for implementation by 2025. This strategy supports congressional and Department of the Navy goals to increase energy security through the use of alternative fuels and energy efficiency. Since 2009 we have aggressively pursued renewable energy and energy efficient capabilities that will make Marine units more energy self-sufficient, and ultimately increase our combat effectiveness.

Within a year, we stood up an Experimental Forward Operating Base, sourced commercial and government technologies, trained an infantry company with renewable energy technology, and deployed them to Afghanistan in the winter of 2010 where they operated two patrol bases entirely on renewable energy. As a result, our forces required less fuel and batteries, reducing risk to marines and saving money. This year, the Experimental Forward Operating Base will focus on the requirements of a major battlefield energy user—the Command Operations Center and the Com-

mand Element—and will evaluate a second round of energy technologies to support expeditionary operations.

In fiscal year 2012 we are devoting more resources—in current programs and new areas—to build a foundation to achieve our goals for increased energy efficiency and renewable energy by 2025. As a starting point, we anticipate savings of petroleum over the Future Years Defense Program in our Overseas Contingency Operations of 100,000 to 150,000 barrels. For example this year, we are procuring mobile electric power sources to achieve 17 percent fuel efficiency using U.S. Army-funded development and Marine Corps-funded procurement monies. We are also fielding Enhanced Efficiency Environmental Control Units to achieve 15–30 percent power efficiency improvements.

Installation Energy

We are also devoting more resources to our Energy Investment Program than ever before. These funds will be used to implement the results of recent and ongoing energy audits at our installations; install more efficient systems and reduce overall energy consumption. Additionally, new facilities will continue to incorporate the latest energy sustainability and efficiency features. This effort aboard our installations complements our Corps-wide initiative to develop an energy ethos and culture of conservation.

TRAINING

Training MAGTFs. We are utilizing our Marine Corps Service Campaign Plan as a roadmap to strengthen and maintain our core competencies and to ensure we remain America's Expeditionary Force in Readiness well into the future. This effort also will also help synchronize our Service level security cooperation activities in support of national strategy and guide the type of training and exercises we must conduct, in particular at the Marine Expeditionary Brigade level.

Our amphibious core competency figures prominently in our Service Campaign Plan, and as a result we have undertaken an array of exercise planning in this critical skill area. We will soon be conducting a MAGTF large scale exercise that will refine our capability to conduct amphibious power projection and sustained operations ashore in a joint and interagency environment. In late-2010 we conducted Exercise Bold Alligator 2011, the first large-scale amphibious training exercise with the Navy on the east coast in almost 10 years. This synthetic training event practiced planning for forcible entry operations against conventional and asymmetric threats and a large scale non-combatant evacuation operation. We will take lessons learned from this exercise and build upon them for the next iteration of this important exercise with the U.S. Navy scheduled in the coming year.

We are reviewing the core functions of our organizations and, where appropriate, adding irregular warfare capabilities to reflect the full spectrum of possible employment options as a core task set for the Marine Expeditionary Brigade. We view integration with other government agencies and coordination with nongovernment organizations as essential to our success in irregular warfare and have significantly increased interagency participation in numerous exercises and training venues such as Expeditionary Warrior-09/10, Emerald Express, Joint Urban Warrior-09, and Joint Irregular Warrior-10. We aim to capitalize on our current theater security cooperation and partnership capacity building activities with our allies and partners in all operational environments providing our national leaders with strategic options to shape outcomes, prevent and deter conflicts, strengthen "at risk" states, and deny enemy safe-havens.

PRIORITY #3: BETTER EDUCATE AND TRAIN OUR MARINES TO SUCCEED IN DISTRIBUTED OPERATIONS AND INCREASINGLY COMPLEX ENVIRONMENTS

Professional Military Education and Small Unit Leader Development

We are planning more investments in the education of our noncommissioned officers and junior officers, as they have assumed vastly greater responsibilities in both combat and garrison. This focus on education will better train them for decision-making during distributed operations against more diffused threats over broader areas of the battlefield. The primary initiative to address this priority is to increase markedly their opportunities to attend resident professional military education. We are currently evaluating ways to increase throughput at resident professional military education courses with options for both constrained and unconstrained manpower and resource increases. We are evaluating traditional paradigms relative to course lengths and instructional methodology, with the specific objectives of tripling throughput at the Expeditionary Warfare School (career level) and doubling resident Command and Staff College (intermediate level) throughput.

These key leaders also impact unit cohesion and our overall effectiveness in combat. Introducing these leaders into a unit at the right time and stabilizing them in a life cycle continuum of a unit positively impacts a unit's effective training, performance and resiliency during pre-deployment training and post combat. These leaders are in the best position to influence our cultural ethos with its emphasis on intangible qualities such as esprit de corps, integrity, and "service to country during time of war." We are currently reviewing manpower policies and models and will ensure these key leaders are present and able to lead a cohesive unit throughout its life-cycle continuum, including rigorous predeployment training and post-deployment actions. This effort will ready our units for any fight, whether irregular or combat.

We also intend to infuse Values Based Training, rooted in our core values of Honor, Courage and Commitment, at all levels of professional development to foster resilience and to enable effective operations, especially in complex irregular environments. Our overall goal is to institutionalize efforts to develop more mature, educated, and capable non-commissioned officers and maneuver unit squad leaders. As these concepts mature, there will be costs in terms of military instruction and facilities for which we will require congressional support.

Regionalization and Specialization

The increased call for engagement, as seen in our force structure review and in strategic guidance, requires marines with improved cultural and language skills and formal education. To develop better specialization for anticipated future missions and operating environments, we will expand our Foreign Area Officer and Regional Affairs Officer programs, as well as opportunities to send more officers through graduate level training, fellowships and research opportunities—ideas supported by findings and recommendations of the 2010 Quadrennial Defense Review and the 2010 Quadrennial Defense Review Independent Panel Report.[14] This effort will extend to our "Whole of Government" approach toward irregular warfare as we seek greater exchanges and fellowships with the elements of the Interagency.

Marine Corps University

We are continuing to implement recommendations of our 2006 Officer Professional Military Education Study (the Wilhelm Report) and are making significant strides in terms of resources and facilities enhancing the campus of the Marine Corps University (MCU). We have programmed approximately $125 million in Military Construction between fiscal year 2011 to fiscal year 2012 for new academic facilities for the Marine Corps War College, Command and Staff College, and the School of Advanced Warfighting. In addition, we will expand the Staff Noncommissioned Officer Academy at the main campus in Quantico. These funds represent only a down payment on a larger commitment to double the size of the University campus and to upgrade our enlisted academies worldwide. Completion of the MCU master plan will require the demolition and relocation of tenant units aboard the campus. Detailed documentation of costs associated is ongoing; however, we estimate over $400 million is needed to complete the master plan. Our ultimate goal is to develop the MCU into a premier institution with world-class faculty, facilities, students, and curricula; we will require the assistance of Congress in this goal.

PRIORITY #4: KEEP FAITH WITH OUR MARINES, OUR SAILORS AND OUR FAMILIES

Keeping Faith

We expect and demand extraordinary loyalty from our marines—a loyalty to Country, family, and Corps. Our Nation has been at war for a decade, placing unprecedented burdens on marines, sailors, families, wounded warriors, and the families of the fallen. They have all made tremendous sacrifices in the face of danger. We owe them all a reciprocal level of loyalty. Our approach to caring for their needs is based on the same unwavering faithfulness they have demonstrated to the Marine Corps. We will ensure their needs are met during times of deployment and in garrison by providing the services, facilities, and programs to develop the strength and skills to thrive on the challenges of operational tempo. When needed, we will restore them to health. We will also transition them back to civilian life, and in the cases of our fallen marines, we will support and protect their surviving spouses and dependents. We will do this by focusing on several areas this fiscal year.

[14] 2010 Quadrennial Defense Review Report, pg 54; 2010 QDR Independent Panel Report, pgs 75–77.

Combat Stress, Resiliency, Medical, and Mental Health Care

We continue to advocate for the highest quality medical care and facilities for our servicemembers, retirees, and their families. To ensure the Department can continue to provide the finest health care benefits in the country to our beneficiaries, we fully support the medical efficiencies and adjustments in TRICARE included in the President's budget proposal.

The evolving security environment requires a physically and mentally resilient marine able to endure extended exposure to ambiguous, stressful, and ever-changing situations. Young leaders find themselves on the vanguard of a protracted war, adapting to a variety of situations and scenarios. To improve their resilience, we are working aggressively and creatively to build a training continuum that better prepares them for the inevitable stress of combat operations and to equip them with the necessary skills required to cope with the challenges of life as a marine.

Instruction founded and focused on our core values helps provide some of this resilience, especially in irregular warfare and complex environments. A program combining the "best practices" of mental, emotional and physical fitness will best instill in our marines the resiliency needed to endure the stressors of combat and enhance their ability to perform effectively across the range of military operations. We are developing a comprehensive program to improve the resiliency of our marines both in garrison and in combat.

We are partnered with the Navy to address the Nation-wide dearth of qualified mental health care providers, which challenges our ability to provide care at some of our bases and stations and, in some cases, to our reservists in remote locations. During calendar year 2010, we saw a nearly 30 percent decrease in the number of suicides within our Total Force.[15] We are too early in our suicide studies to identify what specific initiative(s) have resulted in this dramatic turnaround. However, we have implemented a number of measures on multiple fronts. Some of these include the following:

- Evocative Peer-led Training Program: "Never Leave a Marine Behind" suicide prevention program for noncommissioned officers and junior marines. We are expanding this training to include staff noncommissioned officers and commissioned officers this year.
- DSTRESS Line Pilot Program with TRICARE West: "By Marines—For Marines" call center designed to assist with problems at an early stage. The call center is staffed by veteran marines, providing anonymous service to all current marines, veteran marines, their families, and loved ones.
- Combat and Operational Stress Control and Operational Stress Control and Readiness Teams: Utilizing unique training programs across the Total Force and ensuring the presence of mental health professionals in front-line units as a primary prevention tool to help Marines identify and mitigate stress.
- Marine Resilience Study to Assess Risk and Resilience: We are participating in a longitudinal research study that will examine risk across three domains: biological, psychological and social. The outcome of this study will inform our future work in the area of building and maintain resiliency across the Corps.

We will continue advocating to the medical community for better diagnostic and increased treatment options for marines with severe injuries including post-traumatic stress and traumatic brain injury. In collaboration with the other Services, we developed a set of events-based parameters, mandating that our leaders search out marines who have experienced a concussive event. This measure no longer relies on identification of impacted servicemembers solely on their willingness to seek help on their own initiative. These protocols are in place now in Afghanistan, and we are already seeing a culture change in the attitude of marines about being treated early for a traumatic brain injury.

We have established an in-theater Restoration Center that brings comprehensive concussion diagnosis and management as close to the front lines as possible to ensure that appropriate care is available as quickly as possible. We are currently developing policy and applications to track traumatic brain injury from "point of injury" to "return to full duty" separately but in parallel with medical documentation. These measures will empower commanders with the information they need to monitor the health of a marine who has suffered a concussive event and intervene appropriately for the duration of a marine's career and long after the initial injury."

[15] Calendar year 2010 suicides = 37 whereas calendar year 2009 suicides = 52.

Transition Assistance

We believe transition assistance should be a process not an event. We have established a goal to make the Marine Corps Transition Assistance Management Program more value added for our departing marines. From 2009 to 2010, we conducted functionality assessments of the Transition Assistance Management Program and the Lifelong Learning Program and noted many deficiencies. In response, we established two Transition Assistance Operational Planning Teams in 2010 to assess existing programs. We have developed an "end-to-end" process improvement plan that will begin at the point of initial accession into the Marine Corps and continue through post separation. We are initiating actions and integrating existing capabilities that will most directly improve the quality of support provided to marines within 6 months prior to separation and those who have been separated at least 6 months.

Marines have expressed a desire for assistance navigating Department of Veterans Affairs benefit processes such as in cases of enrollment for and access to education benefits. We will modify existing websites to improve access and enhance opportunity for separating marines to speak directly to Marine Corps support personnel who are trained to remove administrative benefit processing barriers. We will improve networking opportunities to help marines find meaningful employment and are adapting our current job fairs to support increased networking opportunities that will allow them to meet mentors and employers.

Marines have asked for an opportunity to connect with employers and learn how to translate their intangible and tangible attributes. Our transition workshops will be overhauled to address these needs. Marines are also seeking help to simplify enrollment processes for the Post-9/11 Montgomery GI bill and to gain access to academic institutions that will provide the quality and level of business education and skills private industry demands. We have initiated a Leader-Scholar Program, which includes academic institutions who value marines' service commitment and pledge special enrollment consideration. While the support varies from school to school, we now have 75 participating institutions with the goal of an additional 25 by the end of this year. As we gain momentum, we will continue to change the transition assistance program from its current event focus to that of a process that reintegrates marines into the civilian sector with the knowledge, skills, and abilities to leverage and communicate their Marine Corps time and experience.

Family Readiness Programs

We increased baseline funding for family support programs beginning in fiscal year 2010 to ensure appropriate wartime footing. Programs benefitting from this measure include the Unit, Personal and Family Readiness Program; Marine Corps Family Team Building Program; Exceptional Family Member Program; School Liaison Program; and other miscellaneous Marine Corps Community Services Programs supporting remote and isolated commands, deployed marines, and independent duty marines and families. We are currently conducting a complete review to ensure effectiveness and efficiency of these programs. Our goal is to determine where expansion may be needed to further assist our families and where programs can be streamlined to reduce redundancy.

Wounded Warrior Care

Marines continue to suffer numerous wounds, trauma, and injuries during operations in combat and during training missions. Many of these brave heroes with significant injuries are convalescing at military treatment facilities here in the National Capital Region and across our Nation at other major military treatment facilities. Our Wounded Warrior Regiment provides non-medical care management services to wounded, ill, and injured marines and their families. The Wounded Warrior Regiment continues to improve existing programs and add new support mechanisms. We have increased support to wounded, injured, and ill Reserve marines through additional Recovery Care Coordinators, enhanced family support at military treatment facilities, and one-on-one orientation sessions. We also provide Integrated Disability Evaluation System Support through Regional Limited Duty Coordinators and Wounded Warrior Attorneys. We have also initiated a mandatory Warrior Athlete Reconditioning Program. Outreach is an important aspect of the Regiment's nonmedical care delivery and management. The Sergeant Merlin German Wounded Warrior Call Center extends support to marines and families through advocacy, resource identification and referral, information distribution, and care coordination, 24 hours a day, 7 days per week.

The comprehensive care coordination provided by the Wounded Warrior Regiment throughout the phases of recovery has been highly successful. The results of internal assessments have substantiated that creation of the Wounded Warrior Regiment

has had a positive impact on the support offered wounded, injured, and ill marines and families. The Marine Corps will continue to honor the commitment to our Wounded Warriors and to help them return to full duty or successfully reintegrate into their communities.

Behavioral Health Integration

Behavioral health needs since September 11 have become increasingly complex with individuals often requiring assistance in a number of areas at one time. Marines with more than two deployments have been identified as a higher risk population. According to the Joint Mental Health Assessment Team, psychological health problems remain steady at 11 percent of marines for the first and second deployments, but increase to 22 percent for those who have deployed three or more times. Sixty-five percent of marines are under 25 years old. Associated with this young force are high-risk factors that include communication and coping skills, isolation, combat-related wounds and substance abuse. Drawdown of end strength following Operation Enduring Freedom and return to garrison life will likely result in additional behavioral healthcare requirements as marines redeploy and adjust to the garrison environment. We continue to move forward with our integration of prevention and intervention programs initiated in 2009. We have established a Behavioral Health Branch at our headquarters for Manpower and Reserve Affairs. Headquarters Marine Corps Health Services also has created and filled a new billet for a Director of Psychological Health.

Military Construction

The Marine Corps maintains its commitment to facilities and infrastructure supporting both operations and quality of life. Our military construction and family programs are important to success in achieving and sustaining our force structure and maintaining readiness. For many years, we funded only our most critical facility needs. As a result, our installations were challenged to properly house and operate the additional forces required to meet our planned end strength increase. Between fiscal year 2007 and fiscal year 2010, we received $6.9 billion in new construction and design. With this funding, we are providing new quality of life facilities, improved operational and training facilities, and more modern utility infrastructure systems.

Our fiscal year 2012 military construction budget request is $1.4 billion. With these requested funds, we will provide bachelor enlisted quarters, aviation support facilities, and improvements to quality of life, utilities and infrastructure, and professional military education facilities. Additional family housing efforts in fiscal year 2012 include improvements to existing housing units and funding for the operations, maintenance, and leasing of 1,100 units worldwide and oversight of 22,000 privatized units.

CONCLUSION

The U.S. Marine Corps remains the Nation's crisis response force-of-choice. Our continued success in Afghanistan and throughout the globe is made possible by the loyal sacrifice of our incredible men and women in uniform, civilian marines, and our Marine Corps family. The personnel, equipment, and training that have given us success over the nearly past 10 years at war has come through the ongoing support of Congress and the American people. I promise that your Marine Corps understands the value of each dollar provided and will continue to provide maximum return for every dollar spent.

In the coming year, we will begin a deliberate transformation into a force optimized for the likely threats of the next 2 decades. We understand and appreciate the contribution that each marine has made for this great Nation, and we recognize the heavy burden it has placed on their loved ones. We remain "Always Faithful" to our Marine Corps family, to Congress, to our chain of command, and to the American people.

Chairman LEVIN. Thank you so much, General Amos.

Let's start with a 7-minute first round.

General, over the weekend there was reported, and it's been reaffirmed here today, that 400 marines from Camp Lejeune have arrived in Greece. Have they now joined the 1,300 marines of the 26th MEU on those two amphibious ships? I know they went to Greece, but are they on board those two ships now?

General AMOS. Yes, sir, they're on board and the ships are at sea.

Chairman LEVIN. Thank you.

The newspapers reported yesterday—and this goes to both you, Admiral Roughead and General Amos—that some of the capabilities of the two amphibious assault ships as follows: Harrier jump jets that can engage in air-to-ground and air-to-air combat, as well as maintain surveillance on ground positions. They have attack helicopters on board; transport aircraft, including cargo helicopters and the V–22 Osprey, so you have a capability there for long-range transport; as well as landing craft capable of reaching the Libyan coast.

Are there any other capabilities, major capabilities, that I've left out, and is what I have just described accurate? Admiral Roughead, why don't we start with you.

Admiral ROUGHEAD. Yes, sir, those are accurate capabilities, and I would say that in addition to that on board the large amphibious ships there is a medical team with operating room capabilities. So there's significant capacity there, and also they're quite well loaded with humanitarian assistance items as well.

Chairman LEVIN. Thank you.

General?

General AMOS. Chairman, that's an accurate portrayal of the physical equipment and those capabilities therein. That force is capable of performing a variety of missions. They're trained. They can do everything from a raid to an amphibious assault, to a noncombatant evacuation, forcible entry, trap mission, those kinds of things. So there's a lot of capability that resides in those two vessels.

Chairman LEVIN. Thank you.

Admiral, is it also correct that, in addition to those two ships, we have in the Mediterranean ships that are currently available that have missile-launching capability against land targets?

Admiral ROUGHEAD. Yes, sir, that's correct.

Chairman LEVIN. General, let me switch to Afghanistan. Can you give us your assessment of what's called the Interim Security for Critical Infrastructure, which is a separate program I understand from the Afghan local police program? Can you tell us about that program, the Interim Security for Critical Infrastructure? Is that a name which resonates at all with you?

General AMOS. Sir, it does not. I'm going to have to take that for the record and get back to you, Mr. Chairman.

[The information referred to follows:]

[Deleted.]

Chairman LEVIN. It didn't resonate with me either, and we read about it and I was curious about it. But if you could get us that for the record that would be helpful.

Secretary Mabus, can you tell us where we are in the process of moving marines from Okinawa to Guam, and how we are going to complete the program given the strong opposition to it in Okinawa?

Mr. MABUS. Yes, sir. To echo what the Secretary of Defense said earlier, we are waiting for substantive movement on the Futenma replacement facility by the Japanese before taking any major sub-

stantive steps of our own. But in the interim we have signed the record of decision on the environmental impact statement. We held a lot of hearings. We had a lot of interaction with the people of Guam.

My under secretary has been to Guam numerous times to meet with the Government of Guam and with the people of Guam, and he has identified four overarching goals for Guam.

First, is a one Guam and one U.S. Government response to Guam. Second, is that whatever resources are put there should be renewable type energy projects, or a green Guam. Third, is that we will be sensitive to cultural matters, such as Pagat Cave and Pagat Village, the Guam cultural items that have been identified as crucial. Fourth, is that at the end of the day that there will be a net negative footprint, so that we will use less land for military purposes than we are using today.

But again, before we take substantive moves to implement the road map that was agreed to several years ago we are awaiting Japanese Government moves on the Futenma replacement facility.

The last thing I will say is that the Japanese Government has deposited the amounts of money that it had committed to into our Treasury up until this point.

Chairman LEVIN. Now, the Japanese Government moves that you refer to include a signature on a document, is that correct?

Mr. MABUS. Yes, sir, and also something substantive in terms of beginning the construction of a replacement facility for our Futenma Air Base.

Chairman LEVIN. That is what the opposition in Okinawa strongly opposes, is that signature on that document, as I understand.

Mr. MABUS. I understand there's opposition to that in Okinawa. I also understand there's opposition to Futenma in Okinawa.

Chairman LEVIN. Right, both. The opposition is so strong—I think it was unanimous in the Okinawa legislative body. The prospects it seems to me are not great that this is going to happen this fiscal year. Can you comment on the likelihood that we're going to get the Japanese sign-off on both the replacement facility and on the signature for that document?

Mr. MABUS. I will simply quote what Secretary Gates said in previous hearings, which he said that he was hopeful that progress would be made soon, and I believe by "soon" he meant in this fiscal year.

Chairman LEVIN. Hopeful, but not necessarily optimistic; is that fair?

Mr. MABUS. I believe his word was "hopeful." I don't want to put words in his mouth. But he expressed that he was—I can't think of a different word than "hopeful"—to go forward.

Chairman LEVIN. All right. Are you personally optimistic it's going to happen this year?

Mr. MABUS. I believe that the Japanese Government understands what our position is and that, absent movement, that we cannot go forward. So they understand the urgency.

Chairman LEVIN. Thank you very much, Mr. Secretary.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

General Amos, have you had a chance to look at the air capabilities that the Libyans have now as far as fixed wing and helicopters?

General AMOS. Senator, yes, sir. I've looked at what they have.

Senator MCCAIN. What has been your assessment?

General AMOS. I think it's modest. I think their greatest threat is their helicopter-type forces. That's just my assessment standing from afar.

Senator MCCAIN. Their air defenses?

General AMOS. They have air defenses, sir. I'm unfamiliar with the depth of those air defenses, but they have some.

Senator MCCAIN. But my information—I wonder if you have the same thing—they are Soviet-style, somewhat older versions of surface-to-air missile capability.

General AMOS. Yes, sir, I believe that's correct.

Senator MCCAIN. Isn't it true that the air assets are concentrated in about four air bases right around Tripoli?

General AMOS. I believe that's correct, Senator.

Senator MCCAIN. So the air assets, both fixed wing and helicopter, are going out of a relatively small area around Tripoli, operating out of those areas; is that true?

General AMOS. Yes, sir, predominantly. I believe that's correct.

Senator MCCAIN. Do you have any assessment of the numbers of aircraft that they have, both fixed wing and helicopter?

General AMOS. Senator, I just know the general capabilities. I've not spent time looking at the precise numbers.

Senator MCCAIN. Has it been your experience in combat that if the enemy controls the air above, particularly in terrain like Libya, it gives them an enormous advantage?

General AMOS. Sir, I think there are several things that will give the enemy an enormous advantage. One is the ground movement of forces, vehicles, military on the ground. I think it's a very complex environment, where the Gaddafi forces are predominantly located. So I think it's more than just aviation. I think it's very complex.

Senator MCCAIN. But you have very little doubt that control of the air above, particularly in an untrained enemy, gives you an enormous advantage in any conflict? True?

General AMOS. Sir, I would say it would give you an advantage. I'm not sure about his air force.

Senator MCCAIN. Have you heard that Gaddafi is still flying in mercenaries in to Tripoli from other countries?

General AMOS. No, sir, I have not heard that.

Senator MCCAIN. Did you hear that he has two Airbuses that are shuttling back and forth?

General AMOS. No, sir, I have not heard that.

Senator MCCAIN. You have been getting regular briefings?

General AMOS. We do, sir.

Senator MCCAIN. The ships that are offshore, the Harriers, they also have surveillance pod capability?

General AMOS. They do, sir. The Harriers are carrying an ISR pod.

Senator MCCAIN. Do they have jamming capability?

General AMOS. Yes, sir, they do.

Senator MCCAIN. So we could jam Gaddafi's communications, including television?

General AMOS. Sir, excuse me. I misunderstood you. I thought you said camera capability. You're talking jamming capability?

Senator MCCAIN. Yes.

General AMOS. They do not.

Senator MCCAIN. What assets would have those, the jamming capability? Airborne Warning and Control System?

General AMOS. Sir, it would be that, and I'd have to refer to the CNO, but it would probably be aircraft, EA–6Bs off the carrier.

Senator MCCAIN. Admiral?

Admiral ROUGHEAD. Yes, sir, the jamming that would be required, whether for communications or for their air defense system, I believe you would require EA–6Bs or the Growlers that we're now introducing to the fleet.

Senator MCCAIN. How far away are those?

Admiral ROUGHEAD. The aircraft carrier USS *Enterprise* is the closest capability. The USS *Enterprise* is currently in the Red Sea.

Senator MCCAIN. Are there plans to move it?

Admiral ROUGHEAD. At the present time, plans are for her to remain in the CENTCOM area of operations, sir.

Senator MCCAIN. Not move into the Mediterranean?

Admiral ROUGHEAD. There has been no order issued to do that, no, sir.

Senator MCCAIN. General Amos, in the withdrawal from Iraq is it your personal opinion that Iraq will be able to take over logistics, intelligence, and air sovereignty missions that the United States has been carrying out?

General AMOS. Senator, I've always believed that—I can't speak to the degree of where they are today because the marines are out of there and we're focused primarily in Afghanistan and other parts of the world. But we were certainly on a glide slope to make that happen.

Senator MCCAIN. Admiral?

Admiral ROUGHEAD. I believe we are on that path, yes, sir.

Senator MCCAIN. So you're not concerned about a complete withdrawal of U.S. troops from Iraq as far as logistics, intelligence, and training of an air force, or a navy? None of that is of concern?

Admiral ROUGHEAD. As of my most recent visit there, Senator, where I focused primarily on the navy, I see very good progress. In addition to that, because that navy will operate offshore, our Fifth Fleet that operates in the Arabian Gulf, and I believe it will be a very supportive relationship, addressing the needs of Iraq from the naval perspective.

Senator MCCAIN. So they need no other assistance?

Admiral ROUGHEAD. I believe that assistance will continue through the way that we interact with all navies in the region with our Fifth Fleet headquarters and the ships that deploy there, the exercise programs that we have. That will continue on with the Iraqi navy, and not have to have people ashore.

Senator MCCAIN. General Amos, have you been requested to identify any drawdown from Afghanistan, to begin the middle of July of this year?

General AMOS. Senator, no, we have not been asked to identify any forces.

Senator MCCAIN. So we really have no plans yet that you have been made aware of of the beginning of our drawdown in Afghanistan?

General AMOS. Senator, all I'm aware of is that there will be a drawdown. The President has announced it, beginning in July of some forces. The Secretary of Defense spoke about that yesterday in Afghanistan. I can't tell you whether it'll be marine forces. I would have to defer to General Mattis and General Petraeus.

Senator MCCAIN. I thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Thanks to the three of you for your service and for your testimony today. Before I get to my questions, I just want to begin by thanking the three of you for the leadership role that you're playing in the implementation of the repeal of Don't Ask, Don't Tell. Admiral Roughead and General Amos, I recently watched the opening portions of training videos that you have filmed for sailors and marines, and I just want to express my gratitude for the leadership that you display there.

As you indicate in those videos, this is all about values, values that are deep and inherent in your Services, values of leadership, discipline, professionalism, and respect. I think—and I really thank you, based on looking at these videos, for leading your Services, as the two of you have throughout your career, by example. I appreciate that very much.

I want to get to a couple of questions about Libya. I just want to pick up from something Senator McCain asked and the inference from it, which is, no one's saying that a no-fly zone is uncomplicated, but the fact is that we have some experience doing this and, though people have said Libya is a large country, it is of course a large country, but the activity here is mostly along a strip of land along the coast. So if there's a decision to do this—and I appreciate what Secretary Gates said in his testimony, though it's the part that's less quoted, which was that, if asked to implement, hopefully with our allies and others, a no-fly zone, we're perfectly capable of doing it.

But the point I want to make from what Senator McCain asked is that the air defense systems of the Libyans are modest and air capabilities are modest, and the activity, though the country is large, is happening mostly along the strip along the north of the country, along the coast.

The question I wanted to ask is this. The chairman and Senator McCain have asked about our resources in the region. We're all following this very closely. I was interested that our Ambassador to NATO, Ivo Daalder, said—has been quoted as saying that "The United States has been conducting round-the-clock air and ground surveillance in Libya."

I wanted to ask you, Admiral, and you, General, whether you have any knowledge about that, and toward what end are we conducting that surveillance? Admiral?

Admiral ROUGHEAD. Senator, the ability to monitor the level of activity, the disposition of the forces, is something that is within

our capabilities to do and we have been following the fighting that's been taking place through a variety of means that we have. So we have some insight into what's going on there.

Senator LIEBERMAN. General, do you have anything to add to that?

General AMOS. Sir, I don't. I know that, just as we do in many other places around the world where there's hostile action taking place, we pay very close attention through a variety of means and capabilities.

Senator LIEBERMAN. Right.

General AMOS. Some national and some organic.

Senator LIEBERMAN. Admiral, based on what we know or what you know, do you think this is now settling into a kind of stalemate situation? I know it's always hard to predict—where we may end up but, unless something surprising happens, we may end up with a long-term civil war type conflict in Libya.

Admiral ROUGHEAD. Having spent some time in the Middle East, to include actually living in Libya, I am always hesitant to predict what the future may be there. I think it's still a very uncertain period that bears watching. Then as some of the thoughts are discussed and debated, I believe, at least from a military perspective, that looking at what some of those details may be ahead of time is very important, issues such as a no-fly zone, restrictions on use of force, and what basing and access that might be required.

I think all of those need to be sorted through.

Senator LIEBERMAN. Understood.

I understand that, and it's, I believe, been publicly acknowledged, that the State Department at least has opened up channels of communications with the Temporary National Council or provisional anti-Gaddafi Government, which is headquartered in Benghazi. As far as you know, is there any military-to-military contact going on through DOD with the military leadership of the anti-Gaddafi forces?

Admiral ROUGHEAD. I'm not aware of any, sir.

Senator LIEBERMAN. General, do you know?

General AMOS. No.

Senator LIEBERMAN. Good enough.

Let me go to something—Secretary Mabus, I noted in the statement you made in your prepared testimony that the F–35C variant of the JSF will be procured for both the Navy and the Marine Corps. I think it's been the general understanding that the Marine Corps would want to see produced and would procure a pure F–35B STOVL fleet variant of the F–35, and that in fact is the plan that's reflected in the current FYDP.

Did I read this correctly in your prepared statement, and could you speak therefore to the future mix, if that is the correct interpretation, of the F–35B and the F–35C in the Marine Corps inventory?

Mr. MABUS. Yes, sir. It has always been true that the F–35B was solely a Marine aircraft.

Senator LIEBERMAN. Right.

Mr. MABUS. But it's also been true that the C version, the carrier version, the naval version, was going to have marines flying those as well. Today we have three Marine squadrons aboard carriers

and we are currently undergoing a tactical air integration look across the Navy and the Marine Corps to see what the proper mix is of Cs for the Navy and Marine Corps, to make sure that we continue that integration and make sure that marines continue to fly off carriers in strike fighters, as well as in vertical takeoff and landing aircraft.

Senator LIEBERMAN. General, could you give me your reaction to this? Is that mix at this point acceptable to the Marine Corps? Am I wrong that you had originally hoped for a pure STOVL variant fleet?

General AMOS. Senator, you are correct that that was the initial plan. Let me back up just a little bit. We have always been fans of tactical air (TACAIR) integration. As the Secretary said, we have Marine squadrons right now on Navy carriers. On the USS *Enterprise* right now, we have Marine F–18s. So we do that. We like that. It's good for both our Services and the naval force.

But when we set the requirement in for STOVL aircraft, our hope was we would be able to some day fly those versions off of CVNs, naval aircraft carriers. That's yet to be seen, whether that will be possible. So in the meantime, it would seem prudent that we would buy some number of C variants, even early on, so that we can begin to transition our force there. But it will be a proportional number in the overall buy of the STOVL. The STOVL is still our primary focus.

Senator LIEBERMAN. Okay, good enough.

My time is up. Thank you.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Wicker.

Senator WICKER. Thank you.

Admiral Roughead, let me follow up on Senator McCain and Senator Lieberman. Given the testimony that we've received today that Libya's air capabilities are relatively modest, that their air defenses are concentrated in a relatively small area, what would General Gaddafi's options be if the United States imposed a no-fly zone? Why would we not expect it to be completely successful?

Admiral ROUGHEAD. I think the first question, Senator, is, as a precursor, you would be entering into combat operations there.

Senator WICKER. We would be entering into air combat operations?

Admiral ROUGHEAD. I think that in addressing a no-fly zone you want to suppress or destroy any of the air defense systems that could put friendly forces at risk. So that's the first element, I believe, of entering into a no-fly zone, is likely combat operations on Libya.

So I think in talking about a no-fly zone there are some precursor steps that have to be taken.

Senator WICKER. What would General Gaddafi's options be?

Admiral ROUGHEAD. To try to defend against that would be the primary options. But the fact is that that would be the first step that would have to be taken.

Then it's also the issue of, what forces would be used, where are they postured, what are the basing and the overflight issues. I think all of those have to be sorted through. We've done no-fly

zones before and there is a significant infrastructure that backs them up, whether it's naval or land-based.

Senator WICKER. That infrastructure is available to us and to our allies, is that not correct?

Admiral ROUGHEAD. I think that's a function of the countries that would be involved, to make that decision.

Senator WICKER. Are you involved in the discussions with the Secretary of Defense as to whether we proceed with a no-fly zone?

Admiral ROUGHEAD. We have had discussions on Libya in the tank among the Joint Chiefs, and we are involved in positioning our forces to support the efforts that are currently being undertaken in Libya. We're looking at the situation there on a daily basis.

Senator WICKER. Thank you very much for getting further into the details about that.

Let me shift gears to Navy Week and mention to both Admiral Roughead and to Secretary Mabus how much we appreciate being able to host Navy Week in the State of Mississippi during the week of March 19 through 27.

As both of you know, 2012 will mark the 60th anniversary of the founding of the Seabees and their presence in Gulfport, MS, with our four naval construction battalions based in Gulfport. Let me start with Admiral Roughead. What is the past, current, and future contribution of the Seabees? What role do you see the Seabees playing in your vision of the future of the Navy?

Admiral ROUGHEAD. Sir, as a matter of fact, I was in Gulfport last Friday meeting with about 3,000 Seabees. If that doesn't energize you, nothing does.

But the Seabees I think in the Navy are legendary, and I would even say, beyond that within the military, for their combat engineering skills, their ability to go into unimproved areas and provide the facilities that forces need to operate. I know they're linked very closely to the Marine Corps in that regard. They've been very busy over the past few years, particularly in Iraq and in Afghanistan. In fact, we currently have as many Seabees deployed now as we did during the Vietnam War. So they are extraordinarily busy.

But they also function in a humanitarian role, where they will go into countries and develop infrastructure, train some of the indigenous forces that are there. So that's what they have been doing, and I see Seabees doing that well into the future.

Senator WICKER. Do you see their role diminishing in the future or increasing in the future?

Admiral ROUGHEAD. I think the skills and the talent and the competence of the Seabees will prevail. It will be a question of how much usage the combatant commanders demand with regard to Seabees, combat engineers. Clearly, I would predict that as we eventually bring the level of forces down in Afghanistan, of course, Seabees are part of that, so they'll be coming out. So they're probably at a fairly high level right now. But I think the future is yet to be borne out.

Senator WICKER. Secretary Mabus?

Mr. MABUS. I concur with everything the CNO said. I visited with Seabees in Afghanistan and I've joked with them that if you

give them a piece of plywood and a Skilsaw they can build anything, maybe even our fleet.

But I do think that the skills that they have for the missions that are coming in the future, whether it's combat missions or whether, as the CNO pointed out, humanitarian assistance mission, partnership-building sorts of things, that those skills will be in demand and will be needed.

Senator WICKER. Thank you very much.

In the few seconds I have remaining, Secretary Mabus, in your verbal testimony and also in prepared testimony, I wanted to make sure that we understand precisely what you're saying about the effect of a year-long CR. You say it will prevent procurement of two nuclear reactor cores. Will it delay it or will it prevent it? And prevent completion of one *Arleigh Burke*-class modernization. Are you being precise that it will block these two advances?

Mr. MABUS. If a year-long CR occurs, we cannot spend any money on either those nuclear reactors or either of the new start *Arleigh Burke* destroyers.

Senator WICKER. It will in effect be a delay, would it not?

Mr. MABUS. That assumes that at some point we are allowed to begin spending that money. Under a year-long CR for the remainder of the fiscal year, we would not be able to do that.

Senator WICKER. I understand. I would simply observe there are concerns about spending, but I don't see why on a bipartisan basis and a bicameral basis we can't decide as a Congress to fund the military capabilities of this Nation on a permanent basis and then deal with the rest of the discretionary budget at a later time. I don't see a reason why we shouldn't go forward this week or next week with a full defense appropriation aspect of our funding and deal with the other aspects of it later on.

So thank you very much, and thank you all for your service.

Chairman LEVIN. Thank you, Senator Wicker.

Senator Reed.

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

I can't help but follow up my colleague from Mississippi and the ranking member of the Seapower Subcommittee by commending the Seabees. They were organized in Rhode Island in 1942 and one of their signature contributions to construction was the Quonset hut, named after Quonset, RI. So thank you, Senator. I'm glad we could help out the Gulf Coast.

First, Admiral Roughead and Secretary Mabus, one of the critical issues, but it doesn't get a lot of attention, is maintenance of the fleet. Could you comment upon the stress that you're under now in terms of maintenance? We have seen reports that there's an increasing number of failures in the Bureau of Inspection Survey, up dramatically from about 3 percent in the mid-1990s to now 13 percent in terms of ships that are coming in and being inspected, and that the life of the ships, the DDGs especially, is now 25 to 27 years, not 30 or perhaps even 40.

Admiral Roughead, you might start and then, Mr. Secretary, your comments.

Admiral ROUGHEAD. Yes, sir. Looking at that when I came into this position, I looked at the whole approach to maintenance, how are we maintaining our ships. We did several things. We reintro-

duced the engineered based maintenance cycle for our ships, put resources to the teams that do that work. We're beginning to see the benefit of that now.

We also are putting more sailors back on the ships. We had taken them off. With the generosity of Congress, we were able to increase our operation and maintenance funding, so we were able to build that up to the point where we're spending hundreds of millions of dollars now more on maintenance than we were just a couple of years ago. We've taken sailors and put them back into our intermediate maintenance activities, so that more maintenance can be done proximate to the ships in the piers.

So I think all of that adds into improving the maintenance of the ships. We've seen some positive trends in our inspection and survey reports and results. So I think we're doing substantive things. We're investing the money in the right place to improve that ship maintenance.

Senator REED. Mr. Secretary?

Mr. MABUS. Senator, everything, the details that the CNO just said, have been put in place and, as he said, we're beginning to see some improvements. The Navy, unlike other Services, maintenance is our reset. We reset in stride. So if we're going to get to the fleet that we need to get to, if we're going to get the numbers of ships that we need to get to, we simply have to make them get to the end of their normal or extended service lives.

It's one of the things that the CNO has focused on the most closely. It's one of the things that I watch most closely. I do believe that with some of these efforts, putting more intermediate maintenance on the pier, putting more sailors on ships, 2,200 more on our ships, with the specific goal of doing preventative maintenance, so that when a ship comes in for a maintenance period it is more ready and the maintenance will mean more.

Finally, I do want to reiterate one thing that I said about the CR. The chairman pointed out that we've already cancelled five availabilities. We face having to cancel up to 29 ship availabilities, and these, to go to what Senator Wicker said, are not postponements. These are cancellations, because we have other ships in queue waiting behind them.

Senator REED. Thank you, Mr. Secretary.

Again let me address a question first to General Amos and if the Secretary would like to comment. That's on the F–35B. It's slipped in terms of its timeframe. There are some technical challenges. I had the chance to go down to Pax River and talk to your very impressive group of test pilots and program managers.

What is the probability that this is the last major schedule change and that we're finally on track? I know that's a judgment call, but any advice, since you're an aviator and you have great expertise, Commandant? Please comment.

General AMOS. Thank you, sir. Obviously, with that introduction, you know I pay very close attention to it. This, as I said in my opening statement, is critical to our expeditionary capability, and we've talked about that before. My sense right now is that the program management has absolutely the right guy in there with Admiral Venlet running it. I think the oversight at OSD is appropriate. Certainly the oversight in the Department of the Navy is

appropriate. I will promise you, as you and I have talked before, the oversight at the headquarters Marine Corps level and at my desk is very appropriate.

So my sense where we are now is that, with the generosity of both Congress and the wisdom of Secretary Gates, putting more money back into this, trading some tails so that we could get this program back on track, things are lined up now for success. I'll give you an example of what I'm talking about. Right now the STOVL variant, which is the one that everybody refers to, has flown 140 percent of its scheduled test flights since January 1. So in the last 70 days, the airplane has flown 40 percent more of its scheduled test flights. It's flown about another 200 percent of its scheduled test points. Within each flight it's designed to get five or six specific points of flight test.

So it's performing better there. It's already flown I think something like four or five times the number of vertical landings just this year than it did all last year. I took a brief yesterday on the structural issues, the bulkheads, the weight gain. These things are progressing well.

So from my perspective as I look at it, I'm going to pay attention to the aircraft performance, how it's doing in flight, both in vertical and horizontal flight, the weight growth in the airplane, which in a vertical landing airplane is very critical. Right now we're on a good glide slope in the weight growth, and we're not going to add a pound that I'm not aware of to that airplane. We have to talk about it.

Then, finally, the engineering challenges and the test performance. So my sense is I'm optimistic. We are on a 2-year watch. It's my hope that we can get off that well before 2 years, and it's my intent to some time this spring offer to the Secretary of Defense a set of metrics that he might consider as the threshold for getting the airplane off of probation and getting it back into the regular mindset of production.

Senator REED. Any comments, Mr. Secretary?

Mr. MABUS. I can't improve on that answer, Senator.

Senator REED. That's why you're such a good Secretary and a good lawyer.

A final question to Admiral Roughead and the Secretary, the *Ohio* replacement program. I know this is a major issue. It not only touches the fleet, but also our strategic posture, particularly after the recent START Treaty. It's the future of deterrence, nuclear deterrence for the Nation. It's the most survivable aspect of nuclear deterrence.

I think you have made significant progress in ensuring that we design a ship that is not only capable, but affordable. But there's still this issue of sharing the costs, because this program is a Navy program, but it has huge, huge implications for the overall strategic posture of the United States, particularly the deterrence posture with nuclear weapons. So why don't you comment on any efforts to provide support, as we've done on other programs like the missile defense program from DOD, not just from the Navy.

Admiral ROUGHEAD. Yes, sir, and I appreciate the question. Clearly the *Ohio* replacement is, as you said, the most survivable. What we're doing is we're building a submarine that will be on pa-

trol for this Nation in 2080. So that's where the research and development is going, and our focus on stealth and mission capability is where we have to go.

We also know we'll be introducing that submarine at a time when there are other significant costs being imposed on the shipbuilding budget. While we're early on in the program, I do believe that there has to be a discussion about how the submarine is resourced in the context of everything else. I think we're at the front end of having some of those discussions.

Mr. MABUS. In the research and development that's going on now to begin to build the first of the *Ohio*-class replacements in 2019 to go on its first patrol about 10 years later, we've already taken a billion dollars a boat out of the cost to build this submarine. We're looking to take more money out.

Right now we're at about $5.4 billion per boat. The number needs to start with a four in some way for these boats. But even at $4.9 billion per boat, to build 12 of these beginning in 2019 and continuing throughout the decade of the 20s will require substantial resources that, if they all come from the Navy, would put a dent in the rest of our shipbuilding programs.

That's one of the reasons we have put it in and tried to be exactly honest and exactly precise about how much this ship will cost and what it will do to the rest of the fleet, so that these discussions, these debates, and these decisions can be made with the facts of what will happen clearly in mind.

Senator REED. Thank you.

Thank you very much, Mr. Secretary, General, Admiral.

Chairman LEVIN. Thank you, Senator Reed.

Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

Admiral, first let me join everyone in thanking you for your extraordinary service. It's very difficult for those of us who have worked with you for a number of years to recognize that this is most likely your last Navy posture hearing. I want to thank you for your decades of service.

I want to pick up on the issue that Senator Reed just raised. Secretary Gates recently testified that a number of our surface ships that were built during the Reagan years will basically reach the end of their planned life in the 2020s, and that coincides with the time that we will be bringing on the new ballistic missile submarine. Obviously, we need both, but that new submarine is going to swallow up a great deal of the shipbuilding budget.

I understand that there are several precedents for national strategic programs that are funded through defense-wide budget lines. For example, ships supporting sealift for all of the military Services are funded through the National Sealift Defense Fund. As has been mentioned, the MDA budget funds for activities related to ballistic missile defense irrespective of the military Service involved.

So if we're going to proceed, as we must, with the new submarine, but not harm the shipbuilding budget, which is already below the optimum number that you have said repeatedly is the floor of 313—I believe we're at only 286 or 287 right now—would an alternative worth pursuing be looking at a defense-wide budget line, rather than trying to fund this submarine out of shipbuilding?

Admiral ROUGHEAD. Thank you, Senator, and thank you for your very kind comments. It's been my pleasure to work with you over these years, not just as CNO, but even before, and thank you for your great support of the Navy.

But I do believe that, in addition to the points that you mentioned, in the 20s we're also going to still be refueling our aircraft carriers. To make all of us feel a little bit older, we will also in that decade be taking out of service some of the *Nimitz*-class aircraft carriers as they reach the end of their 50-year life.

So there are those two costs that have to get put in there as well. So there's a significant pressure on shipbuilding. Yet the Nation I believe will still need the global Navy that it has today. Whether it's a defense-wide fund or whether there is consideration for those expenses that are being taken into account, I do believe that that has to be addressed, because if it's not taken on and if it's not thought through with a solution that's different than what we have today, we as a Nation are going to find ourselves shorted in a Navy.

Senator COLLINS. I agree with you and I look forward to working with you and the Secretary and my colleagues trying to come up with a solution.

Secretary Mabus, it was so appropriate that you began your testimony today reminding us of the dire impact on the Navy, indeed on all of DOD, of continuing to operate under a CR, particularly one that is extended 2 weeks at a time. That really is an impossible situation.

Just last week I filed the defense appropriations bill, the entire bill, as a modification to an unrelated piece of legislation, to try to emphasize to the Senate leaders that this should be our priority, completing work which should have been done prior to October 1 of last year.

You mentioned the dire impact on readiness, the effect on our sailors and marines, the fact that we are putting in jeopardy as many as 10,000 private sector jobs at a time when our economy is very, very weak. But isn't there also another adverse impact, and that is that these delays cause disruptions in the supply chain that are costly? They're not only depriving our soldiers, sailors, marines, and airmen of needed technology and equipment, but they're increasing the ultimate costs that we're going to pay.

You're going to have to renegotiate contracts. There are disruptions in the supply chain that are costly. Isn't this the case where the longer that we operate under a CR, the more you're likely to have to pay for needed equipment?

Mr. MABUS. I think that's absolutely correct, Senator. The ripple effects of this, we're beginning to feel some now. The longer it goes on, the more those effects take place. Senator Wicker pointed out that we're delaying ship starts, perhaps not cancelling them. But if you delay ship starts this year, we have other ship starts due next year and the year after that, and, as I said in my testimony, it will take us years to recover from this, from the second and third order effects of this and the ripples that go out from it. The supply chain is certainly one of them. Breaking multi-year procurements is another that we are saving money on today. If we are unable to

fulfill our part of the multi-year, we'll have to go in and renegotiate that, for example on shipbuilding.

Senator COLLINS. I think that's a very important point. Some of my colleagues who are supporting a CR are arguing that it saves money. I think it not only is disruptive, but it's going to end up costing us more money in the long run.

Admiral Roughead, just a very quick final question for you. As you may know, Senator Webb and I along with some of our colleagues commissioned a recent Government Accountability Office (GAO) report that found that the Navy's modernization program for our public shipyards, which includes the Portsmouth Naval Shipyard in Kittery, have been underfunded. Indeed, the Navy's own estimate of the backlog at the Portsmouth Naval Shipyard alone exceeds $500 million.

Are you looking at whether you could use some reprogramming or shifting of funds to try to meet some of the more urgent needs, which also would translate directly into increased efficiency and productivity? So again, it's an investment that saves you money in the long run.

Admiral ROUGHEAD. Yes, Senator. We're always looking at our MILCON and where do we get the most bang for the buck, and it goes beyond the shipyards. But we do look at the shipyards and in fact, even though there is what is considered a backlog of maintenance, we are investing above the percentage that's required by Congress to a certain degree.

But I'm always looking at projects, individual ones, to your point, that if we pay a little bit today maybe we can gain in productivity later on, and we're always looking at that.

Mr. MABUS. Senator, if I might add that one of the exemptions to the civilian hiring freeze that DOD announced was for shipyards, to meet exactly what you were talking about.

Senator COLLINS. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Collins.

Senator Webb.

Senator WEBB. Thank you, Mr. Chairman.

Admiral, let me add my own congratulations and appreciation to you for all the service that you have given our country. It's been my pleasure to have known you and worked with you in a number of different capacities for a good 15 years or more. I appreciate the stewardship that you've shown, even in your testimony today, for the people who come after us and what we leave behind.

There's been a number of comments today about the situation in Libya. I think it's important for me to at least express my support for the position that Secretary Gates has taken on this issue, and others in DOD. We all know that military commitments, however small, are easily begun and in this region particularly very difficult to end. History shows that. This is a region full of surprises.

I, for one, am of the opinion it's not a good idea to give weapons and military support to people who you don't know. When it comes to the opposition in Libya, we don't know them. Secretary Clinton was very clear on that last week in her testimony before the Senate Foreign Relations Committee. So it's very important, I think, to

proceed responsibly and very carefully as we approach that particular issue.

Admiral, I, as you would expect, strongly agree with your position about the number of ships that we should be providing in the Navy, that 313 should be a floor. I've been very concerned and vocal about my worry that we've taken our eye off of our strategic forces in general as we have spent so much of our money, energy, and people in Afghanistan and Iraq over the past 8 or 9 years.

This is particularly true in East Asia, which I view to be the central focus of our long-term strategic goals. We can't ignore what the Chinese military has been doing, not only in this area but in other areas. They've been very active over the last year particularly. But we have an obligation to position ourselves properly in terms of our military forces and our basing systems.

In that regard, I'd like to mention my hope that we can do a better job on this situation with Okinawa and Guam. As you may know, Secretary Mabus, I worked as a military planner on this issue many years ago. The attempt at a solution of the Okinawan situation as it moves into the Guamanian situation has now been on the table for 15 years.

I was recently last month the keynote speaker at Shimoda conference in Tokyo, which was a gathering of the minds in terms of how we are going to reshape and strengthen the United States' relations with Japan. I can tell you that this issue is one of the most serious problems in our relationships with the Japanese, but also in Japanese domestic priorities. You can see the turbulence that it has put at the very top of the Japanese Government because we have not yet resolved this issue.

It also is one of our principal challenges in terms of the structuring of our presence in East Asia. I was out there last year on Okinawa and Guam. I think I'm going with the chairman next month also on a visit there.

I just really strongly believe we have to put this on the front burner. It's one of these types of issues that, since it's not hitting us in the face every day, we tend to push it away. But it's now been 15 years. We need answers. Whatever the answers are, we need answers for the stability of our relationships with Japan and for our future in the Pacific.

I'm not sure actually who's carrying the ball on this in DOD. I think the Marine Corps—at least they're heavily present when we go out there and talk to people. But, Secretary Mabus, I'm not sure. Who's the executive agent here, and how do we get this thing resolved?

Mr. MABUS. Senator, we're the executive agent for Guam. You're right that the Marine Corps is heavily involved. But it is not simply a Navy issue. It rises to the top leadership of DOD.

I can assure you from the Marine Corps, from the Navy, and from DOD, it's on the front burner. It takes up a large part of our focus, for exactly the reasons you talked about. It affects our laydown in the entire Pacific. It affects our presence in the western Pacific for the next decades. We had an agreement with the Government of Japan on a way forward. That agreement is several years old now. One of the key components before we begin to move is Government of Japan and the Government of Okinawa move-

ment on replacing our airfield at Futenma. The Marines have to have that air capability on Okinawa regardless of what happens going forward.

So we are focused on it. I will quote Secretary Gates in his hearing when he said that he was "hopeful that progress would be made soon on this issue," as we all are.

Senator WEBB. This is an enormously complex issue in terms of all the moving parts, and I know that there's been some good adjustments already in terms of the Marine Corps footprint on Okinawa, moving it further away from the industrial areas, and also the environmental aspects, particularly on Guam.

But I can't say strongly enough how important it is we put good minds and good leaders on this, for all the reasons that I said: the future of our relationships with Japan. I hear it all the time when I'm with the foreign ministry, the defense ministry in Japan, and with their political leaders, and for our future. So I hope we can have some good discussions before the chairman and I go to Japan and Guam next month, and maybe we can come up with a better way to approach this.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Webb.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman. Sorry I was bouncing back and forth. I had a Senate Small Business and Entrepreneurship Committee hearing as well.

Mr. Secretary, first of all, and Admiral, thank you also, just to reiterate. I appreciate your service and family sacrifice.

Mr. Secretary, just to touch on what Senator Collins was saying, the CR, the 2 weeks, do you think that jeopardizes the safety and security of our country in any way, that continuing on in sporadic means and measures?

Mr. MABUS. I think that it, as I tried to lay out in my opening statement, it has some profound implications for the Navy and the Marine Corps. If the CR continues for the whole year, as we said, flying hours will go down, ship steaming days will go down, the availabilities that we have for maintenance for naval ships. The procurement account for the Marine Corps could go down by as much as a third.

We will not be able to meet payroll by the end of the fiscal year without moving monies from other accounts, and procurement is one of the few places we can get that. In terms of shipbuilding, we will not be able to start the second *Virginia*-class submarine, which will break the multi-year on that, which will make those submarines more expensive. We will not be able to start the two *Aegis*-class destroyers.

Senator BROWN. In plain English, do you think our safety and security is in jeopardy as a result of the delay?

Mr. MABUS. I think that today the Navy and Marine Corps will meet whatever safety and security needs America has. The danger is what happens in the future, what happens to us because of these shortfalls now.

Senator BROWN. To take it a little step further, do you think the lives of our soldiers are in jeopardy as a result of the delay. If it continues?

Mr. MABUS. No, I don't think it risks lives of our marines and our soldiers, because the OCOs are being funded. But I do think—and I know I'm beginning to sound like a broken record, but it's the effects on the future.

Senator BROWN. I understand. I appreciate your honesty.

One of the best ways, I've always felt, and I've heard through testimony from many of you and others, is the open and honest competition. With regard to the LCS, the dual procurement strategy is a perfect example of that type of savings if we strictly enforce competition. Mr. Secretary, can you comment on the importance of implementing competition in our Nation's acquisition strategy, where appropriate, especially when we're deciding to buy massive amounts of equipment costing taxpayers billions of dollars over the course of several years?

Mr. MABUS. Competition certainly worked in terms of the LCS. When we competed two manufacturers against each other with two different variants, the price came down pretty dramatically. Now, I will say that the LCS program was unique in the sense that we had always planned on having two suppliers. We had never looked at this program, regardless of how many variants we had, as coming from one shipyard, because we wanted to keep competition in the program.

Senator BROWN. You're ultimately going to award a contract to one of them, though, based on the specifications, the capabilities, and the like, correct?

Mr. MABUS. Yes, sir. But whoever—if we had down-selected to one variant, whichever shipyard won had to give us the technical data package, all the drawings, all the engineering, so that we would then the next year bid it out to a second shipyard. We were always going to have two shipyards competing on the LCS.

Senator BROWN. So competition saved $2.9 billion and a 27 percent reduction on the original cost of that savings estimate. The third and fourth ships are scheduled to be delivered in 2012 on cost and on schedule. I guess I'm trying to wrestle the fact that we have that fair and open competition with a relatively small quantity purchase like the LCS and yet we're dealing with a $100 billion purchase of over 4,000 JSF engines for the U.S. and international partners spanning a period of 20 years, which the GAO has twice concluded will save the taxpayers $20 billion.

So I'm wondering if you could explain. Am I missing something in terms of having a sole producer of the engine? For example, what happens if they decide to raise the price? Why is it good for one and not the other? I really haven't gotten a good answer.

Mr. MABUS. Two things set those two programs apart. One is what I talked about, about the fact that we always anticipated having two different suppliers for the LCS, regardless of how many variants we had.

Second, we have paid for most of the engineering, the research and development, the up-front cost of both variants of this ship, unlike the alternate engine, which has only paid for the research and development upfront costs for one of them. So I think there are two major differences between those.

The last thing I would say is, from the Navy vantage point we have rarely had two engines for any of our aircraft, simply because

of space concerns. We can't carry two engines on our carriers. We can't carry two engines on our big-deck amphibs. We simply don't have the space for it. We will only be able to buy one engine for these aircraft, as we do today for our F–18s.

Senator BROWN. One of the things I'm always concerned is about cost overruns and delivering weaponry on time. My concern is, obviously, about doing that with that particular program.

I'd like to just shift gears for a minute. I'm thankful, I think it's about time, that Harvard and the Navy once again are having Reserve Officers' Training Corps (ROTC) on their campus. I think it's long overdue. I'm wondering if you could just comment on what your feelings are about the importance of ROTC on our Nation's campuses?

Mr. MABUS. I was very happy to sign the agreement with Harvard last Friday to bring ROTC back there. As I pointed out there, Harvard trails only West Point and Annapolis in Medal of Honor recipients. I agree with you, it had been gone for too long.

I believe that ROTC and the ability to have different viewpoints coming into our military officer corps, different geography, different viewpoints, different backgrounds, is absolutely crucial. We're continuing to reach out to schools that have, for whatever reason, ended ROTC, to bring it back. The military that protects the Nation ought to be reflective of the entire Nation.

Senator BROWN. So noted. I'm anxious to see whether and how the military science classes will be taking place on or off campus, and hoping that they will be fully implemented in the ordinary course like every other organization has that opportunity.

But I want to thank you for wrapping that up. I saw you smiling a lot in the pictures.

Admiral and General, I'm okay with you. I know we've spoken off-line many times about issues, so thank you for your continued service and the good information.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Brown.

Just on two of the statements that you made in response to Senator Brown, if you for the record would confirm or not confirm the following: First, that more than half the development costs on the second engine have already been sunk; second, that the original acquisition strategy did assume two engines for the F–35. Can you confirm or not, for the record, not now?

Mr. MABUS. Yes, sir.

[The information referred to follows:]

Yes, more than one-half of the F136 development costs are sunk-costs ($2.9 billion through fiscal year 2010 of an estimated $4.2 billion development program). The estimate includes only those costs required to complete development of the F136 engine and does not include all TBD costs necessary to get the F136 to a competitive procurement posture. With regard to the acquisition strategy, yes, the Department of Defense assumed two engines as part of the original acquisition strategy if funding was available for the F136 program.

Chairman LEVIN. It's not my turn yet.

Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman.

I wanted to state how pleased I am to see all three of you gentlemen here today and once again thank you for your service. My late father-in-law, who passed away a little over a year ago at the won-

derful age of 96, was a major general in the Marine Corps Reserve, and he was always very interested in everything that you had to say and your actions, especially during these committee hearings.

But, speaking about the ROTC, my husband participated in the ROTC at Chapel Hill, and I think too that it's a wonderful movement forward that Harvard has reinitiated their program. So I think that's great.

I did want to ask about the amphibious assault ships. I'm a big supporter of the Marine Corps amphibious capabilities. It's the bread and butter of the Marine Corps to have the ability to conduct forcible entry operations from the sea. I think it's important that the Navy not decommission amphibious assault ships earlier than their expected service lifespans without replacements.

I'm concerned that the Marine Corps will not have the sufficient amphibious capabilities to fully support the combatant commanders' requirements within an acceptable level of risk. I'm concerned that the Marine Corps will not have the sufficient amphibious capabilities to meet the demands for all the operational deployments that we're seeing.

General Amos, can you discuss how the amphibious forces have been employed during this past year and talk about how this has helped to inform the recently completed force structure review?

General AMOS. Senator, I'll be happy to. I'm pretty proud of the Navy-Marine Corps team. Just in the last 12 months, you remember, just about a month or 2 from now we had 7 amphibious ships full of 5,000 marines and sailors off the coast of Haiti. When you could only put one airplane or two airplanes on the ground in the airport, everything else was clogged, it was the naval amphibious force that was providing the relief—water, food, medical supplies, evacuation—for 45 days.

So that's where the last year began. The 15th MEU sailed off the coast of Pakistan and supported the Pakistan relief operation, flying their CH–53 Echo heavy lift helicopters 400 miles deep into Pakistan, up to the very northern part of Pakistan, to move folks around, provide relief efforts.

While that was going on, the Harriers off the amphibious ships were flying combat sorties into Afghanistan in support of the joint force. Interestingly, one of the ships departed, went 1,000 miles due west, captured the Somalia pirates off the Magellan Star.

About the same time, the 26th MEU, from your great State, sailed 30 days early. They hadn't even finished their certification yet, and they were able to certify en route. They joined the 15th MEU with their three ships to help support the Pakistani operations.

1,400 marines off of the 26th MEU are now ashore in the Helmand Province, reinforcing success for our forces on the ground there.

As you've just seen, the 26th MEU sailed two ships up through the Suez and into the Mediterranean, now joined by marines from your great State as well, the First Battalion, Second Marines, poised off of the Mediterranean.

I haven't counted the 31st MEU in the western Pacific, that came on the back side of that super typhoon in the Philippines.

So lots—there is no shortage of work for the marine expeditionary amphibious units. They are very successful.

Senator HAGAN. Certainly.

Secretary Mabus, in light of those comments, is the Navy reviewing and reconciling the amphibious requirements, ship retirement schedules, and the 30-year shipbuilding plans?

Mr. MABUS. Senator, we keep a close eye on that. We have extended the USS *Peleliu* for a year, its retirement date. But the amount of effort, the amount of money, and the amount of people it would take to continue some of these very old amphibious ships now—the people are needed for other ships coming on line. The amount of money would take away from the newer ships we're building.

We're building toward, and we're in sight of getting there, to having the 33 amphibious ship capacity, 11 big deck amphibs, LHAs, LHA(R)s, 11 LPDs, 11 LSDs. If Congress approves our shipbuilding plan, we will have 11, 11, 11 by 2017.

Senator HAGAN. Thank you, Secretary Mabus.

I also understand that the Department's restructuring of the JSF program, including the recent 2-year probation of the Marine Corps' STOVL, the F–35B. The F–35B is fundamental to the expeditionary nature of the Marine Corps and this aircraft is also essential to how the Marine Corps deploys and utilizes its aviation assets in theater.

This aircraft also provides the Marine Corps with the capability to land on the improvised airstrips and launch from the large-deck amphibious assault ships. It also provides the Marine Corps with the ability to rearm and refuel in the forward operating bases (FOB).

Currently the AV–8B Harriers are approaching the end of their service life and the aircraft and its parts are no longer being produced. I know that the Fleet Readiness Center in Cherry Point in North Carolina, the engineers there, they actually engineer the replacement parts.

Secretary Mabus and General Amos, what would be the impact of terminating the F–35B on the Marine Corps' ability to actually project the power that is necessary in some of these remote expeditionary environments? What effect will that have on the joint force capabilities in theater, as well as the Marine Corps' force structure? What would be some of the near-term milestones that you would expect for the Marine Corps to achieve to get the F–35B back on track?

Mr. MABUS. Senator, I will give a very brief overview and then turn it over to the Commandant, who is far more eloquent than I am about the F–35B.

The Commandant earlier today pointed out that the F–35B is a critical capability for the Marine Corps, the vertical takeoff and landing, for all the reasons that you have laid out. The 2-year intense look at it, or the probationary period, I think is going to give us an opportunity to focus on it and to make sure that the issues associated with it can be fixed within weight limits and cost limits.

The Commandant has stated that he is now a program officer on this, and he gets updates on a very frequent and very routine basis. Some of the milestones that we're looking at: the number of

test flights this year, this calendar year, is at about 140 percent of where we expected to be, so we're ahead of schedule there. The number of test points on those test flights, we're almost 200 percent there.

They have achieved vertical takeoff and landings, more vertical takeoffs and landings so far in the first a little over 2 months of this year than they did all of last year. It's at least my understanding, and then I'm going to turn it over to the Commandant, that the issues associated with the B version are engineering in nature, and the question is whether those engineering issues can be solved inside weight limits and inside financial boundaries, and that that is what we're concentrating on.

General AMOS. Thank you, Secretary.

Secretary, as I said in my opening statement, the way we employ our airplanes in the Marine Corps, we're the blue collar aviation for the United States of America. We get out, we get dirty. We fly in places where there are unimproved strips. We did it all the way to Tikrit when we crossed the border in March 2003. We had Harriers landing on highways. We flew off of narrow roads. We flew off of bombed-out runways and taxiways, all the way past Baghdad into Tikrit.

So that's the way we operate. There are roughly 10 times the number of small airports around the world than there are larger ones. That fits us. We build our own runways when we have to. We have two of them in southern Afghanistan right now. One of them was Poys. We built it in about 30 days out of aluminum matting, so we could fight the fight for Marja a year ago at this time.

So that's the way we employ it. We also fly them off the large-deck amphibious ships. So today, with 11 carriers and 11 large-deck amphibious ships, our Nation—this is a national capability—has 22 capital ships flying TACAIR aviation off of them. Now, imagine a couple of years from now being able to have F–35Cs on board those 11 aircraft carriers and F–35Bs flying off of those 11 large-deck amphibs. So our Nation would have for the very first time 22 capital ships with fifth generation capability flying off of them.

So this is more than just the Marine Corps. If we lose the F–35B, there is no plan B for fixed wing airplanes on the large-deck amphibs. Our Nation's capability to project power and influence situations will be cut immeasurably, not in half. Certainly there are more airplanes on an aircraft carrier than there are—or fixed wings, than there are on an amphib. But it would be significant, and there is no plan B for that, ma'am.

So the F–35B is a requirement. I'm optimistic. What I'm seeing now is very encouraging.

Senator HAGAN. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Hagan.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

I'd like to begin by again thanking all of the three witnesses for your very distinguished service to our Nation. Admiral, I'm new to the committee, but I'm sorry that I'm here for the last of your testi-

mony on this issue, and simply say thank you and congratulate you on your extraordinary service to our Nation.

I'd like to pick up, General Amos, if I may, on the last answer that you gave. I assume from your testimony that you would prefer to see the resources that might be devoted to an alternative engine for the JSF devoted instead to the F–35B alternative?

General AMOS. Sir, we made a decision, the Marine Corps made a decision, in the late 1990s to skip a generation of airplanes, to skip a fourth generation of airplanes, going from our F–18s, which is what we would call a third generation capability, and go on a procurement kind of diet for about 10 or 12 years to buy the F–35B. So that position has not changed, Senator, and that's where we are today.

We need the airplane. We're confident in it and it fits the way we operate our airplanes.

Senator BLUMENTHAL. You would forego that alternative engine, the second engine, as it's been called, and instead devote those resources to that plane that you need so much?

General AMOS. Senator, I would, because we are a Navy-Marine Corps team and we operate off of naval vessels, and for the very same reason that the CNO and the Secretary of the Navy articulated earlier, there's just simply not enough room to have different types of engines, different types of test equipment, tool sets, procedures, and that kind of thing on naval vessels.

Senator BLUMENTHAL. Thank you.

I apologize if I may seem to be repeating one or more of the questions that have already been asked, but I want to return to the *Virginia*-class submarine procurement program, if I may, Secretary Mabus and Admiral Roughead. Could you outline for us what the impact would be on the procurement program for the *Virginia*-class submarine if there is no budget for the fiscal years 2011 and 2012 and we continue with a CR? I have in mind particularly the Admiral's testimony that so far the submarines have been delivered under budget and ahead of schedule. So I'm wondering if there could be continuing negotiations, as you've outlined, to continue the two-sub procurement program even with a CR.

Mr. MABUS. Senator, under the rules of a CR as they are in place today we could only begin to build one *Virginia*-class submarine this year. We are scheduled to build two, two each year for the next 5 years. We have entered into a multi-year procurement on the *Virginia*-class submarine, which has driven the price down even further, giving the contractor some stability in terms of their base, their training, their infrastructure.

So if we are unable to begin the second *Virginia*-class submarine, which would be the case under the current CR, not only would we jeopardize the total number of ships that we have; we would also break the multi-year agreement, which would cause the cost of those ships to rise. We would have to re-enter negotiations because we would not have ordered the number of ships we committed to under the multi-year.

Senator BLUMENTHAL. So even with the best of intentions, very likely the cost of that *Virginia*-class submarine program would rise as a result of continuing with the CR, as opposed to having a budget in place?

Mr. MABUS. Yes, sir. If we are not given relief on new starts, we will not be able to build the second one and the cost would almost certainly rise.

Senator BLUMENTHAL. General Amos, in the time that I have left I'd like to focus on an area that hasn't been covered so far, and that is the very impressive part of the report that you've given us today on some of the work that's ongoing with respect to the diagnosis and treatment of traumatic brain injury and post-traumatic stress. I am tremendously impressed by the general description that you've given in this report on the focus, the increased priority given to this very troubling area, and in particular the in-theater restoration center that provides comprehensive diagnosis and the proactive outreach that the Marine Corps has undertaken whenever any member of the Marine Corps is involved in a concussive event.

I would appreciate further details, perhaps in a later session or in written form, whichever you find best to do, and invite you now just to provide some additional details if you wish. But I would very much appreciate a more detailed briefing, because I think that for all the Services this is a major challenge going forward in this conflict and setting an example for future conflicts.

[The information referred to follows:]

The Marine Corps is undertaking a proactive, comprehensive approach to address the challenge of Traumatic Brain Injury (TBI)/Post-Traumatic Stress (PTS) including prevention, education, early identification, treatment, rehabilitation, and reintegration. We are working closely with the Defense Center of Excellence, which is the Department of Defense lead agency on efforts to improve the prevention, identification, and treatment of TBI/PTS. We are actively implementing the requirements of Directive Type Memorandum 09–033 regarding mild TBI/concussion and have launched a mandatory screening protocol for marines exposed to blast events in theater.

Our Navy medical personnel and leaders are receiving training on new event-based protocols and Marine personnel receive TBI/concussion training prior to deployment. Marines exposed to a potentially concussive event receive a mandatory medical evaluation and requirements are in place for Marine leaders to report on personnel who are exposed to potentially concussive events. Medical evaluation results are documented in medical records, and extra precautions and evaluations are in place for marines with repeat/multiple concussions.

The Marine Corps, with Navy support, has established a Concussion and Musculoskeletal Restoration Care Center (CRCC) in theater. This center provides frontline care to patients with mild TBI/concussion and has dramatically improved identification, diagnosis, treatment, outcomes, and return to duty rates. CRCC provides comprehensive interdisciplinary care for concussion, psychological health, and musculoskeletal injuries. Interdisciplinary services include Family Medicine, Sports Medicine, Mental Health, Physical Therapy, Occupational Therapy, Acupuncture, and Spiritual therapy.

Since its inception in August 2010, the CRCC has logged over 8,000 patient encounters, including evaluation and treatment of over 560 patients with concussion. Over 96 percent of patients treated for concussion at the CRCC have had favorable outcomes with return to full duty. In the past, these patients would have required evacuation to Kandahar or Bagram hospitals and/or evacuation out of theater.

Processes are in place to screen all marines for TBI/PTS upon returning from deployment. Every marine evacuated from theater for injuries receives a TBI screen. This is primarily done via the Post-Deployment Health Assessment/Post-Deployment Health Reassessment.

We are exploring new measures to measure blast exposure and improve detection of TBI, including biomarkers, imaging tools, and neuro-cognitive testing. The Marine Corps continues to pursue advances in personal protective equipment, including next-generation helmet technology to mitigate blast effects. Education about TBI has been shown to reduce morbidity following injury, and we are making efforts to ensure education is provided during predeployment briefs and at all levels of leadership training, from small unit leaders up to senior leaders.

General AMOS. Senator, I'll be happy to provide you the details, in fact, all the members of the committee, because I think it's encouraging. It hasn't solved it. The whole recognition of what happens to the brain is certainly not a mystery, but it is not clear because it doesn't happen in the same way to every single person.

But there was recognition over 2 years ago, and it was really a collaborative effort by myself, or by the U.S. Army and the U.S. Marine Corps—so I want to give credit to General Chiarelli and the Army—to try to figure out what happens to the brain when it's rattled as a result of an IED or some type of concussive event, and then what are the net effects.

The net effects are not necessarily long-range PTS, but it could be. But clearly there was a correlation between getting your brain hit hard with a concussive event and the requirement to let the brain rest. In some cases it's 48 hours, in some cases it's a week, maybe 2 weeks. But the very best thing you can do to prevent further damage is to put that brain in some semblance of rest.

So that's what we did. We built a concussive protocol, the one you're referring to in Afghanistan. Marines, soldiers, sailors, when that event happens, they come right back into what we call the wire. They're looked at by a corpsman if that's all we have there. We have cyber technology that allows the doctor at Camp Leatherneck to look in the eye of the wounded marine or soldier or sailor. Then we eventually will move them to that restoration care center at Camp Leatherneck, if required.

The whole idea now is to just provide them the ability to step back, let their brain heal, to prevent further damage. Marines are tough. We lie. When a young lance corporal is asked by his company gunnie, how do you feel, he says: I'm good to go; when in fact, the very best thing the leadership can do is say: We're going to stop right here, young devil dog, and we're going to let you sit inside the wire for a day or so.

We believe—it's too soon to tell; we don't have the empirical data. But we know in our hearts that this is the right thing to do. We'll be happy to provide you more information.

Senator BLUMENTHAL. Thank you very much.

My time is up, but I would like to thank you for returning ROTC to Harvard as you've done and simply offer to be helpful anywhere on any campus, certainly in Connecticut, where I can be helpful if there's any way that we can restore ROTC anyplace where it's lacking now.

Thank you. Thank you all.

Chairman LEVIN. Thank you, Senator Blumenthal.

Senator McCaskill.

Senator MCCASKILL. Thank you, Mr. Chairman.

First, I want to say to you that I am excited about Marine Week in St. Louis in June, and I want to thank, commander, your decision to come to St. Louis. We will welcome the marines with open arms and, since our State has proudly contributed so many brave marines over the history of our military, we are thrilled to host you for that important event.

Secretary Mabus, I know that our military is the best in the world at combat readiness, but we are really bad at audit readiness. I am continuing to be very frustrated with the business sys-

tems within DOD and the ability for us to get a handle on tracking our money and the various services being able to be transparent and viewable across systems.

It is a continuing level of frustration. I do want to applaud the Navy and Marine Corps for making some important progress on service-level auditability. I know you have been working on it, and I know you've identified some net savings by improving your financial management processes.

The program I want to focus in on today is the enterprise resource planning. You are slated to spend about a billion dollars on that in a supply system called the Global Command Support System. The Army is currently fielding a similar system called Global Combat Support System-Army. Theirs will cost nearly $4 billion.

Now, I know you share equipment in theater. That is a reality of the fight, is the sharing of equipment. But these two systems have the same goal, that is tracking supply and equipment, but they're not even going to run on the same software. The Marines are using Oracle and the Army is running on SAP. There's a $3 billion cost differential.

My understanding is that the two systems as designed are not even naturally compatible and that DOD will have to continue to pay just to develop interfaces between these two systems.

I get a headache when I think about all the money that we have thrown away in the Federal Government on data systems and information technology. Now, part of this is unavoidable because the technology has developed so quickly that when we've tried to develop great big systems, by the time it gets ready to be deployed it's already out of date and antiquated.

Some of it is the nature of the rapid transition we've had in this country with technology. But I think particularly within the military there is a problem in acknowledging when we're throwing bad money after good or when we're setting up systems that frankly make no sense in terms of what the ultimate goals are.

Tell me your position on what could be done to make the effort at tracking our equipment, at least the ability to track it between the two branches of our Services that are sharing the same equipment? This is just hard for me to imagine, that we're going to continue down this multi-billion dollar road.

Mr. MABUS. Senator, you and I share a lot of things. One of them is I know my first elected jobs and one of yours was as State auditor of our respective States. I understand the importance not only of auditability, but of these enterprise resource systems to track the things we do.

If you'll also allow me one more moment of personal thing, a friend of mine once described my father as someone who threw nickels around like they were manhole covers, and I am my father's son. I think that we have to be good stewards of the taxpayers' money.

In terms of auditability, what you said, we are making some progress on that and we are focused on that. In terms of the overall resource, the enterprise resource, that system began several years ago to try to get real-time information on things like inventory on things like equipment, on things, as it moved through the system.

I'll be very frank. I don't know what the interface issues are with the Army. But I will find out, as a result of this. We are spending a lot of money to ensure that we can track on a real-time basis, not a week later or a month later, what's happening to all the assets that the Navy and the Marine Corps have.

We should always look for opportunities, though, to be joint, to do things defense-wide.

Senator MCCASKILL. As we are making really difficult decisions in this government over the next decade and we think the hard ones are today and tomorrow and next week, we're going to have hard decisions to make for a long time. What would be an amazing moment would be for the Army and the Marine Corps to sit down, decide whose system is further along, whose system is the easiest to be trained on, whose system is going to have the least amount of support costs ongoing, and to make a decision to use one for both.

I don't know that it matters whether it's the Marine Corps system or the Army system. But it just seems unbelievable to me that we are paying for the development of two separate systems that don't speak to each other. This would be a moment that we could save. Since the Army's is more expensive, I'm hoping that yours is the one that could be utilized. This could be a $3 billion moment, and we're looking for $3 billion moments right now.

This is the kind of thing that I think, until we can demonstrate to the American people that we can at least do these kinds of savings, I don't think they're going to take us seriously on our ability to deal with our long-term debt. So I would love to see—and I will be following up with Secretary Gates and with Admiral Mullen in terms of seeing how many places are there that we could do something like this.

Now, I know this is hard to do, because you've been working on this for a long time, and so has the Army, and there's some separateness been going on for several years, and sometimes it's not wanting to step in and say, okay, all the money we've spent, we're going to abandon that and go forward in a different way. But sometimes that's the smartest thing to do.

General Amos?

General AMOS. Senator, I'm familiar with the GCCS Marine Corps software by Oracle. That effort began—let me back up, just maybe give you a ray of hope. There is a what we call an Army-Marine Corps Board. It's chaired by the three-stars, the head of requirements and the comptroller. So it's the budget and requirements folks. They meet as required, typically about twice a month, and they resolve an awful lot of these issues where both Services come up. It can be a helmet, it can be something like a service weapon, it can be a piece of equipment.

Now, we all have different—not all our equipment is the same, and you know that. But a lot of that compatibility and who's going to buy what, what's going to jump on whose program, is solved right there at the three-star level. So there is an effort that is under way.

The Joint Requirements Oversight Council (JROC), chaired by all the Service Vices and the Vice Chairman, also looks at compatibility across the joint force.

But back to this GCCS, we got halfway through Iraq. We're talking about 2006, and the truth of the matter is we had a lot of equipment on the ground to satisfy those 35,000 marines and sailors. We thought we knew how much we had and we had a variety of systems, about 15, that were tracking. We said we have to come up with something different. Ergo the birth of the requirement from Oracle.

The system right now, I can't speak to the Army's system, but our system is fielding right now in Okinawa and it is probably, of all the software efforts we've ever done in the Marine Corps and spent a lot of money and been disappointed often, this one probably has the greatest hope of all the ones we have.

So let us check with the Army. Let us come back to you with a "here's where we are as two Services." We owe you that, ma'am.

[The information referred to follows:]

The Army and the Marines Corps both used the competitive contracting process to select their respective software applications based on their specific Service requirements. Although the Army and the Marines Corps may share similar logistics requirements, at the highest level they differ in terms of: people; process/mission execution; technology-interfaces; and data.

Although at first glance it seems logical and compelling to have different Services use the same solution, as the Defense Integrated Military Human Resources System taught the Department of Defense, it is enormously difficult, expensive, and very high risk. In 2005, the IT consulting firm Gartner analyzed this question and concluded it was appropriate, cost effective, and logical for the Services to have chosen two different solutions. Also, there was never a requirement for Global Combat Support System-Marine Corps and Global Combat Support System-Army to be interoperable and pass information, so consequently, at the present time they don't. However, if such a requirement arose, the two systems could be made interoperable through the use of an interface.

Senator MCCASKILL. I understand that JROC was designed to do this, but in other hearings we have had some admissions that the culture of JROC had unfortunately too often been, we'll give you what you want if you'll give us what I want; that there had been some of that, as opposed to, okay, we're going to give up what we want and you're going to give up what you want and see if we can't do it together.

I know, because I worked on this in a previous National Defense Authorization bill trying to provide maybe some input from somewhere other than the branches, because it did appear too often that everybody was going along to get along.

General AMOS. Ma'am, having been the Assistant Commandant for 27 months and been a member of the JROC, I found it almost painful sometimes, how we worked our way through situations. But I will also tell you it's more than culture; it's also the way we deploy, in other words, the kind of systems we need. The software has to support the ability to go aboard ship, to deploy expeditionary in places in North Africa, if required. So there are some differences. But we owe you an answer, ma'am. I understand.

Senator MCCASKILL. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCaskill.

Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman.

I apologize, Secretary Mabus, Admiral Roughead, and General Amos——

Chairman LEVIN. Your mike.

Senator SHAHEEN. It's on. Is that better?

Chairman LEVIN. No. Maybe you better change your seat.

Senator MCCASKILL. Change that name tag from Senator Manchin.

Chairman LEVIN. For your sake, not for his.

Senator SHAHEEN. I was assuming it was for my sake, Mr. Chairman. [Laughter.]

—I apologize for missing your testimony. I had to preside over the Senate. But I am pleased that you're still here and hopefully I won't take too much time.

I know that Senator Collins earlier today raised the question about the backlog of restoration and modernization projects at the four public shipyards. It's a major concern to Senator Collins, being from Maine, and to me, being from New Hampshire, because of the Portsmouth Naval Shipyard. I know that a recent GAO report that was requested by Senators Collins and Webb made four recommendations to improve the visibility of the Navy shipyards restoration and modernization needs and quality of life issues.

I would just hope, Secretary Mabus and all of you, that you will take those recommendations very seriously, and look forward to working with you to implement those. Specifically, as I said, I'm concerned about the Portsmouth Naval Shipyard, the fact that no MILCON funds have been allocated to the Portsmouth Naval Shipyard by the executive branch in the last 5 years. So that that means in previous years the shipyard has had to rely on congressionally-directed spending, which included $39.2 million in fiscal year 2008 and $17.2 million in previous proposed fiscal year 2011 spending.

So given the current spending environment and the moratorium that currently exists on congressionally-directed spending, or earmarks, how does the Navy intend to support critical MILCON investments at Portsmouth and at the other public shipyards? Perhaps as part of your answer you could talk a little about how you might prioritize those investments and support modernization.

Mr. MABUS. Senator, if it's acceptable to you, I'll let the CNO answer this, since he answered Senator Collins, so that we can have an absolute continuity of answers.

Senator SHAHEEN. Shoot, I was going to see if you could answer it the same way. [Laughter.]

Admiral ROUGHEAD. I'm sure he could, Senator.

The shipyards, particularly our four public shipyards, are going to be very critical for us in the future, simply because of the amount of nuclear work that we have coming into the window. Accordingly, we are looking at what must be done, primarily for the safety and security issues, particularly as it applies to our nuclear enterprise, and then productivity and quality of life.

Even though we do have the backlog, in point of fact we are investing above what has been the congressional level of sustainment for the shipyards. But we're always looking at what needs to be done for those four areas that I mentioned.

I would also, being perfectly honest, that as we have looked at the level of funding going into the shipyards and as circumstances have changed, we're going to have to take a look at what the future

looks like and how we apportion the MILCON money, not just across shipyards, but really across all of the facilities that we have.

But I think the public shipyards are going to be in a very good position in the coming years from a workforce standpoint, as the Secretary mentioned, being exempt from the hiring limitations, but also they're going to be very busy and very critical to our future.

Senator SHAHEEN. I certainly agree with that and am pleased to hear that you're thinking about that. Can I just press you a little more on, as you point out, you're going to have to prioritize those investments. So have you thought about the factors that you'll take into consideration in doing that?

Admiral ROUGHEAD. Yes, ma'am. Clearly, nuclear safety and nuclear security are foremost, and that applies to the four public yards that we have, and then also the safety of our workforce is paramount. So those are the opening arguments for me.

Mr. MABUS. Senator, in terms of setting priorities, the CNO mentioned this, there is a civilian hiring freeze at DOD right now. Because of the importance of shipyards, we asked for and received an exemption for shipyard hiring, so that we can continue to maintain our industrial base and the work that the shipyards are doing.

Senator SHAHEEN. Thank you. I do appreciate that and think that was very important. I know that at Portsmouth we've had a very competent, productive workforce and we're going to be losing many of those folks because many of them are close to retirement age. So being able to bring on younger people who can start training for those jobs is going to be very important to productivity.

On another issue, Secretary Mabus, I certainly applaud your focus on trying to be more energy independent within the jurisdiction that you control. I wonder if you could talk a little bit more about the kinds of steps that you're taking in the Navy to be more energy efficient. It is a critical security issue, as you've pointed out, and I think it's important for us in Congress and for the public to know that we're moving in a direction to make us more energy independent, especially these days as we're watching what's happening in the Middle East.

Mr. MABUS. Thank you, Senator. As you pointed out, you don't have to look any further than the headlines to know why we need to do this. We've made a lot of progress toward our goal, which we're going to reach, of by no later than 2020 at least half our energy usage will come from non-fossil fuel sources. We've flown the F–18 on biofuels. We've certified our helicopters also on biofuels, as well as our Swift boats. We are currently working on our large surface combatants in that regard.

We are doing a lot of work on efficiencies. We've launched the first hybrid ship. We're looking at putting the electric drive that is on that ship on our new builds as well as retrofitting some of our DDG–51s.

On shore, we have vastly expanded our solar capacity. We've done stuff like smart meters so that we know where our energy's going.

Finally, I want to particularly brag on the Marine Corps, because, like they normally do, they're leaders in this. They have established two expeditionary FOBs, experimental FOBs, one at

Quantico, one at Twentynine Palms, to develop the alternative energy that our warfighters need.

What we import the most into Afghanistan is gasoline. The Army did a study that showed that for every 24 convoys of gasoline, we lose a soldier or a marine killed or wounded guarding that convoy. It also takes marines away from doing what they were sent there to do, which is to fight, to engage, to rebuild.

The first unit that took some of these things that experimental FOBs designed was 3rd Battalion, 5th Marines, which I got to visit right before Christmas in Sangin. Now, they're in some of the toughest fighting in Afghanistan right now, but even in that fight they have taken solar panels and are using them for their command headquarters. They've taken these rollable solar panels and stuck them in their packs.

I was talking to a lieutenant there. A foot patrol now saves 700 pounds of batteries that they don't have to take because of this. They are reducing dramatically their usage of fossil fuels.

The Commandant has just signed out a requirement, an order, that is going to integrate the training on alternative energy as part of the routine training that marines get before they deploy, so that they'll better be able to use these. But we are seeing real advances. We're saving lives, we're using less fuel, and we're making marines better fighters just because they don't have to lug around so much stuff.

Senator SHAHEEN. That's very impressive. Thank you. Perhaps you can share some of those technologies with the rest of us in government, so that we can be more efficient and more energy independent.

My time is up. Thank you.

Chairman LEVIN. Thank you very much, Senator Shaheen.

I think the figure you used on that point was that that unit was saving 90 percent? Is that the right number, of its fossil fuel? The fuel used decreased 90 percent with that company, I believe.

Mr. MABUS. That company is saving a lot. It's probably not 90 percent.

Chairman LEVIN. All right.

Mr. MABUS. But I can get you a very specific number, but its energy usage, in some of its combat outposts, it's 100 percent; they're using nothing but alternative fuels. Overall for the unit, it's significant, but I don't think it reaches 90 percent.

Chairman LEVIN. What we will do, following Senator Shaheen's suggestion, is to get that experience, if it's not already there, to the other, to the Army as well, because we have the same issue, goal, with the Army, as Senator Shaheen mentioned.

[The information referred to follows:]

While deployed to the Sangin Province Afghanistan, India Company Third Battalion, Fifth Marines (3/5) operated two patrol bases completely on renewable energy, offsetting 100 percent of their potential fuel use. Based on reports from Marines in the field it is estimated that each patrol base saved 12 gallons per day per location. This means that each month these two patrol bases would have offset approximately 744 gallons per month (31 days × 24 gals) or 8,928 gallons per year. It is evident that a small savings at a remote patrol base has significant impacts over the long term, not to mention immediate reduction in risk to our marines moving fuel in a very dangerous area.

In addition to the patrol bases operated by India 3/5, they also employed renewable and energy efficient technologies at a company location too. At the company

location, fuel use was reduced from 25 gallons per day to 2.5 gallons per day or an initial savings of 90 percent. Targeting renewable and energy efficient technologies at remote outpost immediately reduces the risks to our forces and increases our combat effectiveness.

Chairman LEVIN. Senator Ayotte.

Senator AYOTTE. Thank you, Mr. Chairman.

I want to thank the witnesses here today, Admiral Roughead, Secretary Mabus, and General Amos, for your distinguished service to our country. We're deeply grateful for what you're doing. I also want to thank you for all of those that serve underneath you, for the sacrifices that they and their families are making for our country at a time of conflict.

I wanted to follow up on, Admiral, on the questions that were asked by Senator Shaheen. I wanted to join in her comments about the Portsmouth Naval Shipyard and the importance of that shipyard. I wanted to ask you specifically about the project to consolidate structural workshops at Portsmouth Naval Shipyard. This project is a very important one because it would ultimately save taxpayers' dollars through efficiency measures at the shipyard and it would certainly improve efficiency of shipyard operations, reduce cost, and duration of submarine maintenance.

Currently, this project is scheduled to be completed in fiscal year 2015. But, given the importance of the project to naval readiness and taxpayers' savings that I believe that we could accomplish with this, given added efficiencies, I think this project should be moved up to fiscal year 2012. Admiral, does the Navy's fiscal year 2012 budget proposal include this project to consolidate structural workshops at the Portsmouth Naval Shipyard?

Admiral ROUGHEAD. Senator, right now it is in the program for 2015. But it has several segments to it. To your point, if we do it by segment it will actually cost us more money. So we can consolidate two of the phases and actually save money, and we're looking at the ability to do that because we see some potential changes taking place in some other MILCON, and my staff knows to look at that, to see if there is the potential to pull it up into 2012.

Senator AYOTTE. So if we were to consolidate and pull it up into 2012, it actually would result in cost savings, rather than segmenting the project, as it is right now?

Admiral ROUGHEAD. The way that I see the project, it would cost us about another $8 million if we don't do the consolidation.

Senator AYOTTE. So I appreciate that you and your staff are looking at this. It also seems to me not only important in terms of the shipyard, but a way to save taxpayers' dollars to achieve efficiencies at the shipyard with the important work that they're doing there.

Admiral ROUGHEAD. Yes, ma'am. I'm always looking for efficiencies.

Senator AYOTTE. We deeply appreciate that. Obviously, the shipyard is very important in the Navy's mission and we appreciate your bringing that forward. I'd be happy to work with you on that if you need any assistance.

Admiral ROUGHEAD. Thank you, ma'am.

Senator AYOTTE. Secretary Mabus, in your written statement you had noted that rising health care costs within the military health

system continue to present a fiscal challenge to DOD, and you've written that DOD's resources devoted to health care costs cannot be sustained. According to a recent March GAO report, there are tremendous opportunities to reduce potential duplication in government programs among the Services in terms of looking at military health care costs. I want you to tell me what steps you thought were appropriate to take in addressing the findings of the GAO report on duplication.

Mr. MABUS. I think it's important to separate a couple of things here. One is Active Duty health care. There have been no changes in terms of amounts of money spent or things like that recommended for Active Duty servicemembers. There have been recommendations in terms of more service-wide efficiencies that the GAO report did on that.

In terms of my comments that the health care costs were going up, were aimed mainly at health care costs for retirees under the Medicare age, that the Secretary of Defense has made some recommendations on. We fully concur in that. That's where our costs are going up. That, I think, will become unsustainable in the future.

The Secretary of Defense on a defense-wide basis has recommended that the costs for a single person go up $2.50 per month, for a family, $5 per month. We're talking about going for a family, from $460 a year to $520 a year in terms of premiums—a very modest increase. It's still far, far below what a Federal employee who is not a military retiree would have to pay.

There are also overhead reductions in this. We do think that there can be some savings in overhead in terms of the way we deliver our health care costs. But those two major things, we think, are necessary to keep us sustainable just in terms of how much money we're spending on health care.

Senator AYOTTE. Mr. Secretary, I just wanted to follow up, because obviously with respect to our retirees and our veterans we also have a solemn duty to make sure that we follow through on the promises that we've made to them with respect to health care and other promises, given their service to our country. So this committee certainly will be looking at those proposals.

I also wanted to just follow up on the idea of greater coordination to eliminate duplication within the system, to try to save administrative costs, and what your thoughts are, and what some of the issues that were identified in the GAO report were, and what measure you thought that we could take among the branches and even within the Navy to try to save some administrative costs in that area?

Mr. MABUS. There are clearly some areas that you can save some administrative costs. We're looking not only between Services, but also between the Services and the Department of Veterans Affairs (VA) system, for example. We're going to an integrated disability evaluation system so that a servicemember who is disabled doesn't have to go through that twice, once for the Service, once for the VA. That saves one step. That obviously saves some overhead costs.

Because of the previous Base Realignment and Closure Commission, Walter Reed, and Bethesda are being merged into one health care center, and we are actively promoting some savings in over-

head there. We think that, very frankly, there's too much overhead in the joining of those two very critical military facilities.

So you and the GAO are correct that there are efficiencies that we can find just in terms of administrative overhead. We have found some of them based on the efficiencies that Secretary Gates asked us to find. But we are continuing that look, not only in health care, but across DOD, but specifically in health care.

Senator AYOTTE. Thank you very much for your answer.

My time is up. I wanted to thank all of you for the work that you're doing on behalf of our country. I just offer that I certainly am willing to work with you on making sure that we achieve these efficiencies so that we continue to support our soldiers and those who have sacrificed so much for us.

Chairman LEVIN. Thank you, Senator Ayotte.

In your answer to Senator Ayotte, Mr. Secretary, you made reference to the budget's proposed increase in the enrollment fees for retirees under 65. When was the last time those fees were increased, do you know offhand?

Mr. MABUS. I believe it was 1995, Senator.

Chairman LEVIN. I'm wondering if I could ask you, Admiral, and you, General, do you support the budget proposal that those fees be increased?

Admiral ROUGHEAD. I do, sir. I think it's appropriate. I do not believe it is an onerous cost and I'm fully supportive of those changes.

Chairman LEVIN. General?

General AMOS. Chairman, I absolutely support them.

Chairman LEVIN. Let me ask you about the no-fly zone issue. Our NATO allies, including U.K., France, and Italy, are looking at U.N. resolutions and what the role of NATO might be in any no-fly zone. So that my question is the following: Even without direct U.S. involvement, do our NATO allies have the capability of implementing a no-fly zone over Libya, presumably with the support of members of the international community? Do they have the capability of dealing with any threat by the Libyan air force, such as it is, and by Libyan air defenses, such as they are?

Admiral ROUGHEAD. Senator, I think that whatever group comes together if, in fact, this were to proceed would have to look at the individual capabilities of that country or those countries and see what it was. But the NATO air capability is significant, sophisticated. I think you have to see what the final outcome is.

Chairman LEVIN. So that in terms of the specific capabilities of those air forces even without our involvement, you're not able to say now whether or not they could successfully carry out that mission?

Admiral ROUGHEAD. Senator, I think the capabilities reside within the NATO air forces. It's who comes together and contributes what that would determine the effectiveness of that package.

Chairman LEVIN. On the question of Guam and Okinawa, you mentioned, Mr. Secretary, that there need to be some Japanese Government decisions. Do you know whether there are any discussions or negotiations scheduled with the Japanese Government relative to that issue?

Mr. MABUS. I know that Secretary Gates in his previous discussions earlier this year was very frank with the Japanese Government on what those decisions need to be, and I think that the Japanese Government understands exactly what actions need to be taken before we can begin to take some substantive steps.

Chairman LEVIN. Do you know whether there are any scheduled negotiations or discussions?

Mr. MABUS. No, sir, I don't.

Chairman LEVIN. That's fair. If there are, would you let us know?

Mr. MABUS. Yes, sir.

Chairman LEVIN. Senator Webb mentioned that the two of us will be heading out that way in about a month and that we should know the status. We'll be briefed, obviously, by you and your folks before we go, but on that issue particularly, if there's anything scheduled, if you'll let us know.

[The information referred to follows:]

In response to the request for notification of negotiations scheduled between the United States and Government of Japan, although a 2+2 (Secretary of Defense, Secretary of State, Minister of Defense, Minister of Foreign Affairs) had been tentatively scheduled for April 29 in Washington, due to the senior level focus of the Government of Japan and especially the Ministry of Defense, on managing the response to the natural disaster and nuclear crisis, this meeting has been postponed. We are seeking acceptable dates for all parties in the near future. We do not yet have a firm timetable from the Japanese for the landfill permit process, but in our judgment they remain committed to the Roadmap, both for the Guam move as well as the Futenma Replacement Facility and Okinawa.

Chairman LEVIN. Admiral Roughead, you've testified on a number of occasions about your support of the United States signing onto the U.N. Convention on the Law of the Sea (UNCLOS). You reiterate that support in your written statement this morning. I think, Mr. Secretary, you've also testified before this committee in support of our supporting that treaty and acceding to it.

Is there anything that's happened in the last year that has either changed or strengthened either of your positions on that? Mr. Secretary, let me start with you.

Mr. MABUS. It has strengthened my idea that we should accede to this treaty, for a couple of reasons. One is, as other nations who are signatories try to restrict our freedom of navigation, we are less able to push back with as much force as we should be able to were we a signatory to this. I think that you're only going to see that increase, as it has over the past year.

Second, I've seen firsthand some of the implications of the Arctic and the perhaps ice-free Arctic in the next couple of decades. The only way we can have a claim to an outer continental shelf area that we can explore for minerals, that we can use as part of our exclusive economic zone, is if we are signatories to the UNCLOS.

Those two things have strengthened my stand that we very much need to be signatories.

Chairman LEVIN. Admiral?

Admiral ROUGHEAD. I would echo those statements, Senator. I think we are letting an opportunity and time pass us by. On top of those two, where the claims in the Pacific in particular have the potential to become more contentious. The opening of the Arctic,

where resolution of claims and disagreements will be done through UNCLOS, we will not be there.

On top of that, I would submit that our international leadership to those countries that view the seas the same way that we do, that as they come together to address these issues we are not there, and they look to us for that leadership and we are abrogating that leadership.

Chairman LEVIN. Thank you.

Mr. Secretary, I indicated to you that there was a couple of questions on that second engine that I asked you to respond to for the record. In addition to those two questions, let me add a third and a fourth just for the record, if you would. One would be how much development money has gone into the first engine and what is the $400 million, I believe, additional request for the Pratt engine development due to the business case, and how much total has gone into that engine in terms of development costs.

Finally, I have a long question which I'll get to you both, both you, Mr. Secretary, and you, Admiral, about this issue of special support requirements if there is a second engine. It's a lengthy question raising issues with your responses. I think also you, General, responded on that as well. So I would ask all three of you to take a look at that question that I will get to you, and then you can submit your answer for the record.

[The information referred to follows:]

Mr. MABUS, Admiral ROUGHEAD, and General AMOS. The F135 and F136 engines constitute two different designs by two different manufacturers. The large size of the F135 and F136 (approximately 18.7 feet and weighs ~9,300 lbs in its container) necessitates greater sparing aboard ships as neither the assembled engine nor the power section module can currently be replenished underway. Similarly, due to the weight and height of critical engine spares, it is not feasible to store all Joint Strike Fighter (JSF) engine spares in legacy store rooms or stack them aboard ships as is done for the legacy system. This would necessitate work-around in hangar deck spaces normally reserved to store and maintain tactical aircraft. Adding an alternate engine makes the shipboard logistics even more challenging as it is not a one-for-one exchange.

While the F136 engine would be interchangeable, there are several engine components that are not interchangeable. The fan, gear box, and power section modules are unique by F135 and F136 propulsion systems. Only the augmenter and exhaust nozzle modules are common by F–35 variant. Supporting two engines would require unique spares, unique support equipment, and unique training. The JSF specification only requires engines to perform to specified criteria and physically fit into the F–35. Maintenance/repair technical requirements are different, requiring different instructions and training with differences in assembly hardware and special tools for off-aircraft repair.

[Deleted.]

Chairman LEVIN. I must leave. Senator Ayotte, you're more than welcome to take the gavel and conclude if you have additional questions, if that's all right. I'll hand it to you on the way out.

Thank you all. All three of you have performed extraordinary service for this country. Admiral, since this is probably your last appearance here, I just want to reinforce what my colleagues have said about you and that service. We just wish you well if we don't see you again.

Admiral ROUGHEAD. Thank you, Senator. It's been my honor.

Chairman LEVIN. Mr. Secretary, thank you, and General, thank you both.

Senator AYOTTE [presiding]. I just have a couple of brief questions and then I will wrap this up for sure. I appreciate your patience.

Admiral Roughead, I wanted to ask you about the maintenance portion of the budget. Secretary Gates said on March 4 that a lot of our surface ships that were built in the Reagan era will be aging out in coming years pretty quickly. In your written testimony you've echoed this concern, saying: "Many of our existing cruisers, destroyers, and submarines will reach the end of their service life."

I notice in the budget proposal for fiscal year 2012 you've funded ship depot maintenance at 94 percent, and wanted to hear from you if you could provide some examples of what type of maintenance would not be accomplished at that level versus 100 percent maintenance level, understanding that in order for us to preserve our fleet we are probably going to have to be doing additional maintenance, given the aging of the fleet.

Admiral ROUGHEAD. Yes, ma'am. Thank you. We are spending much more on maintenance now than we did just a couple of years ago. So with the support of Congress, we've been able to boost that up.

As we got into putting the final touches on the budget, because we have done that little bit of a boost-up and we looked at ship availabilities, maintenance periods, and the ones that are not included in there are not the complex types of work. They tend to be smaller availabilities. Clearly they don't include any nuclear work, nor do they include any of the work that's done in the public shipyards. These are all availabilities in the private sector, relatively small, and I believe that where we have been—some of the changes that we're putting into place with regard to putting more sailors on ships and in maintenance centers, that I consider this a reasonable approach to take.

Senator AYOTTE. Thank you very much, Admiral.

General Amos, I had a question about our detention policy. I had the privilege of going over to visit some of your soldiers in January. I also want to say the work being done by the Marines is just tremendous and so wanted to commend you for your leadership and also just thank the soldiers that serve underneath you.

If tomorrow we were able to capture the number two in al Qaeda in the Arabian Peninsula, that was actually formerly a detainee at Guantanamo—I believe his name is Saeed al-Shehri—where would we put him?

General AMOS. Senator, that's way above my pay grade. I wouldn't know where we would put him. Truly, the truth of the matter is that that would be resolved at a level with much discussion. In fact, I doubt if the Commandant of the Marine Corps would even be part of that discussion. It would be at the very highest levels of our government.

Senator AYOTTE. One of the concerns that I have is that I've heard testimony now from Secretary Gates as well as Secretary Vickers that because we're in a position where the President wants to close Guantanamo, there is no detention facility to put that type of high-value target that we have under our control. Are you aware of a facility we would have under our control that would be appropriate and not located in the United States, to be able to not only

interrogate that individual, but make sure that he doesn't again rejoin the battlefield?

General AMOS. Ma'am, I am not aware of another facility.

Senator AYOTTE. Thank you very much. I appreciate all of you being here and I'm sure you're all anxious for lunch, so I will conclude this hearing. I thank you all for your service to our country. This hearing is adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

IMPLEMENTATION OF THE REPEAL OF "DON'T ASK, DON'T TELL"

1. Senator LEVIN. Secretary Mabus, last December, Admiral Roughead testified that, "with the exception of the moderate risk associated with projected retention in some Navy irregular warfare specialties, I assess the risk to readiness, effectiveness, and cohesion of the Navy to be low. Based on my professional judgment and informed by the inputs from our Navy, I recommend repeal of 10 U.S.C. section 654." General Amos testified: "based on what I know about the very tough fight in Afghanistan, the almost singular focus of our combat forces as they train up and deploy to theater, the necessary tightly woven culture of those combat forces that we are asking so much of at this time, and finally the direct feedback from the survey, my recommendation is that we should not implement repeal at this time." Since that hearing, the Department of Defense (DOD) and the Navy have been working on policy changes and developing training plans needed to implement the repeal. What are your observations of how Navy personnel are dealing with possible repeal of Don't Ask, Don't Tell (DADT)?

Mr. MABUS. Our Master Mobile Training Teams and command leadership teams continue to provide regular reports capturing the "tone of the force" during this training period. Feedback from our sailors indicates the training they are receiving is comprehensive, well-delivered, and effective. Additionally, we have not observed any impacts to readiness, effectiveness, cohesion, recruiting, or retention.

2. Senator LEVIN. Admiral Roughead and General Amos, what are your current assessments of the risk to readiness, effectiveness, and cohesion in the Navy and Marine Corps if DADT is repealed?

Admiral ROUGHEAD. I assess the risk to readiness, effectiveness, and cohesion in the Navy to be low and acceptable. According to the results of the Comprehensive Review Working Group servicemember survey, approximately 76 percent of sailors believe the impacts on effectiveness, readiness, unit cohesion, and morale will be neutral or positive. There is approximately 24 percent who believe the impact of repeal will be negative. I am mindful of the concerns expressed by these individuals. However, I believe their concerns can be effectively mitigated through engaged leadership, effective communications, training and education, and clear and concise standards of conduct. Since we have begun training, our commanders have reported no impacts to readiness, effectiveness, or cohesion. I have the utmost confidence in the ability of the men and women of the U.S. Navy to implement this change in the law while setting a positive tone, creating an inclusive and respectful work environment, and maintaining high standards of conduct, mutual respect, and military decorum.

General AMOS. I currently believe the risk is low to moderate. However, we will not know the actual impact of repeal until it is effected. During the current training phase, we have not observed significant anxiety or push-back from our marines. I am confident that Marine leaders at all levels will ensure our Corps understands the impending change and will ensure that marines treat each other with dignity and respect, thereby mitigating any impact on readiness, effectiveness, and unit cohesion.

3. Senator LEVIN. Admiral Roughead and General Amos, please describe the status of training and education of sailors and marines regarding the repeal of DADT.

Admiral ROUGHEAD. Navy is on track to meet our training completion goal of 1 July 2011 for all naval personnel. Commander, U.S. Fleet Forces has been appointed the Executive Agent for delivery and tracking of DADT training. Master Mobile Training Teams have been deployed to our Fleet worldwide to deliver training to our command leadership teams (commanding officer, executive officer, command master chief). These individuals will be responsible in turn to conduct the

training for all personnel within their command. To date, more than 90 percent of our command leadership personnel (Tier 2) have been trained and are conducting training Navy-wide for all remaining personnel (Tier 3). Specific training for recruiters, military law enforcement, chaplains, legal, Fleet and Family Support Centers, personnel support professionals, housing, senior human resource personnel, equal opportunity, and Naval Criminal Investigative Service (NCIS) personnel (Tier 1) has been commenced and will be completed by the 1 July 2011 deadline.

General AMOS. The Marine Corps is complete with Tier 1 (special staff) and Tier 2 (leadership) training. As of 30 June 2011, Tier 3 (Marines) training is 95 percent complete. Our primary method of instruction is face-to-face where leaders are able to interact with their marines, provide information and then have a frank and open discussion about any questions or concerns they may have.

4. Senator LEVIN. Admiral Roughead and General Amos, have you discovered any unanticipated issues as you initiated the training? If so, how are you addressing these issues?

Admiral ROUGHEAD. Navy has not experienced any unanticipated issues during the training process. Feedback from our sailors indicates the training they are receiving is comprehensive, well-delivered, and effective. Additionally, we have not observed any impacts to readiness, effectiveness, cohesion, recruiting, or retention during the training period.

General AMOS. We have not observed any significant unanticipated issues during training. The framework for the training is very comprehensive and anticipates many common questions and concerns.

SEXUAL ASSAULTS IN THE NAVY AND MARINE CORPS

5. Senator LEVIN. Secretary Mabus, 17 current and former service men and women recently filed a lawsuit in Federal Court alleging that DOD "failed to prevent plaintiffs and others from being raped and sexually assaulted." Four of the plaintiffs were from the Navy and two from the Marine Corps. Among other things, the plaintiffs allege that DOD failed to investigate rapes and sexual assaults and failed to prosecute the perpetrators. Some reports suggest that up to one-third of the women serving in the military are victims of sexual assault. What is your assessment of the Navy's Sexual Assault Prevention and Response (SAPR) program?

Mr. MABUS. Nothing has a more corrosive effect on readiness, good order, and discipline than sexual assault. We seek nothing less than a culture of gender respect where sexual assault is completely eliminated and never tolerated. The "Navy Sexual Assault Prevention Summit" brought together senior military and civilian Navy leaders to interact with recognized experts in the field. I established a new Navy Sexual Assault Prevention and Response Office (DON–SAPRO), led by a Senior Executive Service civilian who reports directly to me. DON–SAPRO is my primary agent for developing Secretariat-level policy and for monitoring, coordinating, and assessing the Navy-wide efforts to prevent sexual assaults.

The Department of the Navy and its two military Services—the U.S. Navy and the U.S. Marine Corps continue our commitment to reduce the incidence of sexual assault, provide compassionate support to sexual assault survivors, and focus on prevention. Senior department leadership provide a consistent top-down leadership message, underscored by their actions that sexual assault is incompatible with our core values. Examples of the many initiatives taken by the Navy in fiscal year 2010 include:

- "Bystander Intervention" pilot programs at four locations—educated sailors and marines on recognizing and interrupting risky situations. Further implementation is planned for fiscal year 2011.
- Engaged a nationally-recognized civilian expert to advise departmental efforts on sexual assault prevention and to help update sexual assault training curricula.
- Expanded training for military investigators and prosecutors and sponsored "Sexual Assault Investigation and Prosecution" mobile training teams.
- The Marine Corps has revised its training curriculum for Noncommissioned Officers (NCOs), Sexual Assault Response Coordinators (SARCs), and Victim Advocates (UVAs/VAs).

6. Senator LEVIN. Secretary Mabus, have you made any changes in the Navy to improve accountability for Navy personnel who commit sexual assaults?

Mr. MABUS. Sexual assaults are crimes that devastate victims, undermine teamwork, threaten unit cohesiveness, and ultimately reduce fleet readiness. Navy has a "zero tolerance" sexual assault policy. Expectations of senior leadership for SAPR are outlined in policy and in Naval and Marine administrative messages sent worldwide.

Navy Judge Advocate General (JAG), Marine Corps Judge Advocate Division, and NCIS partnered to review cases, analyze characteristics of typical cases, and develop best practices for investigation, evaluation, and prosecution of sexual assault cases. Trends were evaluated to determine the type of training necessary to improve the quality of investigation and prosecution of sexual assault cases. This training was then delivered using mobile training teams throughout the Navy and Marine Corps.

Specific Department and Service-level initiatives:

- Hired two Sexual Assault Litigation Specialists (nationally recognized experts)
- Developed new courses: Prosecuting Alcohol-Facilitated Sexual Assault; Sexual Assault Litigation and Mentoring Skills; and Trial Advocacy taught by AEquitas
- Navy JAG Corps implemented the Military Justice Litigation Career Track
- Marine Corps Trial Counsel Assistance Program implemented
- Judge Advocate Division conducted Marine Corps-wide Victim Witness Assistance Program (VWAP) training
- Ensured sexual assault and VWAP were addressed in all leadership training venues
- Developed joint-service DVD on sexual assault prosecution
- Expanded NCIS training for Family and Sexual Violence Special Agents
- DON Sexual Assault Advisory Council established in policy requiring senior leadership participation from all key SAPR stakeholders
- Ongoing SAPRO team site visits and fleet-wide SAPR Workshops (CONUS and OCONUS) focus on leadership and command responsibility for SAPR
- SAPR definitions and reporting requirements were added on Navy advancement exams
- DON Sexual Assault Prevention Summit scheduled for May 2011 with DON senior leadership, Regional and Installation Commanders, and senior enlisted leadership will focus on prevention and management of sexual assault cases

7. Senator LEVIN. Admiral Roughead and General Amos, what measures have you taken as service chiefs to provide a safe environment for sailors and marines so that they do not have to fear being sexually assaulted by fellow servicemembers?

Admiral ROUGHEAD. Navy continues to maintain a zero tolerance policy toward sexual assault. My goal is to eliminate sexual assault by fostering a culture of prevention which includes effective education and training, a 24/7 response capability to ensure victim support, reporting procedures available worldwide, and accountability that enhances the safety and well being of all. As CNO, I have implemented the following measures:

- Increased oversight. In September 2009, I appointed Deputy Chief of Naval Operations, Manpower Personnel Training and Education (N1) as the Executive Agent (EA) for the Navy SAPR program to provide high level oversight and assessment through regularly scheduled program reviews in which key stakeholders provide inputs on critical SAPR measures of performance and are briefed on the program's effectiveness. To ensure accountability down to the local level, Navy implemented Sexual Assault Coordinating Committees in fiscal year 2010. These organizations provide local oversight of the SAPR program at each installation.
- Policy update. Navy's SAPR policy has been revised and will be released in the near future. The revision has been issued to improve servicemember confidence in the Navy's SAPR program and to improve the rate and level of victim participation in the legal process. The revision has two significant changes that enhance guidance and factors for commanders to consider about the collateral misconduct of victims of sexual assault and increases the required information dissemination throughout the chain of command following a sexual assault and through the legal resolution.
- Raising Awareness and Enhanced Training. Navy has engaged with other governmental agencies and internal agencies to raise sexual assault awareness, increase victim and servicemember confidence, promote Bystander

Intervention (BI), and ultimately reduce the occurrence of sexual assaults. Navy has also incorporated SAPR into training curricula at all levels, beginning at the accession points for officers and enlisted. It then is reinforced through our specialty school curriculum and our leadership school curriculums. The Navy hired a highly-qualified expert who adds critical expertise to the development of the overall Navy Prevention strategy with the intent of identifying gaps across the continuum of training, prevention, and response initiatives.

• Synchronized messages. Navy develops and delivers consistent and concise messages through social marketing media channels, Navy Administrative Messages and Sexual Assault Awareness Month events. Messaging is also coordinated with the Navy Safety Center to focus on the link between alcohol misuse and sexual assault.

• Bystander Intervention. Navy is completing analysis of a 9-month bystander intervention pilot program which was focused on the elimination of sexual assault incidents. This program leveraged peer-to-peer training using real life scenarios. Evaluation of a fleet-wide roll out will be included in the analysis.

• Victim Support. Navy provides 24/7 response for sexual assault victims through trained Victim Advocates (VA) and Sexual Assault Response Coordinators. Navy is also fully engaged in the roll out of the Office of the Secretary of Defense (OSD) sponsored Safe Helpline, a resource which provides expert support to military victims of sexual assault via telephone, text, or chat.

General AMOS. The Marine Corps has taken aggressive actions to heighten awareness about sexual assault and make prevention a leadership issue. Commanders are responsible for creating a safe environment and a climate of respect for all marines. We have also taken measures to highlight the Sexual Assault Prevention Response Program by partnering with industry experts, promoting a strong prevention campaign, implementing a 24/7 Helpline to support victims of sexual assault, and increasing visibility of this issue in the field. We are also utilizing Bystander Intervention as a training tool to create an understanding that every marine has an inherent duty to be actively engaged in preventing sexual assaults.

SUPPORT FOR WOUNDED WARRIORS

8. Senator LEVIN. Secretary Mabus, wounded sailors and marines deserve the highest priority for support services, healing and recuperation, rehabilitation, evaluation for return to duty, successful transition from Active Duty, if required, and continuing support beyond retirement or discharge. In your view, what are the most critical shortcomings in our providing care for our wounded warriors?

Mr. MABUS. Recognizing and appreciating the sacrifices of wounded, ill, and injured (WII) servicemembers and their families remain a priority of the Navy. Through the Bureau of Medicine and Surgery's WII Warrior Support, the Navy Safe Harbor Program, and the Marine Corps Wounded Warrior Regiment, we take care of our own by serving WII sailors and marines who are in Active Duty, Reserve, and veteran status.

The past 2 years, I have designated November as our Warrior Care Month. Last year, our theme was "Focusing on Abilities—Supporting Wounded Warriors throughout Recovery, Rehabilitation, and Reintegration."

Since 2001, we have had over 12,000 marines and sailors wounded in action in Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Operation New Dawn (OND). Historic advances in military medicine have resulted in personnel surviving injuries that would have been fatal in any previous conflict. That is good news. Our leading military treatment facilities (MTF) are helping them recover and rehabilitate.

It is said that critical to reintegration is finding a fulfilling career. But for some of our returning brothers and sisters in arms, reintegration to the workforce in the face of the current economic downturn poses a significant challenge. In addition to weeks, months, or years of recovery, our wounded sailors and marines face the potential travesty of unemployment. Over 140,000 veterans of OIF and OEF are unemployed, or underemployed, with approximately 5,000 WII servicemembers joining the unemployment rolls every year—that is 4 new WII servicemembers every day.

Building résumés, getting the training and education required, and finding a civilian career remain a challenge for our wounded warriors, despite many initiatives across government and the service branches to support returning personnel. We need to better coordinate the employment effort. At the Navy, we are making

progress in this area. We are streamlining the Navy's wounded warrior hiring process and expanding our Wounded Warrior Training and Education programs. We have established a Wounded Warrior Hiring and Support Initiative tasked to develop solutions to improve wounded warrior hiring and support within the Navy. The initiative aims to increase the number of wounded warriors hired into the Navy, the Federal Civil Service, and the private sector. But there is more to be done. We need to ensure that we are continually working with our sister Services, the OSD, the Department of Veteran Affairs (VA), Department of Labor, Office of Personnel Management, other Federal Government agencies, and non-federal entities in this effort.

Our Wounded Warrior Training Programs have become a best practice across DOD. Our Veterans Individual Training Assistant Link is a special program to help wounded, severely ill, and injured marines and sailors, and other servicemembers while recovering in the MTFs to transition from a military career into the Federal Civil Service or other opportunities. While still receiving treatment in our MTFs, wounded, severely ill, and injured marines and sailors, and other servicemembers receive educational and employment counseling, are encouraged to enroll in schooling and, where practical, provided pre-employment job experience in a field that interests them. Our Career Learning and Employment Centers provide education and on-the-job training for disabled veterans. They also provide career assistance and other veteran support to assist the veteran to achieve their career goals. Through these effective training programs, Naval Sea Systems Command hired 282 wounded warriors and disabled veterans in fiscal year 2010 with a goal of 365 in fiscal year 2011. the Navy hired 1,905 wounded warriors and disabled veterans (30 percent and above disability rating) in fiscal year 2010.

While it is the WII marine or sailor who physically endures recovery, rehabilitation, and reintegration, it is the family unit that serves as a critical support system for healing. To this end, families make many sacrifices. Oftentimes, it is the spouse of a recovering sailor or marine who is the breadwinner of the family. We have made progress in this area too. We are working with the Office of Personnel Management to remove the 2-year eligibility limitation for non-competitive appointment for spouses of certain deceased or 100 percent disabled veterans. This will help the wounded warrior families whose wounded family member is not able to return to full-time employment. Last year, President Obama signed the Caregivers and Veterans Omnibus Health Services Act that ensures that families of veterans severely wounded in Iraq and Afghanistan receive comprehensive, coordinated financial and other support that will enable them to provide these warriors with needed homecare. The Navy supports this and is standing by to ensure appropriate support for caregivers, to include special compensation for those caregivers who face financial hardships as a result of caring for their catastrophically injured sailor or marine, is received.

By definition, post-traumatic stress disorder (PTSD) does not start until 30 days after the occurrence of the trauma and the onset may be delayed from weeks to years after the trauma. Many servicemembers may not experience the onset of PTSD symptoms until they have separated from the Service and are under the care of the VA. Because of this wide variability, calculation of an average time to onset is impractical. The Navy and the Marine Corps solution to this issue is a robust program for prevention, early detection, and treatment which makes every effort to remove the stigma and other barriers to servicemembers receiving care at the earliest possible time. The Navy and Marine Corps continue to search for ways to eliminate the stigma and help sailors and marines understand that asking for help is "OK." We also need to ensure that employers of wounded warriors and their staff are educated on PTSD and Traumatic Brain Injury so they can better support our wounded warriors and succeed in the workplace.

9. Senator LEVIN. Secretary Mabus, numerous studies document the need to reform DOD's disability evaluation system. The recently adopted Integrated Disability Evaluation System (IDES) has improved the system by integrating DOD and VA systems, but it still takes nearly a year to process through the system. What is your assessment of IDES?

Mr. MABUS. The IDES process is achieving the primary goals that were intended when this process was designed in 2007. Most notable of these goals is that our sailors and marines receive both their post-service military and VA benefits on the first day authorized by law. This eliminates the "benefits gap" experienced under the previous DES system. To achieve this significant benefit, the IDES process has the secondary impact of keeping our servicemembers in uniform for a longer period of time. This is a concern because the length of time needed to process cases has direct proportional adverse impact on the Services' readiness for their military mission.

Those in the IDES remain in uniform longer which, for any given end-strength, reduces the number of Active Duty available for unrestricted assignment. Therefore, the principle focus must be on reducing the amount of time consumed by the process itself without debasing what we do for our WII servicemembers.

The simplest and most direct means of monitoring the IDES process is through the observation of case flow—the time servicemembers' cases spend transiting the IDES' waypoints. Tracking and evaluating process time brings clarity for resourcing decisions and process improvements. To this end, based on a review of data from IDES operations over the past 6 months (period ending March 31, 2011), we would like to reduce the average time taken by the Medical Evaluation Board (MEB) Phase of the IDES by approximately 100 days. However, since some of the processing events occurring within this phase are controlled by the MTFs and some are controlled by the VA, reducing the average MEB Phase time requires both departments to ensure resources and internal processes are aligned to support timeliness goal.

10. Senator LEVIN. Secretary Mabus, how can we make this system better to support the needs of our wounded warriors?

Mr. MABUS. As previously discussed in the response to question #9, the principle focus must be on reducing the amount of time consumed by the process itself without debasing what we do for our WII servicemembers. To significantly reduce the overall processing time, the Navy has recommended specific changes to "remodel" the IDES. This IDES remodel allows us to keep what is good about the current IDES process while making needed improvements and renovations. The recommended IDES remodel can be implemented under current laws, avoids any post-service benefit gap, maintains the servicemembers' due process rights, and can be completed in less than half the time required by the current IDES process. This remodel is currently under review by both DOD and the VA for possible near-term implementation. By seizing process design change opportunities, properly resourcing the processes we decide to deploy, and better leveraging existing capabilities, both the WII servicemember and readiness for our military mission will benefit.

FORCE SHAPING AUTHORITIES

11. Senator LEVIN. Admiral Roughead, in your prepared statement, you said that: "We will be challenged to meet our Active and Reserve end strength targets in fiscal year 2012 using existing force shaping measures. As a result of continued high retention and low attrition across the force, we are facing increasing pressure to use involuntary force shaping measures to remain within our authorized end strength." What additional force shaping authorities will you need to shape a Navy with the right sailors with the skills and experience the Navy needs?

Admiral ROUGHEAD. While the Navy will be challenged in meeting Active and Reserve congressional end strength limits for fiscal year 2012, existing voluntary and involuntary force-shaping authorities are sufficient for this fiscal year. Navy will continue to monitor those levers against end strength. Should additional authorities be required, we will consult with Congress and utilize the legislative process as we develop any necessary authority changes.

12. Senator LEVIN. Admiral Roughead, do you plan to ask Congress for this authority?

Admiral ROUGHEAD. While the Navy will be challenged in meeting Active and Reserve congressional end strength limits for fiscal year 2012, existing voluntary and involuntary force-shaping authorities are sufficient for this fiscal year. Navy will continue to monitor those levers against end strength. Should additional authorities be required, we will consult with Congress and utilize the legislative process as we develop any necessary authority changes.

13. Senator LEVIN. General Amos, you state that you are "determined to 'keep faith' with [your] marines and their families by designing and executing a responsible drawdown from [your] current 202,100 end strength such that [you] avoid reduction-in-force actions and early retirement boards." How do you plan to reduce the Active Duty Marine Corps end strength from 202,100 to 186,800, a reduction of 15,300 marines, without using involuntary measures?

General AMOS. If the Marine Corps receives the authorities to draw-down over a 4-year period, normal manpower force shaping levers of reduced accession and reduced first term retention will provide the primary reduction methods. Additional shaping measures, such as adjusting high tenure policies, may be required to

achieve proper grade and occupational specialty distribution as well as end strength targets. If used, these slight modifications to manpower policies will still provide every marine a competitive opportunity to continue serving.

14. Senator LEVIN. General Amos, will you need additional legislative authority from Congress to do this?

General AMOS. We believe that given the proper time (i.e. 4 years), the Marine Corps will not need any additional authorities. However, we may require an extension of current and expired authorities relative to end strength to cover the period of the planned draw-down (i.e. fiscal year 2015–fiscal year 2018).

SERVICEMEMBER SUICIDE

15. Senator LEVIN. General Amos, Congress remains extremely concerned, as I know you do, about the rates of servicemember suicide. While the numbers of suicides in 2010 among Navy and Marine Corps members appear to have decreased compared to 2009, February saw a spike in Navy suicides, so we must continue to focus on suicide prevention and resiliency programs. To what do you attribute the decrease in marine suicides?

General AMOS. Marine Corps leaders at all levels are fostering individual and unit resilience, and creating an environment that encourages marines to engage supporting resources before stress mounts to the risk of suicide. As they traditionally do, our NCOs have led the way by first undergoing our prevention and awareness training and then administering it to their junior marines. To assist them we included marines of every rank in the development and testing of our prevention courses. As a result, marines are better receiving the message that asking for help is a sign of strength and that getting help early can improve their careers and the readiness of the Corps overall. This effort also aims to reduce the traditional stigma to seeking mental health care.

We continue to enhance our Operational Stress Control and Readiness Program, which embeds behavioral health providers in deployment and garrison unit settings, optimizing their proximity to and trust with marines. We train these providers and their support teams. Additionally, we recently began training 40–50 marines per deploying unit to recognize signs of stress and assist fellow marines in getting help when needed. The relationship between individual marines is a powerful tool in the effort to prevent suicide.

Amidst these positive trends and developments, we are mindful that we have not ultimately solved the suicide problem. As such we will continue to learn, adapt and do whatever is necessary to combat this tragic and preventable loss of life.

16. Senator LEVIN. Secretary Mabus and Admiral Roughead, how is the Navy addressing the recent rise in suicides that you saw last month?

Mr. MABUS and Admiral ROUGHEAD. Current Navy suicide prevention initiatives include training aimed at front line supervisors to boost understanding of sailors under their command, recognize changes in their behavior and signs of concern, and engaging early with appropriate support when necessary. Leadership seminars focus leader attention during times of transition and stress due to loss, including loss of status or career standing, and address the concept of continuously building and reinforcing connections with families to facilitate communication in times of need. Recognizing that people exposed to suicide are an at-risk group, expanded postvention training and guidance has recently been added to assist leaders, in the aftermath of a tragedy, in preventing future suicides. Other specific actions include:

- Expanded surveillance and analysis of Navy Active Duty and selected Reserve suicide deaths and attempts.
- Support of command prevention and stress management programs with printed resource and innovative interactive training materials.
- Suicide prevention coordinator and first responder training worldwide and at Navy Reserve locations via Navy Reserve psychological health outreach teams.
- Navy representation in support of DOD, VA, and other cooperative efforts.
- Assistance with development of DOD response to recommendations from the DOD task force report on prevention of suicide among members of the Armed Forces.

Additionally, due to the recent rise in suicides, we are intensifying suicide prevention communication efforts and assessing our current program to ensure we are executing it to the fullest, while incorporating recommendations and feedback from the

DOD suicide prevention task force report, the RAND report and the recent DOD/VA suicide prevention conference.

IMPACT OF DEPLOYMENT OF MISSILE DEFENSE SHIPS

17. Senator LEVIN. Secretary Mabus and Admiral Roughead, in the last few days, the United States deployed the USS *Monterey*, an Aegis ballistic missile defense (BMD) cruiser to the Mediterranean Sea as part of Phase 1 of the Phased Adaptive Approach (PAA) to missile defense in Europe. There will be additional deployments of improved Aegis BMD capability with each successive phase of the European PAA. How does the Navy plan to manage these deployments so it is able to accomplish all its assigned missions, including—but not limited to—missile defense?

Mr. MABUS. DOD employs a comprehensive Global Force Management (GFM) process to allocate available assets, including BMD-capable Aegis ships, to meet Geographic Combatant Commanders (GCC) requirements, such as the European PAA. This process considers the GCC surface combatant requirements for all mission areas not just BMD.

A key attribute of all Aegis ships is their multi-mission capabilities within the maritime domain, which allows the Navy to employ Aegis ships in multi-mission roles rather than for exclusive missions. These ships can perform a variety of other non-BMD missions such as strike warfare, air warfare, submarine warfare, surface warfare, information warfare, high value asset protection, or maritime interdiction either concurrently or sequentially as the GCC requires.

The Navy is not large enough to deploy ships for single mission purposes, and thus, with the exception of deterrent patrols by SSBNs, does not advocate deploying warships for single mission tasking. Single mission use of our Aegis ships for BMD will result in shortages in other mission areas and a loss of operational flexibility for the GCCs.

The Navy's operating concept for maritime BMD features a graduated readiness posture that allows BMD-capable Aegis ships to be on an operational tether and available for other tasking when not directly involved in active BMD operations. Aegis ships operating in support of a BMD mission do not lose the capability to conduct other missions; however, specific mission effectiveness may be affected by ships' position and/or application of ship resources to those missions.

Admiral ROUGHEAD. The Navy currently has sufficient capacity to meet the most critical demands for multi-mission surface combatants; however, Navy does not have the capacity to meet all GCC demands, such as the European PAA, for BMD-capable ships without breaking currently established Chief of Naval Operations Personnel Tempo program limits. Based on threat analysis and current indications from GCCs, and assuming standard 6-month deployment lengths, Navy and MDA concluded that GCC demand for surface combatants with Aegis BMD capability will outpace capacity through approximately 2018.

A key attribute of all Aegis ships is their multi-mission capabilities within the maritime domain, which allows the Navy to employ Aegis ships in multi-mission roles rather than for exclusive missions. These ships can perform a variety of other non-BMD missions such as strike warfare, air warfare, submarine warfare, surface warfare, information warfare, high value asset protection, or maritime interdiction either concurrently or sequentially as the GCC requires. The Navy is not large enough to deploy ships for single mission purposes, and thus, with the exception of deterrent patrols by SSBNs, does not advocate deploying warships for single mission tasking. The Navy's operating concept for maritime BMD features a graduated readiness posture that allows BMD-capable Aegis ships to be on an operational tether and available for other tasking when not directly involved in active BMD operations. Aegis ships operating in support of a BMD mission do not lose the capability to conduct other missions; however, specific mission effectiveness may be affected by ships' position and/or application of ship resources to those missions.

CONTINUED PRODUCTION OF SM–3 BLOCK IA

18. Senator LEVIN. Admiral Roughead, the Missile Defense Agency (MDA) is not planning for additional production of the SM–3 Block IA interceptor for the Aegis BMD system, preferring instead to move to production of the next SM–3 variant that has increased capability, the Block IB. However, there have been technical delays with the Block IB which has resulted in production delays. Given that the regional combatant commanders are seeking increased inventories of SM–3 interceptors, do you believe that we should consider additional production of the SM–3 Block IA if there continues to be delays with the Block IB interceptor?

Admiral ROUGHEAD. Navy has a sufficient inventory of SM–3 missiles to satisfy the present global missile defense requirement. An additional delay in the production of SM–3 Block IB missiles would be a cause for concern. However, Navy and MDA are committed to delivering and fielding the significantly more capable SM–3 Block IB on schedule. We will keep Congress fully informed as these important programs progress.

ANTI-SHIP BALLISTIC MISSILE DEFENSE

19. Senator LEVIN. Secretary Mabus and Admiral Roughead, there has been recent discussion of China's development of an anti-ship ballistic missile (ASBM) capability that could pose a risk to our aircraft carriers in the western Pacific. I know the Navy takes a strong interest in this issue. Without going into any sensitive information, what steps are we taking to protect our aircraft carriers from such a system?

Mr. MABUS and Admiral ROUGHEAD. Our Navy has made a significant investment in new ships, sensors, weapons, and systems to counter a wide array of evolving threats. Additionally, we have invested heavily in Aegis modernization, to upgrade existing Aegis technology already in the Fleet. These initiatives involving the current and future Fleet will continuously improve our Integrated Air and Missile Defense capability, allowing our forces to continue to operate forward around the world.

STRIKE FIGHTER SHORTFALL

20. Senator LEVIN. Admiral Roughead, we have had continuing discussions over the past several years about a potential strike fighter shortfall, with the estimates of that shortfall ranging as high at times as 250 aircraft. This year, we have seen yet another restructuring of the Joint Strike Fighter (JSF) program, with a reduction of 65 F–35 aircraft over the Future Years Defense Plan (FYDP) for the Navy and Marine Corps, with an increase in the number of 41 F–18s, an increase that does not match the loss of F–35 aircraft. Considered alone, that would be going in the wrong direction to try to reduce the gap. However, in addition this year, you have established a service life extension program (SLEP) for existing F–18 aircraft that may help ameliorate the gap. What is the Navy's current assessment of the maximum size of the strike fighter shortfall?

Admiral ROUGHEAD. Based on the 2012 President's budget, the Navy projects it will experience a peak inventory shortfall of 65 aircraft in 2018, should the following conditions exist: accelerated transition of 10 F/A–18 legacy Hornet squadrons into Super Hornets; the service life extension of approximately 150 legacy Hornets; and procurement of a total of 556 F/A–18E/F Super Hornets. As I testified, this aircraft shortfall is manageable.

21. Senator LEVIN. Admiral Roughead, in the face of such potential shortfalls, why did the Navy not increase F/A–18E/F procurement to compensate for the reduction in JSF procurement so that you would at least remain even in your numbers of strike fighter production?

Admiral ROUGHEAD. The Navy's procurement objectives presented in the fiscal year 2012 President's budget include the procurement of 41 additional F/A–18E/F for a total of 556. With the addition of 41 Super Hornets, Service Life Extension of 150 F/A–18 A–D aircraft to 10,000 flight hours, and the accelerated transition of three additional legacy squadrons, the Navy was able to reduce the estimated strike fighter shortfall to the current value of 65 aircraft, occurring in 2018, without a one-for-one compensation for JSF reduction and F/A–18E/F procurement. This shortfall risk is manageable.

NUNN-McCURDY RECERTIFICATION

22. Senator LEVIN. General Amos, in February 2007, the Secretary of the Navy notified Congress that the Expeditionary Fighting Vehicle (EFV) program experienced what is known as a "critical Nunn-McCurdy breach," meaning that unit costs grew at least 25 percent above the acquisition program baseline that was current at that time. When such a breach occurs, DOD is required to either cancel the program or to continue the program, to certify to Congress that: the program is essential to national security, there are no alternatives which will provide equal capability at less cost, the new cost estimates are reasonable, and the management structure is adequate to control costs. In June 2007, the Under Secretary of Defense

for Acquisition provided that certification to Congress. In testimony to the House of Representatives at the end of June 2007, DOD witnesses explained that the Joint Requirements Oversight Council (JROC), chaired by the Vice Chairman of the Joint Chiefs of Staff, formally examined the requirements for the EFV as part of the Nunn-McCurdy process. The JROC concluded that the EFV requirements "are essential to national security." A second DOD panel examined alternatives to the EFV and concluded that none existed that could meet the EFV requirements at equal or less cost. What has changed since the EFV went through the Nunn-McCurdy certification?

General AMOS. The requirement to field an amphibious vehicle has not changed. Based on the assessment conducted in support of Nunn-McCurdy certification requirements, the Vice Chairman of the Joint Chiefs of Staff validated that "The Amphibious Joint Forcible Entry Operations capabilities defined by the EFV Capabilities Production Document remain essential to national security." However, since then, the operating environment and the increased cost of developing a modern combat vehicle have changed. Throughout the period when the EFV was being developed, threats in the littorals and U.S. capabilities to counter and overcome these threats have evolved. We now believe that our naval capabilities will allow us to launch an amphibious vehicle at a minimum required distance of 12 nautical miles from the coastline—a distance less than that forecasted when the EFV was developed. This launch distance mitigates the need for a high-speed component to a future amphibious tractor, greatly reducing vehicle complexity and cost.

Improvised explosive device (IED) threats and the changing operating environment drove increased investments in vehicles to increase protection and network capability. Moreover, lessons learned from the dispersed nature of current operations have led to increased requirements for protective armor kits and network connectivity for all tactical and combat vehicles, adding cost to our entire Ground Combat and Tactical Vehicle (GCTV) portfolio. Today's fiscal environment and declining total obligation authority have pressurized all procurement investments, thus making affordability a driving requirement to balance programs and consider risk within the GCTV strategy.

The Marine Corps is committed to the capability represented by the cancelled EFV program. As stated by the Secretary of Defense, we are firm in our requirement for an amphibious combat vehicle (ACV), which is essential to facilitating ship-to-shore operations in permissive, uncertain, and hostile environments; assuring access where infrastructure is destroyed or nonexistent; and creating joint access in defended areas.

BUDGETING FOR AMPHIBIOUS ASSAULT VEHICLE PROCUREMENT

23. Senator LEVIN. Secretary Mabus, the last time the Marine Corps bought a new amphibious assault vehicle (AAV) was almost 40 years ago. Buying a new armored assault vehicle is a rare event and a major undertaking, since it is a unique and critical element in the Nation's ability to project power ashore. Nonetheless, the Marine Corps and the Navy take the view that expenditures on a new vehicle, combined with expenditures on other needed ground vehicles, cannot exceed the historical average of what the Marine Corps spends year-to-year on ground vehicles. This seems strange and illogical. An important but rare investment would seem to demand an increase in average expenditures in a given budget account. This temporary increase in one area would be compensated for by temporary decreases in other areas where similar periodic investments have concluded. Why should the Marine Corps be forced—or be forcing itself—to make a major investment like the EFV fit within a set budget for a specific type of end article?

Mr. MABUS. Marine Corps leadership made the recommendation to cancel EFV based upon recent program performance which included a Nunn-McCurdy breach and multiple schedule slips due to engineering issues with the pump-jet propulsion train. This termination was not necessitated by a need for the Marine Corps to fit programs within any pre-existing or historical level of funding.

Since system development for EFV began in 2000, it has had severe cost growth and technological problems. The program experienced substantial cost overruns in 2007 and was then restructured, and EFV costs were growing at a rate we simply could not afford. Its primary technical challenges at this stage pertain to propulsion train and armor reliability. As a result, it was decided that no further investment should be committed to EFV due to current program performance.

24. Senator LEVIN. Secretary Mabus, do other budget accounts, such as Shipbuilding and Conversion, Navy (SCN), vary from historical averages when the Navy makes large purchases, such as is the case with an aircraft carrier?

Mr. MABUS. As described in the Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for fiscal year 2011 submitted in February 2010, DOD will average no more than $15.9 billion of annual funding (in fiscal year 2010 dollars) across the 30 years reflected in the report, including those years in which aircraft carrier funding is included. DOD utilizes incremental funding, as approved by Congress, as a mechanism to mitigate the impact of the carrier on the overall SCN appropriation. However, in those years where the carrier funding accounts for a larger percentage of the total SCN budget, the procurement of other shipbuilding platforms is adjusted in order to stay within available SCN funding.

25. Senator LEVIN. Secretary Mabus, does the Navy increase the Aircraft Procurement, Navy (APN) account in terms of its share of the investment budget during the period when it is investing heavily in new aircraft such as the F–35?

Mr. MABUS. The Navy's overall investment in the APN appropriation as a percentage of the total investment request varies year to year from fiscal year 2012 to fiscal year 2016, but it is consistently between 28 percent and 30 percent. The changes in the percentage and overall APN funding level is not solely attributable to JSF but is a combination of a number of factors and programs. For example, the P–8A investment steadily increases from fiscal year 2012 to fiscal year 2016 as the program ramps up production. Others programs overall investment decline, such as the EA–18G program which will achieve its inventory objective in fiscal year 2014. The JSF APN request does steadily increase as a percentage of the APN request from 4.6 percent in fiscal year 2012 to 7.6 percent in fiscal year 2016 as the JSF program ramps up production. The table below shows the year-to-year percentages from fiscal year 2012 to fiscal year 2016 for the APN request as a percentage of the total Navy investment request and the JSF APN request as a percentage of the total APN request.

Appropriation ($M) PB 12 Request	$2012	$2013	$2014	$2015	$2016
APN	18,587	19,179	19,747	20,186	22,268
NDSF	1,126	1,000	1,322	1,348	1,253
OPN	6,285	6,652	6,912	7,686	8,171
PANMC	720	798	1,008	1,025	1,165
PMC	1,392	1,976	2,428	2,578	2,839
RDTEN	17,956	17,961	17,542	15,909	14,948
SCN	14,929	16,020	17,152	18,297	17,621
WPN	3,408	3,690	3,606	3,932	4,167
Total DON Investment PB 12 Request	64,404	67,277	69,716	70,961	72,431
APN percentage of PB 12 DON Investment Request	28.9%	28.5%	28.3%	28.4%	30.7%
JSF APN Investment PB 12 request	2,980	3,702	3,809	4,817	5,501
JSF percentage of APN PB 12 request	16.0%	19.3%	19.3%	23.9%	24.7%

SYSTEM DEVELOPMENT AND DEMONSTRATION

26. Senator LEVIN. Secretary Mabus, we do not yet know whether the Marine Corps can build a new AAV that would meet reduced EFV requirements for an amount that is significantly less than what the EFV would cost to finish. Before we irrevocably terminate work on the EFV, why not finish the System Development and Demonstration (SDD) phase over the next year while DOD conducts its studies of alternative solutions?

Mr. MABUS. The cost of completing the SDD phase would require $242 million in fiscal year 2011, $179 million in fiscal year 2012, and $37 million in fiscal year 2013 for a total of $458 million. The program is not supportable within the context of likely Marine Corps procurement budgets. Even in the wake of the changes since 2007, the simple fact is that the procurement and operations and maintenance costs of this vehicle are onerous. We have examined multiple options to preserve the program, either by reducing the number of EFVs, cutting capabilities, or stretching out the production run. Unfortunately, none of these options meets what we consider reasonable affordability criteria. The program office continues to refine a cancelation plan for USD AT&L approval. This plan identifies which efforts on the EFV contract

will be completed in order to better inform the requirements development team in support of the follow-on ACV. The remaining elements of the contract will be shut down using an orderly approach. In essence, we will simply complete those remaining tasks which provide best value to the government. The selected activities are designed to capture performance characterization and may include such things as water speed/power performance and tradeoffs; human factors considerations and performance; and subsystem designs (technologies) that address the AAV capability gaps (i.e., thermal imaging, inertial navigation, laser range finder, crew vision system). These technologies and performance characteristics will better inform requirements and allow us to identify tradeoffs as we develop a more affordable ACV solution.

27. Senator LEVIN. Secretary Mabus, we understand that finishing the essential elements of the SDD phase will cost about the same as paying the termination liability. If that is true, we might get something more for the taxpayers' investment and we could preserve the option of going forward with the EFV or a variant of it if nothing better turns up. Are you evaluating that strategy?

Mr. MABUS. We have evaluated that strategy. However, finishing the essential elements of the SDD phase does not cost the same as paying the termination liability. The cost to complete the SDD phase requires $242 million in fiscal year 2011, $179 million in fiscal year 2012, and $37 million in fiscal year 2013 for a total of $458 million. The cost to cancel the EFV program is $216 million—all of which is in fiscal year 2011. Furthermore, we designed ongoing work to optimally inform the future ACV program. By selectively testing and developing only relevant capabilities for the future we provide best value to the government and maximize the return on our EFV investment. Our aim is to drive termination costs to effectively zero by leveraging those aspects of the EFV program of continuing value.

28. Senator LEVIN. Secretary Mabus, can you identify the relative costs of termination and finishing the essential elements of the SDD program?

Mr. MABUS. The cost of EFV termination is $216 million in fiscal year 2011. The total cost to complete SDD is $458 million. Within the SDD completion figure, the cost of finishing essential elements and shutdown of EFV is $242 million in fiscal year 2011; $179 million in fiscal year 2012; $37 million in fiscal year 2013.

F136 SPECIAL SUPPORT REQUIREMENTS

29. Senator LEVIN. Admiral Roughead, it has been stated by Navy and DOD officials over the past few budget cycles that by having two competing engines for the F–35, it would require having two sets of everything . . . things like two different sets of spare parts, two different sets of shipping containers, different tools, dual trained maintainers, et cetera. You have been quoted as saying that keeping two different engines for the F–35 on the decks of aircraft carriers would not be advisable as "space is at a premium . . . therefore you can put me solidly in the one-engine camp."

As recently as 2001, the Navy was responsible for maintaining nine different type/model/series engines that could be utilized on a carrier. Each of these engines required its own set of unique support equipment, hand tools, intermediate level maintenance, training, et cetera. This situation was all very cumbersome and your argument would make sense from a legacy aircraft point of view. But the situation for the F–35 engine does not appear to present the same situation as that for the legacy aircraft systems to which you compare it. By 2020, and assuming the F136 competitive engine is fielded, the Navy would have to maintain five different type/model/series engines in a carrier strike group. The F/A–18 and the EA–18 will utilize the same engine. The F–35 would have the choice of two interchangeable engines that enjoy 100 percent commonality in hand tools, support equipment, and shipping containers.

Of the four major modules that make up the F–35 propulsion system, two of them are 100 percent common between the F135 and F136. DOD had also planned that the same training courses would prepare maintenance personnel to support either or both engines in the fleet. By using this commonality approach, DOD had designed the program to require fewer uniquely qualified people and fewer unique tools, which would translate to fewer dollars necessary to support the engines. DOD also structured the program that way precisely to minimize the logistics footprint and the associated cost of maintaining a variety of engines on the carrier. Would you clarify why you conclude that you don't have room on the carriers to operate an alternate engine for the JSF?

Admiral ROUGHEAD. The F135 and F136 engines constitute two different designs by two different manufacturers. The large size of the F135 and F136 (approximately 18.7 feet and weighs ~9,300 lbs. in its container) necessitates greater sparing aboard ships as neither the assembled engine nor the power section module can currently be replenished underway. Similarly, due to the weight and height of critical engine spares, it is not feasible to store all JSF engine spares in legacy store rooms or stack them aboard ships as is done for legacy system. This would necessitate work-around in hangar deck spaces normally reserved to store and maintain tactical aircraft. Adding an alternate engine makes the shipboard logistics even more challenging as it is not a one-for-one exchange.

While the F136 engine would be interchangeable, there are several engine components that are not interchangeable. The fan, gear box, and power section modules are unique by F135 and F136 propulsion systems. Only the augmenter and exhaust nozzle modules are common by F–35 variant. Supporting two engines would require unique spares, unique support equipment, and unique training. The JSF specification only requires engines to perform to specified criteria and physically fit into the F–35. Maintenance/repair technical requirements are different, requiring different instructions and training with differences in assembly hardware and special tools for off-aircraft repair.

LPD–17 SHIPBUILDING PROBLEMS

30. Senator LEVIN. Secretary Mabus, we have been experiencing significant problems with production of the LPD–17 amphibious transport dock program. There have been problems with manufacturing, design, and quality control, to the extent that upon delivery of one ship to the Navy, the Navy had to immediately place the ship in a separate shipyard availability period before the Navy could operate the vessel. What has gone so wrong with the construction management and oversight of the LPD–17 program that we have had such continuing problems with this acquisition?

Mr. MABUS. Thorough reviews of LPD–17 class ships revealed issues in the areas of construction oversight, manning, and training, but corrective actions are now being implemented. Assessments of LPD–17 ship class are now complete and necessary corrections are being implemented. The lessons learned with earlier ships in the class have been incorporated in later new-construction ships.

Quality assurance (QA) and production oversight during ship construction were not sufficient by both the Supervisor of Shipbuilding, Conversion and Repair (SUPSHIP) and the shipbuilder impacting main propulsion diesel engines, lube oil systems, piping welds, and foundation bolts and power train alignment. However, the shipbuilder has now developed new procedures and training for its personnel and additional process QA checkpoints have been added to the shipbuilding inspection process. Additional staffing has been added to the SUPSHIP Gulf Coast staff with a focus on compliance and the Navy has instituted Comprehensive Quality audits of both SUPSHIP and the shipbuilder.

The Navy is also strengthening LPD–17 class crew training by establishing more traditional shore-based schoolhouses that will result in a blended philosophy of classroom, on-ship and computer based training, rather than relying on the previous emphasis on computer-based shipboard training.

Initial system reliability issues with the engine controls, ship controls, and interior communications systems have been addressed through major software upgrades to each system as well as the replacement of critical obsolete parts with more rugged current technology hardware. The ships' 1990s technology asynchronous transfer mode (ATM) shipboard wide area network (SWAN) is being replaced with a current Gigabit Ethernet technology network hardware and software.

A LPD–17 Class Wholeness Task Force was formed by the Fleet to undertake a comprehensive assessment of the overall state of readiness for the entire LPD–17 class of ships. The task force is addressing shipboard manning, adequacy of shore-based infrastructure support, performance of critical mission and propulsion systems, spare parts support, and adequacy of maintenance resources.

The combination of the above improvements are resulting in better reliability and operational availability of the currently commissioned ships of the class, while improving the projected operational availability of the ships currently under construction. Recent examples are LPD 21 (USS *New York*) completing in February a highly successful Bureau of Inspection and Survey final contract trials and LPD 19 (USS *Mesa Verde*) in March departing early for an overseas deployment in response to real world events.

QUESTIONS SUBMITTED BY SENATOR JACK REED

LANDING CRAFT AIR CUSHION

31. Senator REED. Secretary Mabus and Admiral Roughead, the Landing Craft Air Cushion (LCAC) has been a workhorse of the amphibious force for moving vehicles and cargo from our amphibious ships to shore. They have been and continue to be heavily employed in missions from combat to humanitarian relief worldwide. Despite a Navy SLEP to extend their lives, the LCAC force is wearing out. The Navy budget request for fiscal year 2011 included buying the lead vessel of a new ship-to-shore connector (SSC) class in the Navy's research and development budget. Last year, the Navy planned to purchase the second SSC vessel of this class in 2013. This year, the budget request indicates that the Navy plans to delay building the second SSC vessel until 2014. This development is troubling, given the wearing out of the exiting LCAC fleet and the cancellation of the EFV, both of which would appear to increase the importance of fielding the new SSC program and argue to maintain the previous schedule, not delay it. Why has the Navy delayed the second SSC vessel a year?

Mr. MABUS. The second SSC (LCAC 101) was delayed by 1 year to ensure that lessons learned during the construction of LCAC 100 were able to be applied to the follow-on vessels. Although a delay in the start of the second craft shifts IOC by 1 year, a SLEP is underway to extend the service life of a total of 72 LCAC from the original 20-year service life to 30 years.

Additionally, a sustaining maintenance program is under development for implementation in the 2014–2015 timeframe to ensure that previously SLEPed LCACs remain serviceable until the SSC reaches full operational capability (FOC) in the 2027–2032 timeframe.

Admiral ROUGHEAD. The Navy remains committed to our the ability to embark, transport, control, insert, sustain, and extract combat marines and sailors on missions that range from forcible entry to forward deployed crisis response. The second SSC (LCAC 101) was delayed by 1 year to ensure that lessons learned during the construction of LCAC 100 were able to be applied to the follow-on vessels.

Although a delay in the start of the second craft shifts IOC by 1 year, a SLEP is underway to extend the service life of a total of 72 LCAC from the original 20 year service life to 30 years.

After 30 years of service a craft is considered to be beyond designed service life and additional maintenance actions will be required to continue these craft in operation. Beginning in 2014 and each year thereafter, the active LCAC fleet will be populated with a growing percentage of craft that are expected to serve beyond the 30-year service life. A sustaining maintenance program is under development for implementation in the 2014–2015 timeframe to ensure the LCAC fleet remains serviceable until the SSC reaches FOC in the 2027–2032 timeframe.

32. Senator REED. Secretary Mabus and Admiral Roughead, will this delay lead to any gap in capability?

Mr. MABUS. There will be no capability gap in the Navy's ship-to-shore portfolio and the 1 year delay in the SSC/LCAC 100 acquisition will have only a minor impact in the transition from LCAC to SSC/LCAC 100. The Navy's transition plan combines SLEP for the current LCAC fleet, a post-SLEP LCAC maintenance and sustainment program, and a procurement profile for new connectors which replaces all legacy LCACs with new SSC/LCAC 100s by 2027. The SLEP and post-SLEP maintenance and sustainment program, currently under development, will ensure that legacy LCACs will remain operational until replaced by SSC/LCAC 100s sometime between now and 2027.

Admiral ROUGHEAD. The Navy remains committed to our the ability to embark, transport, control, insert, sustain, and extract combat marines and sailors on missions that range from forcible entry to forward deployed crisis response. The 1 year of delay in the SSC acquisition will have an affect on the established mitigation plan to address the LCAC capability gap. However, this LCAC capability gap reflects continuation of the current capability with a number of older and potentially more maintenance intensive craft remaining in service while developing and fielding the successor platform.

In 2014, the 72 LCAC fleet will begin to exceed its designed service life of 30 years. A number of LCAC will be required to remain in service in excess of the SLEP 30-year designed service life until the SSC reaches FOC in the 2027–2032 timeframe. A maintenance and sustainment program is being developed to retain these craft in service beginning in 2014–2015 timeframe until SSC attains FOC.

Craft that operate beyond the design service life will require the additional maintenance prescribed and the overall availability of the LCAC fleet will be impacted.

QUESTIONS SUBMITTED BY SENATOR MARK UDALL

RAND REPORT ON ALTERNATIVE FUELS

33. Senator UDALL. Secretary Mabus, recently, RAND published a study on alternative fuels that was intended to fulfill the requirement of section 334 of the National Defense Authorization Act (NDAA) for Fiscal Year 2009 for such a report. I am under the impression that there are aspects of the methodology, findings, and conclusions of the RAND report with which you disagree. Is my impression correct? If so, with what specifically do you disagree, and why do you disagree?

Mr. MABUS. In the RAND report, some of the conclusions suggested that the alternative fuel industry is immature, could not scale up to make an appreciable difference as a domestic alternative, and recommended that DOD not invest in this market. We have found that the biofuel industry appears to be well-poised to be of commercial size and ready to meet Navy demands by 2016 for the Secretary of the Navy Great Green Fleet goal. According to Biofuels Digest, there are 110 companies that are currently working on various biofuel products including mixed alcohols, biocrude oils, and drop-in fuels.

The RAND study accurately states that the Navy's switch to biofuels, in and of itself, will not reduce the Nation's total energy consumption by a significant margin. However, the RAND report was not well researched and did not take into account the recent research and development advances in the biofuels technologies. RAND stated in their report that the Fischer-Tropsch coal-to-liquid/biomass-to-liquid fuels are the most promising near-term options for meeting DOD's needs cleanly and affordably. Currently, there are no Fischer-Tropsch plants here in the United States. Additionally, under the guidelines of the Energy Independence and Security Act (EISA) of 2007, Section 526, any replacement fuel has to have a greenhouse gas emission profile less than petroleum. In order to meet this guideline, any Fischer-Tropsch coal-to-liquid plant would have to have carbon capture and sequestration incorporated into this overall process. While there is important carbon capture and sequestration research and development ongoing at DOE, there has not been any carbon capture and sequestration process built to commercial scale in the United States. In summary, due to the EISA 2007, Section 526 guidelines and the cost prohibitive carbon capture and storage process, we feel that the Fischer-Tropsch coal-to-liquid/biomass-to-liquid fuels are not the most promising near-term option for meeting DOD's needs cleanly and affordably.

While the use of alternative fuels can contribute toward guaranteeing our energy supplies, reducing our operational risks, and during volatile upward price swings in petroleum, could represent additional cost savings, the Navy's energy strategy has not been limited to alternative fuels. We have aggressively adopted proven energy efficient applications and practices commonly found in the commercial sector. We have funded both science and technology/research and development projects in pursuit of increased energy efficiency since these project can potentially and directly contribute to the combat capability of our operating forces by reducing our energy consumption both afloat and ashore, and by achieving significant cost savings.

The Navy prefers to see itself as an "early adopter" of available biofuels. The military has often led in the development of new technologies where there was a compelling military use, even if the civilian use was ultimately greater (ex. GPS, the Internet). The operational use of alternative fuels by the Navy will be hastened by collaborating with Federal agencies and private industry at every step of the research, development, and certification process. The alternative fuel program establishes the Navy as an early adopter for investors in a nascent industry that could significantly enhance energy security, and thereby national security, in the mid- to long-term. By positioning itself as an early adopter by testing available biofuels and certifying them "fit for use across our major platforms and leveraging test and certifications accomplished by the other services that meets our specifications," the Navy is better poised to reap the following benefits:

- Cost Savings. Increasing our use of alternative energy sources helps us achieve a level of protection from energy price volatility. For every $10 increase in the cost of a barrel of oil, the Navy spends an additional $300 million a year. Operating more efficiently saves money by reducing the amount we spend for fuel. Savings can be reinvested to strengthen combat capability. The cheapest barrel of fuel afloat or kilowatt-hour ashore is the one we will never use.

• Guaranteed Supply. Our reliance on energy can be exploited by potential adversaries. Efficiency and alternatives may be our best countermeasure. Energy efficiency increases our mission effectiveness by expanding our range and endurance, and reducing our need for logistics support. Efficiency improvements minimize operational risks of that logistics tether, saving time, money, and lives. Alternative fuels provide the Navy an 'off-ramp from petroleum,' mitigating the risk to a volatile and ever more expensive petroleum market.

• Fossil Fuel Independence. The Navy recognizes that our dependence on fossil fuels and foreign sources of oil makes us more susceptible to price shocks, supply shocks, natural and man-made disasters, and political unrest in countries far from our shores.

• Combat Capability. Making our ships and aircraft more efficient improves their fuel economy. We can increase the days between refueling for our ships, improving their security and combat capability. We can also extend the range of our aircraft strike missions, allowing us to launch our aircraft farther away from combat areas. Increasing our efficiency and the diversity in our sources of fuel improves our combat capability strategically and tactically.

34. Senator UDALL. Secretary Mabus, section 334 of the NDAA for Fiscal Year 2010 required a related report. Are you aware of the status of that report?

Mr. MABUS. The Navy is aware of this report being prepared by LMI. Our understanding is that this report is still undergoing review with all pertinent energy offices, and is expected to be out by the end of May.

ALTERNATIVE ENERGY SOURCES

35. Senator UDALL. Secretary Mabus, you have set as an ambitious goal: committing the Navy and Marine Corps to generate at least 50 percent of all the energy you use to come from alternative sources no later than 2020. Can you speak to what qualifies as alternative sources, where you have had the most success and where you believe you will attain the remaining percentage under this goal?

Mr. MABUS. The Navy has set two priorities that illustrate the Navy's role in investing in alternative sources of energy which are energy security and energy independence. The Navy will achieve energy security by utilizing sustainable sources that meet tactical, expeditionary, and shore operational requirements and force sustainment functions. This allows the ability to protect and deliver sufficient energy to meet operational needs. Second, energy independence is achieved when naval forces rely only on energy resources that are not subject to intentional or accidental supply disruptions. As a priority, energy independence increases operational effectiveness by making naval forces more energy self-sufficient and less dependent on vulnerable energy production and supply lines.

The Navy uses many different types of alternative energy on our naval installations such as solar, wind, and waste to energy. We have over 100 MW of solar planned to be installed in the next few years, and we have 22 anemometer (wind) studies ongoing. On the operational energy front, we have flown an F/A–18 Hornet on blended fuel, operated a 50/50 blend of biofuels on the Riverine Command Boat (RCB–X), and test flown a Seahawk helicopter on a 50/50 blend of biofuels. The Navy has also commissioned the USS *Makin Island,* which is designed with a gas turbine engine and electric auxiliary propulsion system. We also consider our nuclear fleet of aircraft carriers and submarines as part of our alternative energy program. In our expeditionary forward operating bases, we are using flexible solar panels to recharge batteries and light the inside of the tents with LED lighting. These are just a few examples of the different types of alternative energy sources that the Navy is currently using.

Much of our success is in the technologies that are tried and true—solar, wind, and geothermal. We are continuing to explore geothermal resources on our installations in the southwest. We are making great strides in helping stand up a biofuels industry that will supply biofuels to the fleet. This effort will be a key factor in our overall success of the 50 percent goal. We have to continue to institute energy efficiency into our processes and programs. We are designing and constructing all of our new buildings to LEED Silver criteria. The bottom line is that the most efficient BTU or KW-hr is the one that is not used.

36. Senator UDALL. Secretary Mabus, in your testimony you said that you are actively exploring for new geothermal resources to augment our existing 270 MW geo-

thermal power plant at China Lake. What technologies are you seeking to employ to expand geothermal energy use?

Mr. MABUS. Currently our geothermal development program is seeking areas on our installations with medium to high temperature hydrothermal resources where there is adequate faulting or permeability of the rock to allow movement of the steam and available ground water. This 'hot' geothermal is a large scale power source but the effectiveness of the use of geothermal heat depends on site specific characteristics. These locations are primarily in the western United States, although we have received requests to study geothermal potential in Guam and Japan. These requirements are necessary for conventional geothermal power plants, like the Navy's NAWS China Lake facility. Additionally, in locations with permeability with lower temperature hot water, we would use a binary system, but these systems have reduced power output.

We are also concurrently monitoring the maturity of the Enhanced Geothermal System (EGS) which could have a much broader applicability throughout the United States. EGS would be used where we have heat but no faults or water, but this is a relatively new technology and issues pertaining to earthquakes and possible contamination of water supplies need to be resolved.

Additionally, Navy is actively constructing numerous "shallow-drill," lower temperature gradient geothermal systems to use renewable resources to partially replace fossil fuel consumption in our individual building heating and cooling systems. We are also installing innovative "no-drill" solutions wherever viable. Navy's Dam Neck "no-drill" system won a 2009 Presidential Award for Leadership in Federal Energy Management. Dozens of these active systems are employed by the Navy today utilizing simple ground-loop or shallow-vertical indirect (closed loop) heat exchange systems. These systems save over 500 billion BTU annually, are a considerably lower risk to install, have minimal environmental impact, and have favorable ROI in most locations.

37. Senator UDALL. Secretary Mabus, are you considering shallow-drilling geothermal heat pump systems to power small-scale residential facilities and the like at domestic installations or are you exploring areas where you could tap hyper-deep geothermal energy resources and supply power to an entire installation?

Mr. MABUS. The Navy has been installing geothermal systems of all types at our installations since the early 1980s. We have installed them for family housing and small office buildings, as well as whole-base solutions. Both hyper-deep and shallow-drill systems are a major part of the Navy's plans for future Renewable Energy development.

The Navy is the lead service for hyper-deep geothermal energy production. Additional resource exploration is underway at NAS Fallon's Dixie Valley Bombing Ranges, NAF El Centro, and NAWS China Lake South Range. Our 270MW geothermal plant at NAWS China Lake is the third largest plant of its type in the United States.

Additionally, Navy is utilizing "shallow-drill" geothermal systems, both large and small scale, to replace fossil fuel consumption with renewable energy. We are also installing innovative "no-drill" solutions wherever viable. Some examples:

- Oceana shallow-drill geothermal systems save over 210,000 MBTU and nearly 20 million gallons of water annually, by placing 470,000 square feet of Navy Facilities onto Ground Source Heat Pump (GSHP) systems. The second phase of this project recently became operational in January 2011, 6 months early. These systems enabled closure of the large, aging, and inefficient central steam system.
- Dam Neck Annex's "no-drill" system utilizes seasonal heating and cooling from the Hampton Roads Sanitation Division (HRSD) Atlantic Treatment Plant effluent to save 244,000 MBTU annually, as well as enabling demolition of the central heating system.

Our most recent Annual Energy Management Report specifically identified approximately 12 other small-scale GSHP systems saving approximately 14,000 MBTU annually. Additional systems exist, but are often difficult to identify since they are often considered part of the building heating and cooling systems and not identified separately.

38. Senator UDALL. Secretary Mabus, are you aware of work within DARPA and/or collaborations with the Department of Energy's (DOE) ARPA–E program to advance the deployment of such technology?

Mr. MABUS. The Navy does not use the term "hyper-deep geothermal energy resources." The Navy was funded by Congress in 2001 to drill two 15,000–20,000 foot

wells. The drilling failed due to instability and fractures in the holes. The Navy geothermal project at China Lake does have a 13,500 ft. deep well which is deeper than most commercial wells.

Navy geothermal staff attended a DARPA geothermal meeting last year. The DARPA agenda was focused on EGSs, geothermal systems for forward operating bases, and geothermal systems for Guam. There was no discussion of hyper-deep wells.

Our Navy geothermal office does share technical information with DOE and has offered to partner with them in proving new technical concepts for geothermal. We are not aware of any on-going work at DARPA or DOE on hyper-deep resources.

EXPERIMENTAL FORWARD OPERATING BASE TECHNOLOGIES

39. Senator UDALL. Secretary Mabus and General Amos, the Experimental Forward Operating Base (exFOB) was cited by Secretary Mabus as a model for energy security in the theater. It is remarkable that such technologies allowed a foot patrol to operate for 3 weeks without battery resupply, reducing their burden by 700 pounds and saving more than $40,000. Is such a project scaleable to other FOBs as well?

Mr. MABUS. Yes, the capability referenced—the backpack-portable solar powered battery recharger called Solar Portable Alternative Communications Energy System (SPACES)—is scalable and it makes sense to deploy it broadly to our FOBs and Marine units. We introduced SPACES to the Fleet via ExFOB in summer 2010, and India Company, 3rd Battalion, 5th Marines successfully used it in Afghanistan beginning in December 2010. As a result, and in response to the clear value demonstrated to the mission, we now have 1442 units in the operating forces, with 446 units in Afghanistan. We are accelerating deployment of this capability to our forces.

General AMOS. The capability referenced—the backpack-portable solar powered battery recharger called SPACES—is scalable, and it makes sense to deploy it broadly to our forward operating bases and units. We introduced SPACES to the Operating Forces via our ExFOB in the summer 2010, and an infantry company from 3rd Battalion 5th Marines successfully used it in Afghanistan in late 2010. As a result, and in response to the clear value demonstrated to the mission, we now have over 1,500 units in our Operating Forces for use in our Afghanistan force rotation and our training allowances.

40. Senator UDALL. Secretary Mabus and General Amos, what challenges do you foresee in expanding exFOB technologies?

Mr. MABUS and General AMOS. One challenge we face is how to rapidly transition new capabilities to our Operating Forces, and ultimately into fully supported programs of record. Our ExFOB is an effective process that brings together the key players from our combat development, acquisition, and science and technology communities to identify and evaluate new capabilities. It informs our requirements, mitigates investment risks, and builds marines' confidence with innovative capabilities. Consequently, ExFOB helps to bridge the so-called 'valley of death' as it relates to technology transition. However, this process takes time, and these long lead times make it difficult for small companies seeking to do business with the Marine Corps, to engage in the process.

41. Senator UDALL. Secretary Mabus and General Amos, what are the benefits?

Mr. MABUS and General AMOS. The ExFOB capabilities we have evaluated in Afghanistan have helped our marines operate lighter, with less reliance on resupply. Our forces today are widely dispersed across the battle space: a company today may cover an area of 50 square miles or more, manning multiple outposts, and executing extensive dismounted operations. Our marines depend on communications gear and equipment, and rely on frequent resupply to support fuel, battery, water, and food needs. By providing a new source of power-solar and hybrid solar energy—and reducing the power demand of equipment, we have reduced mission risk, and increased our commanders' options. Ultimately, our goal is fewer marines at risk on the road hauling fuel and protecting fuel convoys.

In less than a year, through our ExFOB process, we evaluated capabilities at Twentynine Palms and on the battlefield in Afghanistan with India Co. 3rd Battalion, 5th Marine Regiment. While engaged in nearly constant combat, these marines used small scale solar solutions, man portable solar battery rechargers, hybrid-solar generators, plus energy efficient lighting and shelters, with positive results:

- Two patrol bases operated completely on expeditionary solar power generators. They have done this even while engaged in near constant combat.
- Another patrol base reduced its fossil fuel need by approximately 90 percent—from 20 gallons of fuel a day to 2.5 gallons a day.
- Using the SPACES back portable solar power system to recharge their radio batteries they were able to patrol for 3 weeks with no battery resupply. Typical battery resupply is every 2–3 days.

Because of the mission benefits we have seen, the Marine Corps is now looking at deploying these solutions broadly to our forward operating units in the coming months.

42. Senator UDALL. Secretary Mabus and General Amos, are you aware of any compromises to warfighting capability or strategic flexibility that were incurred as a result of utilizing the unique technologies at exFOB?

Mr. MABUS. Prior to battlefield evaluation of new capabilities, we conduct detailed evaluations in the lab with actual users who employ the equipment in similar operating environments and under similar stresses. Mission effectiveness is a top priority; solutions that cannot perform required mission tasks do not progress beyond the lab. The exFOB capabilities meet our requirements and have benefited our warfighting capability.

General AMOS. ExFOB capabilities have benefited our warfighting capability. Prior to battlefield evaluation of new capabilities, we place them through detailed evaluations in our laboratory, with actual users who would employ the equipment in operating environments similar to that in Afghanistan, under similar stresses. Mission effectiveness is a top priority; solutions that fall short do not progress to the next level of our process.

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN

ALTERNATIVE ENERGY SOURCES

43. Senator MANCHIN. Admiral Roughead, we've seen price fluctuations right now in foreign oil based on political instability in the Middle East and North Africa—I'd like to talk about using alternative energy sources from home. Will you speak about the costs of aviation fuel and alternative jet fuels—are you considering coal-to-liquid fuels?

Admiral ROUGHEAD. The Navy fully supports the use of using alternative source aviation fuels that meet all military performance requirements and technical specifications and would prefer, wherever possible, that the United States be the source of these fuels. Testing and certification of coal-to-liquid fuels are not in the Navy Program of Record because of congressional restrictions prohibiting procurement of alternative source fuels that may have greenhouse gas emissions or a carbon footprint greater than the petroleum based fuels which they would replace. Capital costs associated with commercial coal-to-liquid plants are expected to be in the billions of dollars and the technological hurdles associated with carbon sequestration present enough unknowns that there is little commercial transportation industry interest in this approach. As the commercial transportation industry and the Navy have focused on the use of next generation biofuels engineered to mix seamlessly with existing fuel supplies. As with any commodity, the costs of any alternative fuels will be a function of supply and demand. Industry and academia forecast the future costs of these fuels will be competitive with petroleum based fuels.

44. Senator MANCHIN. Admiral Roughead, what are the challenges using such fuels in the war zone?

Admiral ROUGHEAD. Once the alternative fuels are certified in 2012, there will be no restrictions on using these fuels in combat. We will deliver the quantity and quality of fuels required to our forces when and where they are needed, and the source of these fuels will be transparent to the end users, the fuels will mix seamlessly with our existing fuel supplies, and the technical parameters of the fuels will deliver similar combat capability.

The purpose of the Navy alternative fuels test and certification program is to certify that these alternative source fuels meet the specifications that our petroleum-based fuels must meet. The test and certification process of the fuels necessary for the Great Green Fleet is currently underway. Current funding puts the Navy on track to complete the fuel certification required for ship and aircraft systems to conduct the demonstration of the Green Strike Group in 2012. They will be functionally

identical and 'drop in' replacements to the current fuels that we use and will have no impact to the engines that use them.

45. Senator MANCHIN. Secretary Mabus, you have pledged your commitment to have the Navy and Marine Corps accelerate the exploration and exploitation of new ways to "procure, produce, and use energy." You have also stated that your goals for energy security include a commitment to generate at least 50 percent of all the energy the Navy and Marine Corps use from alternative sources no later than 2020. What progress have you made in achieving this goal and what is the makeup of alternative energy sources?

Mr. MABUS. The Navy has set two priorities that illustrate the Navy's role in investing in alternative sources of energy which are energy security and energy independence. The Navy will achieve energy security by utilizing sustainable sources that meet tactical, expeditionary, and shore operational requirements and force sustainment functions. This allows the ability to protect and deliver sufficient energy to meet operational needs. Second energy independence is achieved when naval forces rely only on energy resources that are not subject to intentional or accidental supply disruptions. As a priority, energy independence increases operational effectiveness by making naval forces more energy self-sufficient and less dependent on vulnerable energy production and supply lines.

The Navy uses many different types of alternative energy on our naval installations such as solar, wind, and waste to energy. We have over 100 MW of solar PV projects planned to be installed in the next few years, and we have 22 anemometer (wind) studies ongoing. On the operational energy front, we have flown an F/A–18 Hornet on blended fuel, operated a 50/50 blend of biofuels on the Riverine Command Boat (RCB–X), and test flown a Seahawk helicopter on a 50/50 blend of biofuels. The Navy has also commissioned the USS *Makin Island,* which is designed with a gas turbine engine and electric auxiliary propulsion system. We also consider our nuclear fleet of aircraft carriers and submarines as part of our alternative energy program. In our expeditionary forward operating bases, we are using flexible solar panels to recharge batteries and light the inside of the tents with LED lighting. These are just a few examples of the different types of alternative energy sources that the Navy is currently using.

Much of our success is in the technologies that are tried and true—solar, wind, and geothermal. We are continuing to explore geothermal resources on our installations in the southwest. We are making great strides in helping stand up a biofuels industry that will supply biofuels to the fleet. This effort will be a key factor in our overall success of the 50 percent goal. We have to continue to institute energy efficiency into our processes and programs. We are designing and constructing all of our new buildings to LEED Silver criteria. The bottom line is that the most efficient BTU or KW-hr is the one that is not used.

46. Senator MANCHIN. Secretary Mabus, are each of these sustainable, especially in the war theater, and if not, why not?

Mr. MABUS. Yes, they are all very sustainable in a war theater as well as elsewhere. A good example is that while deployed to the Sangin Province Afghanistan, India Company, Third Battalion, Fifth Marines (3/5) operated two patrol bases completely on renewable energy, offsetting 100 percent of their potential fuel use. Based on reports from marines in the field it is estimated that each patrol base saved 12 gallons per day per location. This means that each month these two patrol bases would have offset approximately 744 gallons per month (31 days $\times$ 24 gals) or 8,928 gallons per year. It is evident that a small savings at a remote patrol base has significant impacts over the long term, not to mention immediate reduction in risk to our marines moving fuel in a very dangerous area.

An example of the technology that they used is the SPACES, which is is an innovative family of mobile solar power and power distribution products. SPACES delivers portable power to charge batteries, operate communications equipment, and run small electronic accessories in tactical and remote environments.

In addition to the patrol bases operated by India 3/5, they also employed renewable and energy efficient technologies at a company location, too. At the company location report fuel use was reduced from 25 gallons per day to 2.5 gallons per day or an initial savings of 90 percent. Targeting renewable and energy efficient technologies at remote outpost immediately reduce the risks to our forces and increases our combat effectiveness.

Outside of those pursuits, we are making our Navy and Marine Corps more energy efficient. Making our ships and aircraft more efficient improves their fuel economy. We can increase the days between refueling for our ships, improving their security and combat capability. We can also extend the range of our aircraft strike

missions, allowing us to launch our aircraft farther away from combat areas. Increasing our efficiency and the diversity in our sources of fuel improves our combat capability strategically and tactically.

CHINA

47. Senator MANCHIN. Secretary Mabus and Admiral Roughead, China has continued its military modernization effort, including its naval modernization. How should the U.S. military planners respond to China's improved military forces and how would this affect the Navy's budget?

Mr. MABUS and Admiral ROUGHEAD. Our Navy has made significant investment in new technology to defeat the most likely evolving threats, including those of China. Also, the Navy has invested heavily into Aegis modernization which will upgrade existing Aegis technology to continually improve our integrated air and missile defense capability.

48. Senator MANCHIN. Secretary Mabus and Admiral Roughead, how could the U.S.-Chinese military balance in the Pacific influence day-to-day choices made by other Pacific countries, especially our allies?

Mr. MABUS. Sovereign nations throughout the Asia-Pacific region indicate they are reevaluating their political, economic, and military alignments as globalization continues, a multi-polar geo-political landscape emerges, and the world encounters an increasing number of diverse, concurrent crises. Considering this dynamic environment, the Navy is confident that its current force structure and forward posture serve to reinforce our longstanding commitment to the security and stability of the Asia-Pacific region as a whole, and our allies in particular.

The Navy is mindful, however, of the need to respond to emerging challenges in this rapidly evolving security environment by strengthening our alliances and partnerships, modernizing our forces, fielding new capabilities and technologies, and developing new operational concepts.

One specific initiative that will help preserve a favorable military balance in the Pacific, and assure our allies, is implementation of the Air-Sea Battle Concept—a limited operational concept that focuses the development of integrated air and naval forces on addressing the evolving anti-access/area denial (A2/AD) environment. The Air-Sea Battle Concept encompasses three key elements:

- Institutional cooperation will be enhanced by establishing an enduring organizational construct that will continue formal collaboration to address the A2/AD environment as it evolves over time.
- Conceptual alignment will be perpetuated through the operational design which describes how capabilities and forces are integrated to accomplish operational objectives in an A2/AD environment.
- Materiel solutions and innovations will be collaboratively vetted to ensure they are complementary where appropriate; redundant when mandated by capacity requirements; fully interoperable; and fielded with integrated acquisition strategies seeking efficiencies where they can be achieved.

Air-Sea Battle implementation will ensure continued U.S. advantage against emerging threats that include long-range, precise, anti-ship and land attack ballistic and cruise missile systems; advanced combat aircraft and electronic warfare technologies; advanced Integrated Air Defense systems; submarines and subsurface warfare capabilities; surface warfare capabilities; C4ISR capabilities; and cyber warfare technologies. This advantage, coupled with enduring forward presence that supports robust training, exercises and military-to-military engagement, will promote choices among our allies and like-minded partners that advance our national interests in the Pacific.

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TRANSPORTATION OF FUEL AND SUPPLIES

49. Senator MANCHIN. General Amos, there are regular reports of fuel and supply chain interruptions over land routes in Pakistan and Afghanistan. In some cases, U.S. taxpayers' dollars are being siphoned off to insurgents to secure the safety of the fuel and food supplies. Please give me a detailed assessment of the risks marines are facing by hauling fuel and water to forward bases.

General AMOS. Day-to-day marines courageously operate in a high-risk environment to ensure the timely delivery of logistics support to the many combat outposts, patrol bases, and forward operating bases throughout Regional Command-Southwest (RC–SW). Fuel, food, water, and ammunition continue to be the most critical items required for delivery. Harsh terrain and enemy activity, highlighted most by IEDs, take a significant toll on both marines and their equipment. However, we mitigate these risks by providing marines with the best possible equipment. Our Mine Resistant Ambush Protected (MRAP) vehicles, augmented with Counter Radio-Controlled Electronic Warfare systems, help to defeat radio-controlled IED threats. We also outfit our vehicles with Vehicle Optics Sensor Systems to scan for IED threats during day and night operations. We also maintain dedicated Route Clearance Teams comprised of engineers, explosive ordnance disposal personnel, mechanical devices, and specialized robotics to help thwart ambushes, clear natural or man-made obstacles, and detect IEDs.

We reduce the exposure of our marines by using a wide range of delivery options. Air delivery using Air Force and Marine Corps fixed-wing aircraft are used to drop supplies to remote locations. We also employ contracted rotary wing assets to deliver cargo. Where the enemy threat is less severe, contracted trucks provide direct delivery of fuel and water to many of our bases allowing us to make the most effective use of our tactical distribution assets. Finally, we are continuously examining ways to reduce the amount of fuel and water delivered to our marines by providing capabilities such as the Tactical Water Purification System and Lightweight Water Purification System to produce water onsite. We are also fielding systems such as the Ground Renewable Expeditionary Energy System and the SPACES to reduce the demand for fuel at our remote patrol bases.

The siphoning of U.S. tax dollars to insurgents is a significant threat in a number of functional areas including logistics; however, this activity is not significant in RC–SW. There are isolated reports of extortion along heavily traveled routes, but this activity is assessed as low when compared to other regional commands. Pilferage is only a minor concern as vendors in RC–SW are paid for delivery vice transport. This policy creates an incentive for the shipping companies to ensure that loads arrive intact. Overall, we do not assess RC–SW to be experiencing significant supply chain interruptions due to enemy activity, corruption, or criminality.

50. Senator MANCHIN. General Amos, can you tell me about the Marine Corps' Bases to Battlefield Expeditionary Energy Strategy and how this strategy will affect the logistic concerns surrounding the transport of fuel and supplies?

General AMOS. On March 21, I announced the Marine Corps Expeditionary Energy Strategy and Implementation Plan that specifically directs the Corps to increase energy efficiency on the battlefield by 50 percent, and to reduce the fuel used by each marine per day by 2025 by the same amount as well. My intent for this strategy is to increase combat effectiveness and reduce our need for logistics support ashore. The priority is to save lives by reducing the number of marines at risk on the road hauling fuel and water. Our objective is to allow marines to travel lighter—with less—and move faster through the reduction in size and amount of equipment and the dependence on bulk supplies.

Based on a 2010 study that we conducted, we determined that marines in Afghanistan use about 200,000 gallons of fuel a day to power warfighting capabilities and sustain our forces. About 70 percent of our logistics requirements are fuel and

water. This demand for resources increases risk and constrains our operations. It also costs lives: 6 marines were wounded over a 3-month period in 2010 while supporting 299 fuel/water convoys. This roughly equates to 1 marine wounded per every 50 fuel and water convoys.

Demand for battlefield energy has increased exponentially in the last 10 years and is rising, driven by enhancements to communications, computers, command and control, and information capabilities (C^4I), vehicles, and weapons systems. We recognize that these warfighting assets have made our combat forces more lethal, but they also have come with a grave unintended consequence—our logistics trains are at greater risk.

Our strategy, therefore, concentrates on three major areas:

(1) We will increase the energy efficiency of our equipment, platforms, and systems;
(2) We will increase our use of renewable energy, and thereby increase self sufficiency in our battlefield sustainment; and
(3) We will change the way we think about energy-equating efficient use of resources with increased combat effectiveness.

The Marine Corps Expeditionary Energy Strategy calls on the Marine Corps to build Marine Expeditionary Forces capable of maneuvering from the sea and sustaining C^4I and life support systems in place. The target date for this goal is 2025.

In addition to the "Bases to Battlefield" strategy, we are now taking the critical step to institutionalize change in our energy usage by establishing formal requirements via the Expeditionary Energy, Water, and Waste Initial Capabilities Document to drive our investments in equipment, training, and manning. These requirements aim to reduce energy demand in our platforms and systems, increase the use of renewable energy, and build an ethos around energy efficiency in the Corps.

BAHRAIN

51. Senator MANCHIN. Admiral Roughead, news sources continue to report on political problems in Bahrain, where the 5th Fleet is currently operating. I recently met with political leaders in the region who expressed their genuine concern for the political stability of the monarchy in Bahrain. What can you tell me about your security concerns for U.S. forces in Bahrain?

Admiral ROUGHEAD. To date, there are no known credible threats to U.S./coalition forces or bases. There has been no change in the status of the relationship between Commander, U.S. Naval Central Command (CENTCOM)/C5F and the Government of Bahrain. The Government of Bahrain continues to fully support hosting Naval Support Activity-Bahrain (NSA-Bahrain) and its tenant commands. We do not expect a change in the Bahraini Government's attitude toward hosting NSA-Bahrain. The King and Crown Prince have stated their continuing support to the U.S. Navy presence in the Kingdom of Bahrain.

LIBYA

52. Senator MANCHIN. Secretary Mabus, taking into account the extent of the U.S. military commitment in Afghanistan, Pakistan, and Iraq, do you believe it would be more difficult for the United States to operate a no-fly zone (NFZ) in Libya, and if so, why?

Mr. MABUS. As was demonstrated by U.S. and coalition forces operating from European bases, establishing a NFZ in Libya was not difficult. The Navy/Marine Corps team readily executed the NFZ with the air combat element aboard our amphibious ships in conjunction with shore-based intelligence, surveillance, and reconnaissance, missile attacks from surface combatants and submarines and electronic attack aircraft. Our sea-based forces again exploited their inherent flexibility to respond to crises and conduct operations largely independently from third-country basing requirements.

QUESTION SUBMITTED BY SENATOR JEANNE SHAHEEN

GAO RECOMMENDATIONS FOR PUBLIC SHIPYARDS

53. Senator SHAHEEN. Secretary Mabus, the Navy's four public shipyards—Portsmouth Naval Shipyard, Puget Sound Naval Shipyard, Pearl Harbor Naval Shipyard, and Norfolk Naval Shipyard—are critical to the readiness, sustainability, and continued endurance of America's unparalleled naval power. I am very concerned about

the backlog of restoration and modernization projects at the four public shipyards. According to the Navy, as of October 2009, the backlog consisted of nearly $3.1 billion. In addition, according to the Government Accountability Office (GAO), the Navy's estimate of $3.1 billion actually underestimates the total shipyard backlog. The GAO report made a series of four recommendations "to improve the overall visibility of the Navy shipyards' restoration and modernization needs and quality of life issues." In written comments on this report, DOD concurred with all four recommendations. Please comment on each recommendation listed below and address how the Navy intends to implement each accepted recommendation:

A. Develop guidance that lays out the requirement for the shipyard to develop strategic plans that address their future restoration and modernization needs and that reflect the seven essential elements of a comprehensive strategic planning framework;
B. Develop and document a method for systematically collecting and updating the Navy's configuration and condition information, including establishing measurable goals and timeframes for updating its processes so that the data are complete and accurate;
C. Submit documentation to the Office of the Deputy Under Secretary of Defense for Installations and Environment to update the replacement unit cost factor for dry docks so that plant replacement value calculations for dry docks, and subsequent restoration and modernization cost calculations, more accurately reflect the shipyards' unique infrastructure needs; and
D. Develop guidance for the shipyards to systematically collect information on and document corrective actions to prioritize and address identified quality of life issues.

Mr. MABUS.

A. The Navy's Ship and Submarine Global Shore Infrastructure Plan (GSIP), which serves as a higher order strategic document that provides the context for the individual shipyard plans, is being finalized. Once the GSIP is finalized, Naval Sea Systems Command (NAVSEA) will develop guidance to align the individual shipyard plans and the Depot Maintenance Infrastructure Plan (DMIP) with the GSIP and the 2011 Naval Shipyard Business Plan. The guidance will reflect the seven essential elements of a comprehensive strategic planning framework.
B. The Infrastructure Condition Assessment Program (ICAP) is in place to ensure assessment of the condition of all shipyard buildings and waterfront structures (piers, wharfs, et cetera). Additionally, waterfront structures receive a structural inspection on a 6-year cycle. The Navy will add conduct a pilot program assessment of dry docks to evaluate the associated costs for inclusion into the ICAP process. Finally, the shipyard utility infrastructure is being evaluated for potential assessment in the next few years. Updated condition ratings from these inspections will be uploaded into the internet Navy Facilities Asset Data Store (iNFADS) annually. The Navy currently plans to have all waterfront infrastructure (to include dry docks) evaluated and relevant data systems updated by fiscal year 2013. Additionally, a majority of configuration (functionality) ratings are currently available in iNFADS, which will be updated as necessary via the ongoing asset evaluation program.
C. The Navy is committed to accurately reflecting the magnitude of the dry-dock backlog. Navy is pursuing a reassessment of the Replacement Unit Cost factors and plans to provide this information to DUSD(I&E) no later than 9 months after receiving funds.
D. With workforce safety, health, and quality of life as top priorities, the Navy develops comprehensive restoration and modernization (RM) projects, based primarily upon the ICAP and Asset Evaluation (AE) program data. These assessments and subsequent projects specifically address improvements for people and processes in support of the shipyard mission.

The Navy cannot address every shortfall in the desired timeframe due to fiscal constraints, so shipyard projects are evaluated and prioritized with all Navy RM projects, in accordance with the Navy's shore investment strategy. Our shore investment strategy provides shore infrastructure that is properly sized and aligned to enable warfighting and joint capabilities, minimizes the decline of critical mission-essential and quality of life infrastructure, and optimizes warfare enterprise outputs and quality of service.

The Navy is exploring methods to collect additional information on shipyard quality-of-life and quality-of-service issues.

QUESTIONS SUBMITTED BY SENATOR KIRSTEN GILLIBRAND

ENERGY SECURITY

54. Senator GILLIBRAND. Secretary Mabus, as you stated, you have set a goal of having at least half the Navy and Marine Corps total energy coming from non-fossil fuel sources by 2020. As the price of oil continues to rise due to conflicts in the Middle East, replacing costly fossil fuels with proven and effective renewable energy technologies is a necessary move, for the taxpayers' pocketbook and our Nation's energy security. I want to commend you on the extensive number of renewable energy projects you have implemented both on Navy and Marine Corps installations at home and at forward deployed locations. As the Navy and Marine Corps continue to procure renewable energy technology, what efforts, if any, is DOD taking to provide the proper guidance to the energy managers to emphasize American renewable technology in their procurement portfolios?

Mr. MABUS. The Navy is emphasizing American renewable technology in all its actions related to energy. We do not want to trade dependence on foreign oil for dependence on foreign technology. The Federal Acquisition Regulation clause requiring compliance with the Buy American Act (BAA) is placed in all applicable Navy contracts. Additionally, DOD and the Navy have issued separate internal guidance documents on their energy programs emphasizing both renewable energy technologies and energy efficiency. These vision and guidance documents provide direction and meet or exceed all of the energy mandates and legislation.

The Navy has set two priorities that illustrate the Navy's role in investing in alternative and renewable sources of energy which are energy security and energy independence. The Navy will achieve energy security by utilizing sustainable sources that meet tactical, expeditionary, and shore operational requirements and force sustainment functions. This allows the ability to protect and deliver sufficient energy to meet operational needs. Second energy independence is achieved when naval forces rely only on energy resources that are not subject to intentional or accidental supply disruptions. As a priority, energy independence increases operational effectiveness by making naval forces more energy self-sufficient and less dependent on vulnerable energy production and supply lines.

The Navy uses many different types of alternative energy on our naval installations such as solar, wind, and waste to energy. We have over 100 MW of solar PV projects planned to be installed in the next few years, and we have 22 anemometer (wind) studies ongoing. We are working with American companies to develop ocean power systems (wave, tidal ocean thermal) that can be used in the future to power our island and coastal installations from ocean resources. On the operational energy front, we have flown an F/A–18 Hornet on blended fuel, operated a 50/50 blend of biofuels on the Riverine Command Boat (RCB–X), and test flown a Seahawk helicopter on a 50/50 blend of biofuels. The Navy has also commissioned the USS *Makin Island* which is designed with a gas turbine engine and electric auxiliary propulsion system. We also consider our nuclear fleet of aircraft carriers and submarines as part of our alternative energy program. In our expeditionary forward operating bases, we are using flexible solar panels to recharge batteries and light the inside of the tents with LED lighting. These are just a few examples of the different types of alternative energy sources that the Navy is currently using.

Much of our success is in the technologies that are tried and true—solar, wind, and geothermal. We are continuing to explore geothermal resources on our installations in the southwest. We are making great strides in helping stand up a biofuels industry that will supply biofuels to the fleet. This effort will be a key factor in our overall success of the 50 percent goal. We have to continue to institute energy efficiency into our processes and programs. We are designing and constructing all of our new buildings to LEED Silver criteria. The bottom line is that the most efficient BTU or KW-hr is the one that is not used.

55. Senator GILLIBRAND. Secretary Mabus, what is DOD's process to track the country of origin of technologies procured? Specifically, I'm not referring to where a renewable energy technology may have been substantially transformed but the origination—for instance, in the solar industry, what is the country of origin of the solar cells in solar panels that are eventually installed on Navy installation facilities?

Mr. MABUS. The Federal Acquisition Regulation clause requiring compliance with the BAA is placed in all applicable Navy contacts. Contract awardees provide product submittals during the design and construction phase to certify compliance with the provisions of the act. The Navy does not apply any additional criteria such as country of origin, as long as BAA requirements are met. Neither does the Navy cen-

trally track the country of origin of any installed technologies, but manages these requirements at the contract level.

56. Senator GILLIBRAND. Secretary Mabus, as the world's largest consumer of energy, spending over $20 billion a year, DOD has a special responsibility to lead by example when greening the government. Its enormous purchasing power helps create new markets for renewable energy technology products, making them more affordable for everyone. However, when DOD makes its renewable energy procurement decisions, are the implications of those purchases on our Nation's energy security considered? Specifically, some of the largest solar PV projects within the military rely heavily on foreign-manufactured renewable energy. I am interested to know if the Navy is purchasing foreign-manufactured solar panels. If yes, were American-manufactured options considered in such instances? If yes, why were they rejected? If such options were rejected on price or efficiency alone, could you please explain if that determination was made on a cost-per-panel basis or on a total-system-of-cost-per-watt basis?

Mr. MABUS. When a procurement requires that the Navy own PV panels, the Navy includes the BAA requirement in its contract and requires that all contractors comply. When procuring services, which will include PV panels that the Navy will not own, the Navy will apply the test criteria and follow the requirements of the 2011 NDAA, as amended to include Section 846. BAA requirements do allow the Navy to purchase foreign manufactured solar panels if the cost of a particular domestic construction material exceeds the cost of foreign material by more than 6 percent.

BUY AMERICAN ACT

57. Senator GILLIBRAND. Secretary Mabus, DOD, along with all Federal agencies, must abide by the BAA when purchasing products for the agency. I am advised that DOD, instead of direct procurement, has increasingly begun to rely on financing vehicles such as Power Purchase Agreements (PPA) to fund renewable energy investments because of their attractive financing features. However, the BAA did not apply to this financing agreement until it was extended to do so by the NDAA for Fiscal Year 2011 for solar PV panels on DOD facilities. As DOD moves forward to implement the new contracting rule, what efforts and guidance will you be providing installation commanders, energy managers, and contracting officers within the Navy and Marine Corps to ensure they fully implement the BAA provisions?

Mr. MABUS. As DOD moves forward to implement the new contracting rule, all contracting officers will continue to require BAA compliance when applicable in procuring PV panels. As with all NDAA sections impacting DOD procurement procedures, we are waiting for uniform DOD guidance prior to instructing the Navy procurement officials on any specific implementation requirements. Until then, we will advise contracting officers to apply the 2011 NDAA test criteria when contemplating the acquisition of PV panels.

MILITARY BASE ENERGY SAVINGS

58. Senator GILLIBRAND. Secretary Mabus, the Defense Science Board Task Force has recognized the Navy's Incentivized Energy Conservation (i-ENCON) program, a program that allows ship commanders to keep a portion of the money saved through operational efficiency measures and use it for morale, welfare, and recreation or investments in further efficiency measures, as one of the few successes in helping DOD meet its energy efficiency goals. Would you please comment on how the i-ENCON program came to fruition, how it has led the Navy to be the lead military department in energy efficiency, and make suggestions on how DOD can adopt this program agency-wide?

Mr. MABUS. In 1975, the Navy developed the Steam System computer model to determine energy savings available by procedural and equipment modifications. In the 1980s, the Navy initiated the Ship Energy Conservation Assist Team (SECAT) program to demonstrate and introduce individual ship commands to known energy conserving techniques without adding equipment complexity or additional maintenance burden. The biggest lesson learned from SECAT was that ships were significantly more likely to emphasize energy savings, when it was incentivized (i.e., some portion of the savings went to ships' Operating Target (OPTAR) accounts).

In the early 1990s, as a result of the Gulf War's impact on oil prices, NAVSEA piloted the i-ENCON program which was implemented Fleet-wide in 1999. Today, the i-ENCON program is a major initiative of the Navy's Energy Conservation Pro-

gram. During fiscal year 2010, Navy ships achieved a net fuel cost avoidance of $68 million compared to the average burn rate from fiscal year 2007–fiscal year 2009. I–ENCON has helped the Fleet accomplish increased steaming hours at no extra cost by managing fuel consumption and transit speeds and eliminating unproductive energy expenditures.

NAVAIR is currently working with the Fleet to develop a similar type ENCON program for naval aviation. The Air Force has also been briefed by NAVSEA's i-ENCON Program Manager to assist them with establishing a program as well. Other DOD components will likely find that incentivized programs will yield similar results with getting their commands to adopt best practices in procedural and technical specifications that measurably result in energy cost avoidance.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

SSBN(X) *OHIO*-CLASS SUBMARINE REPLACEMENT

59. Senator MCCAIN. Secretary Mabus and Admiral Roughead, one area of the Navy's budget that I am very concerned about is the amount of funding needed for ship construction going forward. With about half of the Navy's construction and development dollars being needed to build extraordinarily expensive nuclear submarines, I am concerned that our commitment to building new submarines may be crowding out funding needed to modernize the surface fleet. Do you share that concern? If so, how do you intend to address it?

Mr. MABUS. Yes, there is concern. The fiscal year 2011 Shipbuilding Plan included, and Navy planning will continue to include, the provision for funding SSBN recapitalization from the Navy's expected shipbuilding funds. The need to fund SSBN recapitalization will result in some risk to the Navy's shipbuilding plan in the years outside the FYDP. The Navy's Shipbuilding Plan has balanced the anticipated risk in the period with the uncertainties of the future to achieve the best balance of missions, resources, and requirements possible.

The strategic necessity of recapitalizing the SSBN force will impact the Navy's ability to procure other ship classes as significant resources are allocated to the *Ohio* Replacement program. The lower build rates while the *Ohio* Replacement is being procured will result in reduced force structure in the far-term. While the threats, demands, and mission requirements for this far-term planning period are not well understood, the Navy will continue to consider mitigation strategies for these anticipated shortfalls in future plans. Additionally, the Navy must strike a balance between investing in new ships more capable for meeting current and future requirements and maintaining ships to their expected service life. The Navy has made a conscious decision to deactivate older, less capable ships that have become increasingly expensive to maintain and operate in order to support those investments in our future Fleet.

The Navy is planning to manage the service lives and modernization of legacy ships during this period to prevent block obsolescence causing unacceptable gaps in capability and capacity. During the far-term period, we have assumed a procurement strategy based on sustaining procurement rates. As requirements, resources and the industrial landscape come into better focus for the post-2020 timeframe, the Navy will address these issues working with combatant commanders, Congress, and industry to fulfill the mission requirements on this distant horizon for these ships. Annual procurement and funding levels have been leveled to the greatest extent possible, and annual production rates are often at minimum sustaining rates. While this plan is fiscally prudent, it will likely cause some increases in ship unit costs due to production inefficiencies.

Affordability is the key challenge. During the past year, the *Ohio* Replacement Program has been thoroughly reviewed. All aspects of the program (warfighting requirements, program execution, design and construction efforts) were aggressively challenged to drive down non-recurring engineering and construction costs while meeting the core military requirements for a survivable nuclear deterrent. The Navy continually strives to reduce the costs of all of its shipbuilding programs, specifically through design and development to reduce total ownership cost and acquisition cost, analysis of operational and maintenance requirements, and planning for future disposal requirements.

If additional funding was provided to fund SSBN(X) procurement during this time period, the Navy would be able to apply its shipbuilding funds to raise other ship procurement rates to reduce the impact on the shipbuilding industry and to increase the overall battleforce inventory. Additional ships would include guided missile de-

stroyers and attack submarines. Additional funding would help reduce future ship inventory shortfalls and provide more stable production base.

Admiral ROUGHEAD. I remain committed to ensuring we maintain undersea dominance. This is best done with our unequalled submarine fleet. However, starting in the 2020s, many of our existing cruisers, destroyers, and submarines will reach the end of their service lives. During this period, it will be particularly critical to procure sufficient numbers of new ships to offset these decommissionings to avoid a rapid decline in force structure. At the same time, we will begin to replace our *Ohio*-class ballistic missile submarine, the most survivable leg of our Nation's nuclear deterrent triad. While we have reduced the cost of that submarine substantially, our total shipbuilding budget will be pressurized in that decade as we seek to recapitalize our surface and submarine forces while sustaining warfighting readiness and supporting our people. I am confident our near-term force structure plans provide the capability and capacity we need to meet demands today, but in this decade we must address how to best resource the shipbuilding programs required in the 2020s.

The Navy will continue to consider mitigation strategies for these anticipated changes. Additionally, the Navy must strike a balance between investing in more capable new ships for meeting future requirements and maintaining ships to their expected service life. The Navy has made a conscious decision to deactivate older, less capable ships that have become increasingly expensive to maintain and operate in order to support those investments in our future Fleet. The Navy will manage the service lives and modernization of legacy surface ships during this period to prevent block obsolescence causing unacceptable gaps in capability and capacity. In the far-term, we have assumed a procurement strategy based on sustaining procurement rates.

If additional funding were to be provided to fund SSBN(X) procurement during the 15-year construction phase of this national security asset, the Navy would be able to apply its shipbuilding funds to raise other ship procurement rates to reduce potential capacity gaps and minimize the impact on the shipbuilding industry and the overall battleforce.

60. Senator MCCAIN. Admiral Roughead, a couple of weeks ago in New York you said that the ballistic missile submarine replacement program—a 12-submarine $60 billion acquisition program—"is a strategic national asset that should not necessarily be funded in the shipbuilding account."

I too am troubled by the fact that *Ohio*-class replacement nuclear ballistic submarines are estimated to cost at least $7 billion each and the cost to operate them will cost $347 billion over the life of the submarines. Should the *Ohio*-class submarine replacement program be funded in the shipbuilding account or in a separate account where it does not compete with other critical shipbuilding modernization needs?

Admiral ROUGHEAD. During the development of the future budget submissions, Navy will continue to engage with OSD leadership to develop a well-informed and executable strategy for the procurement of *Ohio* Replacement SSBNs that includes some form of above top line relief for Navy shipbuilding.

The *Ohio* Replacement Program has been thoroughly reviewed. All aspects of the program (warfighting requirements, program execution, design and construction efforts) were aggressively challenged to drive down nonrecurring engineering and construction costs. The Navy estimates that the average *Ohio* Replacement cost for hulls 2–12 will be $5.6 billion with a goal of reducing this to $4.9 billion. The Navy continually strives to reduce the costs of all of its shipbuilding programs, specifically through design and development to reduce total ownership cost and acquisition cost, analysis of operational and maintenance requirements, and planning for future disposal requirements.

61. Senator MCCAIN. Admiral Roughead, were Secretary Gates' or Deputy Secretary Lynn's views on funding the ballistic missile submarine replacement program outside the shipbuilding budget?

Admiral ROUGHEAD. I believe that the Secretary and Deputy Secretary understands the Navy's challenges to recapitalizing the Nation's sea-based strategic deterrent force while maintaining investments in our future battle force. During the development of the future budget submissions, Navy will continue to engage with DOD leadership to develop a well-informed and executable strategy for the procurement of *Ohio* Replacement SSBNs that includes some form of above top line relief for Navy shipbuilding.

62. Senator MCCAIN. Admiral Roughead, you've made some comments lately about the option of funding the procurement of the Navy's new ballistic missile sub-

marines outside the Navy's budget—so as to preserve Navy shipbuilding funding for other shipbuilding programs. Please expound on those comments.

Admiral ROUGHEAD. Recapitalization of the Nation's sea-based strategic deterrent within the Navy shipbuilding account over a 15-year period (fiscal year 2019–fiscal year 2033) creates significant challenges to conventional Navy shipbuilding goals. The fiscal year 2011 Shipbuilding Plan included funding for *Ohio* Replacement from within its anticipated Total Obligation Authority. During the years in which the new submarine is being procured, the procurement of other ship types will be reduced resulting in force level and industrial base impacts. This plan will achieve a peak battle force of 320 ships in fiscal year 2024, after which the force level drops as legacy cruisers, destroyers, submarines, and amphibious ships retire, falling to a low of 288 ships in fiscal year 2032 and then ramping back up to 301 ships by fiscal year 2040.

If additional funding were to be provided for *Ohio* Replacement procurement during this time period, the Navy would be able to apply its shipbuilding funds to raise other ship procurement rates to include DDGs and submarines. This would also reduce the impact of this time period on our shipbuilding industry and raise our overall battle force inventory.

During the development of the future budget submissions, Navy will continue to engage with OSD leadership to develop a well-informed and executable strategy for the procurement of *Ohio* Replacement SSBNs that includes some form of above top line relief for Navy shipbuilding.

63. Senator MCCAIN. Admiral Roughead, how likely do you think it is that the Navy will be able to win support from OSD for funding these submarines outside the Navy's budget?

Admiral ROUGHEAD. Because of the national strategic mission of the sea-based deterrence force, the Navy will work with OSD leadership to develop a well-informed and executable strategy for the procurement of *Ohio* Replacement SSBNs that includes some form of above top line relief for Navy shipbuilding.

64. Senator MCCAIN. Secretary Mabus, according to recent press reports, the Navy recently rejected the recommendation of U.S. Strategic Command (STRATCOM) to design the next generation ballistic missile submarines with 20 missile tubes, instead opting for only 16 per boat. What is the basis for the Navy's decision of 16 tubes?

Mr. MABUS. The Navy conducted an in-depth, extensive review of the capability requirements for the *Ohio* Replacement SSBN in parallel with development of the Service Cost Position required at Milestone A. This analysis concluded that a force of 12 *Ohio* Replacement SSBNs with 16 missile tubes can carry all the sea-based warheads and maintain excess capacity in the event of a fundamental deterioration of the security environment or as a hedge against technical challenges within one or more of the other legs of the triad. A force of 12 SSBNs with 20 missile tubes could carry the Nation's entire operationally-deployed warheads with excess capacity remaining. These conclusions are based on the current requirements of the New START treaty.

It is the Navy's judgment that the Nation's sea-based strategic requirements can be met with a force of 12 *Ohio* Replacement SSBNs with 16 tubes. Given the substantial budgetary pressures facing DOD and Navy Shipbuilding a 20 tube *Ohio* Replacement SSBN would inappropriately sacrifice other conventional shipbuilding requirements for unneeded excess capacity. OSD, Joint Staff, and STRATCOM have since concurred with the Navy's position on this military requirement.

65. Senator MCCAIN. Secretary Mabus, aside from cost, which is reduced significantly at 16 tubes per submarine, in what ways will such a decision impact the overall nuclear force structure and the associated flexibility of the commander of STRATCOM?

Mr. MABUS. The decision to develop the *Ohio* Replacement SSBN with 16 missile tubes is consistent with the guidance in the 2010 Nuclear Posture Review and current requirements of the New START treaty. A force of 12 *Ohio* Replacement SSBNs with 16 missile tubes can carry all the sea-based warheads and maintain excess capacity in the event of a fundamental deterioration of the security environment or as a hedge against technical challenges within one or more of the other legs of the triad. OSD, Joint Staff, and STRATCOM have concurred with the Navy's position on this military requirement.

AEGIS BALLISTIC MISSILE DEFENSE

66. Senator MCCAIN. Admiral Roughead, the 2012 budget request provides for an additional Aegis class destroyer, increasing the total number of ballistic missile capable ships to 41 by the end of the 5-year budget plan. However, significant concerns remain about the overall stresses on the Aegis fleet as the missile defense mission continues to grow. What is the current status of the Aegis destroyer and cruiser fleet?

Admiral ROUGHEAD. The 2012 budget request represents the combined efforts of the Navy and the MDA to build the afloat BMD capacity needed to meet combatant commander demands and meet the President's Phased Adaptive Approach (PAA) on schedule.

Of the 22 cruisers and 58 destroyers in service today, 5 cruisers and 16 destroyers have been modified to be BMD capable. This year, Navy will conduct three destroyer BMD installations (USS *Barry*, USS *Laboon*, and USS *Cole*) and one cruiser upgrade (USS *Shiloh*). The Aegis modernization program, which is planned to add BMD capability to all 62 original DDGs and 9 Baseline IV CGs, and new construction of Aegis ships, will add BMD capacity and capability to the Fleet.

To improve the operational readiness of BMD ships, Navy is providing tailored pack-up kits of critical repair parts to deploying BMD ships, to ensure that mission performance remains at the optimal level. USS *Monterey* recently deployed to execute the Phase I of PAA for the defense of Europe mission with a pack-up kit onboard.

67. Senator MCCAIN. Admiral Roughead, how has the missile defense mission impacted overall availability?

Admiral ROUGHEAD. The Navy currently has sufficient capacity to meet the most critical demands for multi-mission surface combatants; however, Navy does not have the capacity to meet all GCC demands for BMD-capable ships without breaking currently established Chief of Naval Operations Personnel Tempo program limits. Based on threat analysis and current indications from GCCs, and assuming standard 6-month deployment lengths, Navy and MDA concluded that GCC demand for surface combatants with Aegis BMD capability will outpace capacity through approximately 2018.

A key attribute of all Aegis ships is their multi-mission capabilities within the maritime domain, which allows the Navy to employ Aegis ships in multi-mission roles rather than for exclusive missions. These ships can perform a variety of other non-BMD missions such as strike warfare, air warfare, submarine warfare, surface warfare, information warfare, high value asset protection, or maritime interdiction either concurrently or sequentially as the GCC requires.

The Navy is not large enough to deploy ships for single mission purposes, and thus with the exception of deterrent patrols by SSBNs, does not advocate deploying warships for single mission tasking. The Navy's operating concept for maritime BMD features a graduated readiness posture that allows BMD-capable Aegis ships to be on an operational tether and available for other tasking when not directly involved in active BMD operations. Aegis ships operating in support of a BMD mission do not lose the capability to conduct other missions; however, specific mission effectiveness may be affected by ships' position and/or application of ship resources to those missions.

SM–3 MISSILES FOR BALLISTIC MISSILE DEFENSE

68. Senator MCCAIN. Secretary Mabus and Admiral Roughead, the MDA recently identified technical issues that may result in a 12-month delay for the initial production decision of the SM–3 Blk IB missile. Despite the anticipated delay, I understand that MDA does not intend to procure any additional SM–3 Blk IA and instead intends to let elements of the production line close as they await certification of IB. Does the Navy support a production break in SM–3 missiles?

Mr. MABUS and Admiral ROUGHEAD. Navy supports the MDA decision to focus efforts on production of the SM–3 Blk IB. We need to move to the next generation of missile to ensure we are pacing growing ballistic missile threats. Navy and MDA are working closely together to develop and field this vital capability on schedule. We will keep Congress fully informed as these important programs progress.

69. Senator MCCAIN. Admiral Roughead, does the Navy have enough SM–3 missiles to satisfy global missile defense requirements?

Admiral ROUGHEAD. Navy has a minimum sufficient inventory of SM–3 missiles to satisfy the present global missile defense requirement. To meet these require-

ments, we are using the GFM system to provide an adequate inventory of SM–3s to deploying ships. In concert with the MDA, Navy is building additional SM–3 missiles which will permit increased loadouts aboard deploying ships.

70. Senator MCCAIN. Admiral Roughead, would an additional delay in SM–3 IBs—without a plan to produce additional IAs—be a cause for concern?

Admiral ROUGHEAD. An additional delay in the production of SM–3 Blk IB missiles would be a cause for concern. However, Navy and MDA are committed to delivering and fielding the significantly more capable SM–3 Blk IB on schedule. We will keep Congress fully informed as these important programs progress.

RAND REPORT ON ALTERNATIVE FUELS

71. Senator MCCAIN. Secretary Mabus, the Navy has put a fair amount of effort recently into developing alternative fuels. A recent RAND report, however, raises specific questions about the Navy's efforts to develop such fuels. The report would have the Navy spend its resources on using energy more efficiently in weapon systems and at military installations rather than developing new alternatives. According to press reports, the Navy has taken issue with some aspects of the RAND report. What is your perspective on the RAND report, particularly in terms of where you disagree with the report?

Mr. MABUS. In the RAND report, some of the conclusions suggested that the alternative fuel industry is immature, could not scale up to make an appreciable difference as a domestic alternative, and recommended that DOD not invest in this market. We have found that the biofuel industry appears to be well-poised to be of commercial size and ready to meet the Navy demands by 2016 for the Secretary of the Navy Great Green Fleet goal. According to Biofuels Digest, there are 110 companies that are currently working on various biofuel products, including mixed alcohols, bio-crude oils, and drop-in fuels.

The RAND study accurately states that the Navy's switch to biofuels, in and of itself, will not reduce the Nation's total energy consumption by a significant margin. However, the RAND report was not well-researched and did not take into account the recent research and development advances in the biofuels technologies. RAND stated in their report that the Fischer-Tropsch coal-to-liquid/biomass-to-liquid fuels are the most promising near-term options for meeting DOD's needs cleanly and affordably. Currently, there are no Fischer-Tropsch plants here in the United States. Additionally, under the guidelines of the EISA of 2007, section 526, any replacement fuel has to have a greenhouse gas emission profile less than petroleum. In order to meet this guideline, any Fischer-Tropsch coal-to-liquid plant would have to have carbon capture and sequestration incorporated into this overall process. While there is important carbon capture and sequestration research and development ongoing at DOE, there has not been any carbon capture and sequestration process built to commercial scale in the United States. In summary, due to the EISA 2007, Section 526 guidelines and the cost prohibitive carbon capture and storage process, we feel that the Fischer-Tropsch coal-to-liquid/biomass-to-liquid fuels are not the most promising near-term option for meeting DOD's needs cleanly and affordably.

While the use of alternative fuels can contribute toward guaranteeing our energy supplies, reducing our operational risks, and during volatile upward price swings in petroleum, could represent additional cost savings, the Navy's energy strategy has not been limited to alternative fuels. We have aggressively adopted proven energy efficient applications and practices commonly found in the commercial sector. We have funded both science and technology/research and development projects in pursuit of increased energy efficiency since these projects can potentially and directly contribute to the combat capability of our operating forces by reducing our energy consumption both afloat and ashore, and by achieving significant cost savings.

The Navy prefers to see itself as an "early adopter" of available biofuels. The military has often led in the development of new technologies where there was a compelling military use, even if the civilian use was ultimately greater (ex. GPS, the Internet). The operational use of alternative fuels by the Navy will be hastened by collaborating with Federal agencies and private industry at every step of the research, development, and certification process. The alternative fuel program establishes the Navy as an early adopter for investors in a nascent industry that could significantly enhance energy security, and thereby national security, in the mid- to long-term. By positioning itself as an early adopter by testing available biofuels and certifying them "fit for use across our major platforms and leveraging test and cer-

tifications accomplished by the other Services that meets our specifications," the Navy is better poised to reap the following benefits:

- Cost Savings. Increasing our use of alternative energy sources helps us achieve a level of protection from energy price volatility. For every $10 increase in the cost of a barrel of oil, the Navy spends an additional $300 million a year. Operating more efficiently saves money by reducing the amount we spend for fuel. Savings can be reinvested to strengthen combat capability. The cheapest barrel of fuel afloat or kilowatt-hour ashore is the one we will never use.
- Guaranteed Supply. Our reliance on energy can be exploited by potential adversaries. Efficiency and alternatives may be our best countermeasure. Energy efficiency increases our mission effectiveness by expanding our range and endurance, and reducing our need for logistics support. Efficiency improvements minimize operational risks of that logistics tether, saving time, money, and lives. Alternative fuels provide the Navy an 'off-ramp from petroleum,' mitigating the risk to a volatile and ever more expensive petroleum market.
- Fossil Fuel Independence. The Navy recognizes that our dependence on fossil fuels and foreign sources of oil makes us more susceptible to price shocks, supply shocks, natural and man-made disasters, and political unrest in countries far from our shores.
- Combat Capability. Making our ships and aircraft more efficient improves their fuel economy. We can increase the days between refueling for our ships, improving their security and combat capability. We can also extend the range of our aircraft strike missions, allowing us to launch our aircraft farther away from combat areas. Increasing our efficiency and the diversity in our sources of fuel improves our combat capability strategically and tactically.

72. Senator McCain. General Amos, please describe the alternative you are pursuing to reduce our reliance on fuel on the battlefield, and which of those initiatives do you think hold the most promise?

General Amos. We are aggressively pursuing alternative energy capabilities, which will reduce the requirement for liquid fuel logistics. Our objective is to increase our self sufficiency in battlefield sustainment and to reduce our expeditionary footprint.

Currently we are pursuing innovative renewable energy capabilities to support the small unit level operations at the forward edge in Afghanistan. Last year, through our ExFOB process, marines of India Company, 3rd Battalion 5th Marine Regiment (3/5) trained and deployed to Afghanistan with solar and hybrid solar power generation capabilities. As of January 2011, two patrol bases were operating entirely on renewable energy—while engaged in near constant combat. A third base reduced its fuel requirement by approximately 90 percent. This unit also used flexible solar/backpack portable battery rechargers, enabling a foot patrol to operate for 3 weeks without battery resupply whereas typical resupply occurs once every 2 to 3 days. This unit experienced a reduced burden by an estimated 700 pounds and saved an estimated $40,000.

Our focus on renewable energy aims to increase combat effectiveness. India Company's experience—and leadership—show us that increasing energy efficiency and using renewable energy sources extends a marine unit's sustainability in an expeditionary environment, bringing about a leaner, lighter force. Most importantly, it may also save lives by getting marines off the road hauling fuel and water.

In our experience, locally-sourced alternative fuel has the potential to offset demand for petroleum at the tactical level. Reduced demand for fuel that must be transported to the battlefield means fewer marines at risk on the road in convoys.

In short, solar and hybrid solar capabilities for the small unit have proven valuable; we are planning to accelerate them into the force. This summer the ExFOB will focus on the activities of a battalion-level command operations center. Taking a systems approach, we will evaluate renewable and hybrid power solutions together with energy efficient shelters and equipment. Solutions that demonstrate promise will be carried through for further evaluation. In addition, we are focused on leveraging every opportunity to harvest energy from all available renewable sources.

FUTURE NAVAL FORCES AND FUTURE SECURITY THREATS

73. Senator McCain. Admiral Roughead, you've given some speeches in recent months presenting your views on the value of naval forces in defending U.S. inter-

ests in coming years, particularly in light of trends you are seeing in the international security environment. What are your views on that matter?

Admiral ROUGHEAD. America's prosperity depends upon the seas: 90 percent of world trade moves on the world's oceans and underwater telecommunications cables facilitate about $3.2 trillion of commerce each year. The modern world is a complex, open system comprised of interdependent networks of trade, finance, information, law, people, and governance. The stability and security of that system depends upon U.S. leadership, U.S. cooperation with global partners, and America's tireless service as a global security provider.

Our prosperity and security are inextricably linked, and the maritime commons will continue to support the stability of the global system. The ocean will remain the primary domain from which naval and joint forces project and sustain military power. Seapower allows our Nation to maintain U.S. presence and influence globally and, when necessary, project power without a costly, sizeable, or permanent footprint ashore. Seapower strengthens international and regional security, and provides the United States, our allies, and partners the means to deter and defeat aggression globally.

The future security environment will continue to be dynamic and characterized by disruption and disorder as state and non-state actors compete for resources and influence. Global trends in economics, demographics, resources, and climate change portend an increased demand for maritime power and influence. We will continue to maintain a forward-deployed presence around the world to prevent conflict, increase interoperability with our allies, enhance the maritime security and capacity of our traditional and emerging partners, confront irregular challenges, and respond to crises. As we plan for the Navy of the future, we must take a realistic view of that future and ensure a dominant Fleet continues to provide the six core capabilities we set forth in our Maritime Strategy. If history and our current operations are a guide, demand for what we provide the Nation will remain undiminished, and may very well increase in the years ahead.

FISCAL YEAR 2012 NAVY BUDGET

74. Senator MCCAIN. Admiral Roughead, you've made some comments lately about the need for possibly having to reopen the 2012 budget, as you put it—by which I take it you mean the Navy later this year might have to submit an amended 2012 budget to Congress—depending on what happens regarding 2011 Navy funding. Could you expand on that?

Admiral ROUGHEAD. The President's budget for 2012 was built on the President's budget for 2011 foundation. The CR drastically affects the Navy's accounts and will continue to do so until an appropriation bill is enacted. For example, in shipbuilding, the Navy's plan for fiscal year 2011 included the procurement of two *Arleigh Burke*-class guided missile destroyers. The second ship of the planned procurement is in jeopardy as there was only one ship budgeted in the 2010 cycle. Additionally, we planned to start the procurement of two *Virginia*-class submarines, but a CR permits us to procure only one. The lead Mobile Landing Platform would be delayed since the lead ship is planned for procurement in 2011. Lastly, there is significant increased risk to the *Gerald R. Ford* (CVN–78)-class aircraft carrier program, development for the *Ohio* Replacement Program, and procurement of the amphibious assault ship (LHA–7).

75. Senator MCCAIN. Admiral Roughead, what kinds of changes to the 2012 budget might we see?

Admiral ROUGHEAD. Until the final budget for 2011 is determined, it is difficult to speculate on what the cascading changes might be. However, Navy will be able to recover, but there are some programs that may not be executable on the same schedule and may require modification. There may also be additional costs incurred due to delays in meeting contract requirements. Our Navy's budget submitting offices are currently working to mitigate these issues. For these reasons, we may need to revisit some of our 2012 submissions to ensure that our vital programs, and their programmed funding levels, are appropriate with the realities of fiscal year 2011's appropriation.

AIRCRAFT CARRIERS AND OTHER SURFACE SHIPS FACE GROWING THREATS

76. Senator MCCAIN. Admiral Roughead, there have been some press reports lately suggesting that China's new ASBM (called the Dong Feng 21D) is going to compel

our surface Navy to withdraw from certain parts of the Western Pacific. Do you agree with this view?

Admiral ROUGHEAD. No. The DF–21D ASBM is but one system in China's arsenal that challenges naval operations in contested areas, and our Navy has made significant investment in kinetic and non-kinetic capabilities to counter ASBMs and advanced cruise missiles. We will sustain our forward presence in the Western Pacific and strengthen our alliances and partnerships in the region through robust training, exercises, and military-to-military engagement. Implementation of the Air-Sea Battle Concept, a limited operational concept that focuses the development of integrated air and naval forces on addressing the evolving anti-access/area denial environment, will help us preserve our access and advance our national interests in the Western Pacific while ensuring continued U.S. advantage against emerging anti-access threats.

77. Senator MCCAIN. Admiral Roughead, please tell me—in general terms, without getting into classified details—what the Navy is doing to counter the ASBM, and whether you are confident about the ability of our surface ships to continue operating in these parts of the Western Pacific.

Admiral ROUGHEAD. Our Navy has made significant investments in new ships, sensors, weapons, and systems to counter a wide array of evolving threats. Additionally, Navy has invested heavily in Aegis modernization, to upgrade existing Aegis technology already in the Fleet. These initiatives involving the current and future Fleet will continuously improve our integrated air and missile defense capability, allowing our forces to continue to operate forward around the world.

78. Senator MCCAIN. Admiral Roughead, more broadly, please discuss in general terms what the Navy is doing to counter China's various maritime anti-access systems, and to preserve a military balance in the Western Pacific that is favorable to the United States and its allies.

Admiral ROUGHEAD. The Navy has and will continue to develop programs and capabilities to address the anti-access/area denial challenges in the Western Pacific and other theaters of operation. Accordingly, we are mindful of the need to be prepared to respond to all challenges by strengthening our alliances and partnerships, modernizing our forces, fielding new capabilities and technologies, and developing new operational concepts.

One specific initiative that will help preserve a favorable military balance in the Western Pacific and elsewhere is implementation of the Air-Sea Battle Concept—a limited operational concept that focuses the development of integrated air and naval forces on addressing the evolving anti-access/area denial environment. The Air-Sea Battle Concept encompasses three key elements:

- Institutional cooperation will be enhanced by establishing an enduring organizational construct that will continue formal collaboration to address the A2/AD environment as it evolves over time;
- Conceptual alignment will be perpetuated through the operational design which describes how capabilities and forces are integrated to accomplish operational objectives in an A2/AD environment; and
- Materiel solutions and innovations will be collaboratively vetted to ensure they are complementary where appropriate; redundant when mandated by capacity requirements; fully interoperable; and fielded with integrated acquisition strategies seeking efficiencies where they can be achieved.

Air-Sea Battle will ensure continued U.S. advantage against emerging threats that include long-range, precise, anti-ship and land attack ballistic and cruise missile systems; advanced combat aircraft and electronic warfare technologies; advanced Integrated Air Defense systems; submarines and subsurface warfare capabilities; surface warfare capabilities; C^4ISR capabilities; and cyber warfare technologies.

NAVY SURFACE SHIP READINESS

79. Senator MCCAIN. Admiral Roughead, I understand that the Navy recognizes that it needs to improve maintenance on its surface ships to repair problems that have developed over the last several years in surface ship materiel readiness. However, the Navy's budget request shows funding for ship maintenance declining from 100 percent of projected requirements in 2010 to 97 percent in the 2011 request and 94 percent in the 2012 budget request. The total amount of ship maintenance funding is going down, from $7.5 billion in 2010, to $7.3 billion in the 2011 request, and $7.2 billion in the 2012 request. Equally troubling is the amount of annual deferred

maintenance is increasing from zero in 2010 to $172 million in 2011, and $367 million in the 2012 budget request. Since funding for maintenance on submarines and aircraft carriers is traditionally protected, this downward trend in funding looks like it could fall more heavily on the Navy's surface combatants. Why does the Navy's budget not reverse the upward trend of deferred maintenance?

Admiral ROUGHEAD. Both the fiscal year 2011 and fiscal year 2012 baseline ship maintenance budget submissions are significantly higher than the fiscal year 2010 submission, reflecting our commitment to improving the baseline ship maintenance funding posture. Our combined fiscal year 2012 OMN baseline and OCO budget submission reflects the best balance of risk and available resources across the Navy portfolio. It funds 94 percent of the projected depot ship maintenance requirements necessary to sustain our Navy's global presence. To enhance the materiel readiness of our Fleet, we are improving our ability to plan and execute maintenance by increasing manning at our Regional Maintenance Centers (RMC), and by institutionalizing our engineered approach to surface ship maintenance, converting the successes of our Surface Ship Lifecycle Maintenance (SSLCM) initiative I began 2 years ago into the Surface Maintenance Engineering Planning Program Activity (SURFMEPP). These initiatives combined with our enhanced assessments of the materiel condition of our surface ships provides us with more insight on how to manage the risk and ensure the deferred work is properly documented and completed in future availabilities. Navy remains committed to sustaining the force structure required to implement the Maritime Strategy and will ensure we minimize the impacts and continue the gains we have made in surface ship readiness over the last several budget cycles.

80. Senator MCCAIN. Admiral Roughead, is the Navy's 2012 budget request consistent with its goals of improving surface ship readiness?

Admiral ROUGHEAD. Our combined fiscal year 2012 baseline and OCO budget submissions fund 94 percent of the projected depot ship maintenance requirements necessary to sustain our Navy's global presence and continue to improve overall surface ship readiness. This represents the best balance of risk and available resources across the Navy portfolio. Additionally, the investments we have made in the past several budget cycles in SURFMEPP and enhanced assessments of our surface ships provide us with more insight on how to manage the risk and ensure the work is appropriately apportioned across maintenance availabilities. However, Navy remains committed to sustaining the force structure required to implement the maritime strategy and will ensure we minimize the impacts and continue the gains we have made in surface ship readiness over the last several budget cycles.

81. Senator MCCAIN. Admiral Roughead, how much risk is the Navy taking on in terms of surface ship readiness with its current year budget submission?

Admiral ROUGHEAD. Our combined fiscal year 2012 baseline and OCO budget submissions fund 94 percent of the projected depot ship maintenance requirements necessary to sustain our Navy's global presence. The resultant shortfall of $367 million equates to deferral of 44 surface ship availabilities (34 surface ship non-docking availabilities, 3 surface ship docking availabilities, and 7 CVN private sector carrier incremental availabilities). This represents the best balance of risk and available resources across the Navy portfolio. Additionally, the investments we have made in the past several budget cycles in SURFMEPP and enhanced assessments of our surface ships provides us with more insight on how to manage the risk and ensure the deferred work is properly documented and completed in future availabilities. Navy remains committed to sustaining the force structure required to implement the maritime strategy and will ensure we minimize the impacts and continue the gains we have made in surface ship readiness over the last several budget cycles.

COMMANDING OFFICERS' FIRINGS ON THE INCREASE

82. Senator MCCAIN. Admiral Roughead, there have been a number of reported cases in recent months of Navy commanding officers being relieved of duty for various reasons relating to their personal behavior. The case of the commanding officer on the aircraft carrier was well publicized, but there have been a number of additional cases as well. Have these removals become more frequent?

Admiral ROUGHEAD. In 2010, we saw an increase in the number of commanding officers that have been detached for cause (DFC); however, since 2005, less than 1 percent of all our commanding officers have been detached for cause, most for issues involving personal misconduct. After observing the increase in the number of com-

manding officers DFC cases in 2010, we conducted a review and have taken corrective actions. The number of commanding officers detached for cause are:

Year	Commanding Officers Detached for Cause
2007	13
2008	12
2009	14
2010	29
2011	1
Total	69

83. Senator MCCAIN. Admiral Roughead, how do you explain this trend?

Admiral ROUGHEAD. While 99 percent of our commanding officers continue to be successful, the increase of commanding officers relieved for misconduct in 2010 is a concern. In my review, the increase in DFC resulted from personal behavior and misconduct more than professional performance. The Navy continues to review and make changes to leadership training to improve the success rate of commanding officers. There is no simple explanation for this trend, and we have focused our efforts on the education, training, and selection of our commanding officers. The emphasis is on the personal character, integrity, and accountability we expect of our commanders.

84. Senator MCCAIN. Admiral Roughead, is there an actual increase in misconduct by the Navy's commanding officers or is the media just paying more attention to them lately?

Admiral ROUGHEAD. The number of commanding officers relieved for misconduct in 2010 is an increase. In my review, the increase in DFC resulted from personal behavior and misconduct more than professional performance. The Navy continues to review and make changes to leadership training in order to improve the success rate of commanding officers. There is no simple explanation for this trend, and we have focused our efforts on the education, training, and selection of our commanding officers. The emphasis is on the personal character, integrity, and accountability we expect of our commanders.

There have been 69 commanding officers officially detached for cause for the 5-year period from January 2007 to present. Out of the 69 DFCs since 2007, 36 cases were related to personal misconduct. There are currently 5 cases that are pending a final decision, including the commanding officer of the aircraft carrier mentioned in your earlier question. Reasons for DFC included: (1) Abused position for personal gain; (2) Misconduct—fraternization/sexual misconduct; (3) Misconduct—otherwise; (4) Inability to provide effective leadership; (5) Collision/Grounding; and (6) Requested to be relieved. Personal misconduct incidents are reflected in the first three reasons.

Year	Total Detachments For Causes	Personal Misconduct
2007	13	7
2008	12	9
2009	14	4
2010	29	15
2011	1	1
Total	69	36

The public sensitivity to alleged misconduct by military and government officials may generate media attention. In fiscal year 2010, media reporting on these issues did increase. With the widespread use of electronic devices today, it is far easier to substantiate claims of misconduct through the use of email, photographic, and video evidence.

85. Senator MCCAIN. Admiral Roughead, are you concerned that these removals reflect problems in the way the Navy is selecting and training its commanding officers?

Admiral ROUGHEAD. I'm confident that the Navy is choosing the best officers based on documented performance. The Navy's process of selecting and training

commanding officers is rigorous and sound. Over the last 6 years, 99 percent of commanding officers have successfully completed their command tours. The recent DFC trend has largely been a result of personal misconduct issues rather than professional shortcomings. As a result of this trend, we have incorporated training that specifically addresses this matter into the training curriculum all prospective commanding officers must complete prior to assuming command. The Navy sets high standards of conduct for its commanding officers, and will continue to hold them fully accountable.

MARINE CORPS ROLES AND MISSIONS

86. Senator McCain. General Amos, it appears that a number of investments associated with the Marine Corps' ability to put troops ashore and then properly support them in combat operations have in recent years been reduced or put on hold. For example: The Navy's long-range shipbuilding plan does not include enough amphibious ships to maintain a force of 33 amphibious ships. The Navy's planned force of 155mm Advanced Gun Systems, which were central at one point to DOD's plans for providing the Marines Corps with adequate naval surface fire support, has been greatly reduced in number due to the truncation of the DDG–1000 program. The planned 12-ship MPF(F) squadron has been set aside in favor of a less ambitious plan to reinforce the three existing maritime prepositioning ship squadrons—and the 2012 budget request now plans to reduce that capability by putting one of those three squadrons into reduced operating status. The STOVL version of the JSF, for which the Marine Corps is to be the primary user—has been put on a 2-year probation. The 2012 budget request proposes to cancel the EFV in favor of a less-capable replacement system. In light of all these developments, do you believe that the Marine Corps' program needs are being sufficiently supported by the Navy and the DOD?

General Amos. There is increasing awareness within the Navy and DOD regarding challenges to operational access and power projection. Amphibious ships are the cornerstone of our Nation's ability to respond to crisis and protect our citizens and interests globally. Today we have agreement within the Navy on a requirement of 38 amphibious ships and a minimum inventory of 33 ships. While we will not realize the floor of 33 immediately, we have committed to reverse this trend to increase our amphibious capabilities.

Additionally, we are working to balance capabilities developed since September 11 with the need to expand our engagement efforts, respond to crisis, and still be able to project power for the most dangerous but less likely threat scenarios. We have greatly improved and will continue to improve our maritime prepositioning ship squadrons. We have developed an ability to transfer equipment at sea and have ensured we can reinforce amphibious forces without a port. We continue to look for innovative solutions to meet our naval surface fire support requirements, and in that regard the DDG–1000 provides an enhancement, and we look to further development of the Long Range Land Attack Projectiles. We continue to work with the Navy to enhance our connectors and landing craft that form the backbone of our heavy-lift, surface, ship-to-shore movement capability from amphibious ships. The LHD Capstone Upgrade to Ship Self Defense System Mk 2 provides another example of forward momentum to enhance our amphibious capabilities.

Establishing a period of scrutiny for the F–35B program was a prudent decision in light of the progress the JSF program had made to date. The identified technical challenges of a Short Take-Off and Vertical Landing (STOVL) aircraft are typical of the developmental stage of a program of this complexity, yet none of the currently known issues are considered to be insurmountable. Corrective actions have either already been incorporated into production aircraft, or they are being proactively analyzed and will soon be resolved.

We now have the time to focus resources, ensure solutions are effective, and incorporate them in the most efficient means possible with the least disruption to schedule, while avoiding the potential of costly improvements later in the service life of the aircraft. Implications of not having a STOVL tactical aviation capability reach far beyond the Marine Corps, and directly affect our ability to support national strategy. I am confident the F–35B will surpass expectations during this period of focused scrutiny and be a key resource in our arsenal of expeditionary capabilities. Once the F–35B platform is fully fielded aboard our LHD and LHA ships, the Nation will have 22 capital ships—11 amphibious assault and 11 carrier—with 5th generation assets aboard.

I recommended cancellation of the EFV after careful evaluation of affordability, fiscal reality, and future operating challenges. Although the EFV program has been

cancelled, both the Secretary of Defense and the Secretary of the Navy have reaffirmed the necessity of the Marine Corps amphibious assault capabilities as a component of the larger amphibious operations mission set. As the Secretary of Defense stated, we are firm in our requirement for an ACV. It is the key to conducting ship-to-shore operations in permissive, uncertain, and hostile environments; assuring access where infrastructure is destroyed or nonexistent; and creating joint access in defended areas. Throughout the period when the EFV was being developed, threats in the littorals and U.S. capabilities to counter and overcome these threats evolved. We now believe that improvements in our capabilities fielded and in development mitigate the threat to amphibious forces from anti-access and area denial threats to an acceptable level of risk for a naval force operating at a 12 nautical mile stand-off range.

87. Senator McCAIN. General Amos, and if this trend toward program reductions and deferrals continues, what is going to happen over the long run to the Marine Corps' ability to put troops ashore and then properly support them there in combat operations?

General AMOS. The contributions of amphibious forces to the strategic mission of the United States are possible only by the maintenance of robust amphibious capabilities—the ships, aircraft, connectors, ground vehicles, and forces that conduct sea-based operations. In 2010, the Navy-Marine Corps team returned to conducting large-scale Marine Expeditionary Brigade/Expeditionary Strike Group exercises to hone these critical amphibious skills. While these exercises are critical to enhancing our proficiency in large-scale amphibious operations, they also serve as a valuable platform to test new concepts and potentially lead to the development of updated joint doctrine.

Future amphibious operations will require improvements in mobility, command and control, intelligence, fires, sea-based logistics, organization, doctrine, training, and education. Amphibious landing forces require surface and vertical assault systems with the speed, range, precision location and navigational capabilities, protection, and firepower to launch from over-the-horizon positions, maneuver through tactical points of entry, and achieve the objective regardless of the threat. The technologies required to enhance these capabilities are under development, and the combat systems implementing these technologies are the highest priority in the Marine Corps.

Our force structure review completed last fall proposed the reestablishment of standing Marine Expeditionary Brigade headquarters, each under the command of a brigadier general. These command elements will increase responsiveness to GCC needs and align with the Navy's Expeditionary Strike Group headquarters. The goal of this alignment is to provide a more integrated naval approach for amphibious training and innovation, while also establishing headquarters capable of commanding and controlling larger amphibious operations.

REDESIGNATING THE DEPARTMENT OF THE NAVY TO THE DEPARTMENT OF THE NAVY AND MARINE CORPS

88. Senator McCAIN. Secretary Mabus, what is your view of the proposal to redesignate the Navy as the Navy and Marine Corps, and to redesignate the person in charge of that department from Secretary of the Navy to Secretary of the Navy and Marine Corps?

Mr. MABUS. I oppose the redesignation of the Navy. Although the intent of the proposal is to provide for specific recognition of the Marine Corps, it may result in a less effective Navy and Marine Corps team. The Navy represents one unified team, with the Marine Corps as a fully integrated and equal part of that team. The name of the department has not underserved the Marine Corps as a Service, and suggestions to the contrary undermine the sense of unity and jointness that have been the hallmark of the Navy for over 200 years. Dictating such a name change creates the impression that a problem exists and could have the deleterious effect of suggesting a step away from the heritage and tradition of a strong Navy and Marine Corps team. Thus, I oppose the redesignation.

REQUIREMENT FOR A 313-SHIP NAVY

89. Senator McCAIN. Admiral Roughead, for the past few years Navy has justified to Congress a need for 313 ships; does this budget support that requirement?

Admiral ROUGHEAD. Yes. This budget supports and will allow the Navy to reach a battle force inventory of 313 ships. The President's budget for 2012 achieves a bal-

anced and executable shipbuilding program which provides additional capability while gaining efficiency in the shipbuilding industrial base. The requirement of 313 ships remains the floor and the Navy is committed to building to that floor.

The Navy was able to budget for a total of 55 ships in the President's budget 2012 FYDP. These ships include: a continuation of the fiscal year 2010 restart of the DDG–51 program; an additional LCS in fiscal year 2012 to support an acquisition strategy of dual contract awards totaling 10 ships of each design; continuation of the SSN–774 program at 2 ships per year through fiscal year 2016; acceleration of the new MLP program aimed at increasing the capacity and capability of the existing Maritime Prepositioning Ship fleet; continuation of the CVN–78 program; procurement of the 11th LPD–17 ship, addressing the Marine Corps lift requirements for this class of ship; and a substantive increase in the Navy's ability to meet theater cooperation demands and intra-theater lift requirements through increased procurements of the Joint High Speed Vessel (JHSV) program. Overall, the fleet additions represented by the additions to the President's budget 2012 FYDP will position the Navy to meet its obligations and mission requirements through the next decade.

90. Senator McCAIN. Admiral Roughead, I'm concerned that cost overruns in shipbuilding programs will undermine future plans. What specific actions is the Navy taking to mitigate cost overruns in shipbuilding programs?

Admiral ROUGHEAD. The Navy recognizes that building the required force structure will largely depend on controlling shipbuilding costs (including combat systems). The Navy is addressing this in three ways.

First, the Navy continues to look for further affordability and efficiency opportunities as we go forward with the shipbuilding plan, such as revising the acquisition strategy for the Littoral Combat Ship (LCS) to maximize the advantage of the competitive pricing we received and enable us to gain an additional DDG–51 ship within the FYDP.

Second, the Navy is continuing to emphasize the use of fixed-price contracts as a cost control mechanism, when technical risk is low and when a ship's design is mature prior to the start of fabrication.

Third, prior to Milestone A approval for the *Ohio* Replacement submarine, the Navy evaluated numerous capability trades to reduce costs. As a result, the Navy made trades in the number of ballistic missile tubes, the diameter of those tubes, the number of torpedoes to be carried, acoustic sensors, and other defensive features throughout the design. These trades made the submarine more affordable while maintaining the necessary level of capability, resulting in a reduction of the projected cost to a target cost of $4.9 billion (fiscal year 2010 dollars) for the follow on hulls 2–12.

SHIPYARD INDUSTRIAL BASE

91. Senator McCAIN. Secretary Mabus, for more than a decade, six major shipyards have met most of the shipbuilding needs of the Navy. In fact, some experts have said that our industrial base today has been established to support a 600-ship Navy, but those needs are declining, even as the Navy builds up to a 313-ship fleet. Is the planned number of ships enough to keep those six shipyards in business?

Mr. MABUS. The fiscal year 2012 President's budget request balances capability, affordability, and industrial base considerations in determining the force structure necessary to meet maritime security requirements. Striking that balance requires the Nation to maintain adequate capacity and capability by the industrial base to produce the ship classes in the plan. It also requires that we preserve competition, where practical, and incentivize industry to invest in the tools and training required to achieve the affordability, performance, and innovation needed to maintain our naval superiority.

Within this overarching framework, the Navy looks to the shipbuilding industry to adopt processes and optimize facilities to affordably build the future fleet. The private sector industrial base has done so since the Navy build up in the 1980s. Business decisions regarding capital investment, consolidation, overhead reductions, et cetera—particularly where industry has opportunity to compete for naval or commercial ship construction contracts—are largely left to industry to determine based on the individual shipbuilder assessment of its future business base, and the cost performance it needs to achieve to be affordable and competitive for ships in the Navy's budget.

A recent example of adjustments in the shipbuilding industrial base is the Northrop Grumman Corporation (NGC) decision to spinoff its shipbuilding sector. Navy evaluated this complex corporate transaction and negotiated with NGC to ensure

that the reorganized entity, Huntington Ingalls Industries (HII), would start as a financially viable company capable of performing current and future Navy shipbuilding programs. This spin-off is now complete.

92. Senator McCain. Secretary Mabus, in both the current budget request and in terms of a more general policy, what (if anything) is the Navy doing to support the shipbuilding industrial base?

Mr. Mabus. DOD and Navy face the challenge of ensuring that the defense industrial base can meet the current and future requirements for systems and support while maintaining cost effectiveness, competition, and the necessary skills and technology base. To help meet this challenge, the Assistant Secretary of the Navy (Research, Development, and Acquisition) has engaged an outside entity to develop and provide a publicly available, comprehensive, and independent assessment of the Navy shipbuilding industrial base.

The Navy seeks an industrial base analysis that focuses on the essential capabilities and capacities needed to support Navy ship construction. The objective of the study is to identify the challenges facing the Navy and the strategies for mitigating the effects of those challenges, across a variety of issue areas such as cost, schedule, technical, infrastructure, and workforce capability. This may include recommendations to change/improve policies, standards, contract elements, performance benchmarks, government and industry practices, and oversight that define the effective delivery of quality products, platforms, and systems (including combat systems).

Recent examples of what the Navy has done to support the industrial base include:

1. In Title II of Public Law 109–234, Section 2203, Congress directed that at least $140 million be made available for infrastructure improvements at Gulf Coast shipyards that have existing Navy shipbuilding contracts and that were damaged by Hurricane Katrina in calendar year 2005. In 2010, DOD awarded an additional $39.5 million in infrastructure improvement projects to Gulf Coast shipyards that support the Navy shipbuilding industrial base. These projects focus on expediting recovery of shipbuilding capability, increasing efficiency, and preventing further hurricane damage to Gulf Coast shipyards.
2. The production of the double-hulled fleet oiler T–AO(X) was accelerated from 2017 to 2014 in the fiscal year 2012 budget submission. This allows the Navy to acquire this important capability 3 years earlier while bringing greater stability and promoting competition in the shipbuilding industry.
3. A recent adjustment in the shipbuilding industrial base is the NGC decision to spinoff/sell its shipbuilding sector. Navy evaluated this complex corporate transaction and negotiated with NGC to ensure that the reorganized entity, HII, would remain a financially viable company capable of performing current and future Navy shipbuilding programs. This reorganization is now complete, after Navy completed its evaluation and announced its position supporting this reorganization and finding HII a responsible contractor. The Navy is also prepared to provide an agreement, in accordance with the Shipbuilding Capabilities Preservation Act (SCPA), that would assist in making HII more competitive for commercial shipbuilding work. The purpose/benefits of an SCPA is to facilitate a shipbuilder's entry into private sector work and reduce that shipbuilder's reliance on the DOD industrial base. U.S. commercial shipbuilding accounts for approximately 1 percent of world commercial shipbuilding output; 80 percent of this comes from the mid-tier sector.
4. Of the Big Six shipyards, only General Dynamics NASSCO has recently competed in the commercial shipbuilding industry. However, NASSCO currently has only U.S. Navy shipbuilding and repair work at the shipyard. In 2010, the Navy signed an SCPA agreement with NASSCO and the company is pursuing commercial contracts.

93. Senator McCain. Secretary Mabus, are there any plans, for example, such as helping to convert existing shipyards into ship repair yards?

Mr. Mabus. There are existing construction shipyards that are capable of performing repair work also, and some currently are Navy prime contractors for repair, maintenance, and modernization of Navy surface ships, aircraft carriers, and submarines.

Geographic restrictions. For long-term availabilities, 10 U.S.C. 7299a (section 7299a) prohibits geographic restrictions when assigning ship conversion, alteration, or repair projects. For short-term availabilities (<6 months), however, section 7299a requires geographic restriction of performance to the ship's homeport if there is adequate competition to perform the work in the homeport. If homeport competition ex-

ists, then the Navy shall issue solicitations and award contracts only to firms that will perform the work at the vessel homeport.

The Secretary of the Navy Homeport Policy provides additional definitions and guidance in applying section 7299a, as follows:

- For long-term availabilities, the work will be competed "coast-wide," unless the ASN(RDA) determines "that competition is infeasible or special conditions exist."
- For short-term availabilities: (i) "homeport area," for solicitation purposes, is defined as a grouping of ports within a 75 mile radius of, and less than 1.5 hours one way travel from, the naval facility where the ship is homeported; (ii) "adequate competition" is defined as the presence of two or more qualified bidders that can perform in the homeport; and (iii) requires that, if adequate competition is not available in the homeport, the geographic area for solicitation will be expanded equally in all directions until adequate competition is achieved.
- For short-term availabilities for submarines, the Secretary of the Navy waives the requirement for competition and allows performance to be performed sole source in the homeports of New London, CT, and Norfolk, VA. This waiver is necessary because General Dynamics Electric Boat and Huntington Ingalls Industries (Newport News) are the only private sources that can perform short-term, non-refueling availabilities for nuclear submarines.

Multi-Ship/Multi-Option (MSMO) contracts. The Navy uses MSMO contracts to accomplish surface ship maintenance and modernization. These contracts are awarded for a specific ship class in a homeport in accordance with the Secretary of the Navy Homeport Policy. New construction shipyards that are located in a Navy homeport area have been awarded MSMO contracts. For example, NASSCO currently holds the MSMO contracts for LPD, LSD, LHA, LHD classes of ships in San Diego, CA, and Vigor Shipyards (formerly Todd Pacific Shipyards) holds the MSMO contracts for docking availabilities for FFG and DDG classes of ships in Puget Sound, WA.

94. Senator McCain. Secretary Mabus, I understand that an outside study being done for the Navy on the health of the Navy shipbuilding industrial base is just about finished. Can you share any of the findings of that report?

Mr. Mabus. The Assistant Secretary of the Navy (Research, Development, and Acquisition) has engaged an outside entity to develop and provide a publicly available, comprehensive, and independent assessment of the Navy shipbuilding industrial base.

The Navy seeks an industrial base analysis that focuses on the essential capabilities and capacities needed to support Navy ship construction. The objective of the study is to identify the challenges facing the Navy and the strategies for mitigating the effects of those challenges, across a variety of issue areas such as cost, schedule, technical, infrastructure, and workforce capability. This may include recommendations to change/improve policies, standards, contract elements, performance benchmarks, government and industry practices, and oversight that define the effective delivery of quality products, platforms, and systems (including combat systems). The study is expected to be completed shortly.

HOME-PORTING FOR THE NAVY'S VERSION OF THE F–35 JOINT STRIKE FIGHTER

95. Senator McCain. Admiral Roughead, I understand that the Navy plans to begin replacing 109 F/A–18C Hornets on the West Coast with 100 F–35C JSF carrier variant aircraft over the next 10 years, beginning in 2015. Where are you now in determining where those JSF squadrons will be home-based and, as a general proposition, what criteria will determine the outcome of that decision?

Admiral Roughead. An Environmental Impact Statement (EIS) is underway to assess the impact of homebasing seven F–35C squadrons and one Fleet Replacement Squadron (FRS) in a single West Coast location to replace the FA–18C. The EIS is evaluating two locations—Naval Air Station (NAS) Lemoore, CA, and Naval Air Facility (NAF) El Centro, CA. The Navy will make a final homebasing decision after the EIS is complete and a Record of Decision (ROD) is signed. Homebasing decisions take into account a wide range of possible considerations and factors including combatant commander requirements, strategic guidance (QDR, Naval Operations Concept, et cetera), threat/risk of natural or manmade disaster, proximity to training and operating areas, maintenance schedules, existing infrastructure, quality of life for sailors and their families, cost, environmental impacts (per the National Envi-

ronmental Policy Act (NEPA)), joint efficiencies and synergies, and port/airfield loading.

SUSTAINING LEVEL OF COMMITMENT

96. Senator MCCAIN. Admiral Roughead, the Navy is now required to have aircraft carriers in Middle Eastern waters for 9 months out of every year, a heavier constant commitment beyond the temporary surging of carrier battle groups in the region over the past decade. Will the Navy be able to sustain that level of commitment in 5th Fleet with only 11 aircraft carriers?

Admiral ROUGHEAD. Navy's force generation model, the Fleet Response Plan (FRP), structures operational and maintenance cycles to provide full spectrum operational capability across all Navy deployable force structure. By leveraging the inherent flexibility of the FRP, the Navy can sustain current combatant command demand for carrier presence with 11 operational aircraft carriers for a relatively short and defined period of time.

97. Senator MCCAIN. Admiral Roughead, how difficult will it be to sustain that level of commitment when USS *Enterprise* retires in 2012 and the Navy has just 10 aircraft carriers?

Admiral ROUGHEAD. Despite being below our required 11 carrier force structure, the Navy will be able to meet operational commitments with the carriers that remain in service without undue burden on the sailors and families of the carrier fleet when the USS *Enterprise* decommissions in 2012. The Navy has put in place measures to minimize the impact of the 10-carrier window during the 33 months between the inactivation of USS *Enterprise* (CVN–65) and commissioning of CVN–78 in 2015. We are taking advantage of the flexibility of our FRP to ensure that the carriers are delivered to combatant commanders in a material condition to support all tasks and with a crew that is properly trained. After the delivery of CVN–78, we will maintain an 11-carrier force through the continued refueling program for *Nimitz*-class ships and the delivery of our *Ford*-class carriers at 5-year intervals starting in 2020.

JOINT STRIKE FIGHTER EXTRA ENGINE

98. Senator MCCAIN. Admiral Roughead, just a few weeks ago, the House of Representatives voted to end funding for the extra engine to the JSF. The extra engine has even less support here in the Senate and probably would not survive a vote here, if one should occur. What is your reaction to having a program that has siphoned hundreds of millions of scarce dollars away from other priority requirements finally terminated?

Admiral ROUGHEAD. I concur with DOD's belief that the JSF alternate engine program is unnecessary, too costly, and risks diverting needed resources from other programs. The fiscal year 2012 President's budget does not request funding for the development and procurement of the F136 extra engine. DOD has concluded that maintaining a single engine supplier provides the best balance of cost and risk. Our assessment is that the benefits that might theoretically accrue with a second engine are more than offset by excess cost, complexity, and associated risks, and will divert precious modernization funds from other more pressing priorities.

99. Senator MCCAIN. Admiral Roughead, do you have a sense of when Secretary Gates and President Obama will officially announce the termination of this program?

Admiral ROUGHEAD. It is the view of DOD that the Alternate Engine Program is a waste of taxpayers' money that can be used to fund higher departmental priorities, and should be ended now. The administration and the DOD strongly oppose the extra engine program, as reflected in the President's fiscal year 2012 budget proposal that was recently submitted to Congress, which does not include funding for the program. DOD issued a stop-work order 24 March 2011 in connection with the JSF extra engine program.

The House of Representatives has recently expressed its own opposition to the extra engine in its passage of H.R. 1, including the adoption of the Rooney Amendment which removed all fiscal year 2011 funding for this program. In addition, funding for the extra engine was not authorized in the NDAA for Fiscal Year 2011, enacted in January. In light of these recent events, congressional prerogatives, and the administration's view of the program, we have concluded that a stop-work order is now the correct course. The stop-work order will remain in place pending final reso-

lution of the program's future, for a period not to exceed 90 days, unless extended by agreement of the government and the contractor.

100. Senator MCCAIN. Admiral Roughead, to continue funding this wasteful program at $28 million per month—or $14 million per each 2-week CR—when it is now clear this program is effectively dead, makes little sense. Has a stop-work order been issued for this program yet? If not, do you have a sense of when that may be done?

Admiral ROUGHEAD. DOD issued a stop-work order 24 March 2011 in connection with the JSF extra engine program. The administration and the DOD strongly oppose the extra engine program, as reflected in the President's fiscal year 2012 budget proposal that was recently submitted to Congress, which does not include funding for the program. It is the view of DOD that the Alternate Engine Program is a waste of taxpayers' money that can be used to fund higher departmental priorities, and should be ended now.

The House of Representatives has recently expressed its own opposition to the extra engine in its passage of H.R. 1, including the adoption of the Rooney Amendment which removed all fiscal year 2011 funding for this program. In addition, funding for the extra engine was not authorized in the NDAA for fiscal year 2011, enacted in January. In light of these recent events, congressional prerogatives, and the administration's view of the program, we have concluded that a stop-work order is now the correct course. The stop-work order will remain in place pending final resolution of the program's future, for a period not to exceed 90 days, unless extended by agreement of the government and the contractor.

MARINES IN AFGHANISTAN

101. Senator MCCAIN. General Amos, since this time last year, the number of marines in Afghanistan has nearly doubled from about 10,600 to nearly 20,000. During that period, marines have taken on the Taliban in their heartland in Helmand province. It appears we may have turned the tide against the Taliban in Helmand this winter, but we know there will be heavy fighting ahead in spring and summer. What has to happen to keep the momentum we have achieved from being reversed?

General AMOS. U.S. Marines, along with our Afghan, NATO, and international partners, will maintain the momentum in the Helmand and Nimruz Provinces this spring and summer. We will do so by deepening our hold in critical districts, expanding governance and security presence into previously uncontested areas, and supporting the Afghan Government's plans to transition identified municipalities, districts, and provinces to host nation lead throughout the summer and into the fall. Each of these three activities, supported in partnership by each member of the Regional Command Southwest Combined Team, will enable the Afghan Government to maintain its momentum throughout 2011.

102. Senator MCCAIN. General Amos, what do you think will happen as we approach the July 2011 timeframe when many Taliban thought we would be pulling out of Afghanistan?

General AMOS. Taliban senior leaders have commented on the planned withdrawal of U.S. forces from Afghanistan on several occasions referencing late 2014 as stated in both U.S. and international press. Most Taliban are aware of the new timeline just as they were aware of the initial 2011 target date. With President Karzai's announcement this past March of his intent to transition key districts within Afghanistan, most Taliban will expect to see the presence of coalition forces wane in those areas.

A precondition for the Taliban to reconcile or negotiate with the Afghan Government is the exodus of all foreign entities within Afghanistan. As such, we anticipate there will be little reaction from low to mid-level Taliban fighters and operational leaders. We also expect to see increased rhetoric with regards to coalition partners withdrawing troops and subsequent praise of those countries. Additionally, once coalition countries have departed, the Taliban likely will demonize the remaining U.S. presence for any actions perceived as a sleight against Islam.

103. Senator MCCAIN. General Amos, how much of the load are Afghan troops carrying in Helmand and other places in Afghanistan where they are partnered with marines?

General AMOS. The Afghan National Security Forces (ANSF) are taking steps to develop the capability to lead their own operations. In some areas, the ANSF are able to plan and execute their own operations while in other places they are heavily

involved in planning, coordination, and execution. During March 2011, we saw an increase in the overall number of ANSF-led operations within Helmand Province.

As the Afghan National Police (ANP) and Afghan National Army (ANA) continue to grow and mature as a force, we must continue to be mindful that the ANA 215th Corps, which is the primary ANA element in Helmand Province, was stood up just over 1 year ago and that we are still building both the ANP and ANA at the same time that they are fighting an active insurgency. As we continue to assist in the manning, training, and equipping of the ANSF, we anticipate that they will further improve their capability to take the lead in executing operations. This will lead to a more secure operating area, bringing us closer to a transition period where coalition forces can operate from an overwatch posture.

104. Senator MCCAIN. General Amos, are we being successful in training the ANA and ANP?

General AMOS. Through the Regional Training Center and the Joint Security Academy Southwest (JSAS), Regional Command Southwest has established a benchmark in terms of training and building capability and proficiency within the ANSFs. We are seeing dividends in our investment as we have been able to build upon ANSF basic proficiency levels through our leadership and specialty courses to include the Afghan Uniform Police Basic Course that we developed.

The limiting factor to our efforts has been the number of troops available to attend these courses. Namely, given the kinetic nature of operations in Helmand Province, it is difficult to remove ANSF troops from the battlefield for specialized training without simultaneously detracting from current operational capabilities or readiness. In this regard, our initiatives to hold sustainment and basic training packages onsite have enabled improvements and a more combat capable Afghan force. As we continue to assist in building ANSF capacity and capability, JSAS will continue to provide the key elements for continued development. Examples of this include JSAS led training programs that will continue to focus on NCO development as well as future training targeting junior officers.

105. Senator MCCAIN. General Amos, how do the local Afghans view the marines? Are they willing to throw in their lot with us or are they just waiting for us to leave?

General AMOS. In general, reporting indicates increased Afghan support for U.S. Marine Corps and coalition forces in areas where we have a significant presence. Depending on the quality of local ANSF in an area, marines are somewhat more accepted than their ANA or ANP counterparts. In other areas, the ANSF are preferred.

In general, local nationals appreciate the security provided by marines and coalition forces, allowing for development projects in the areas of education, health care, agriculture, infrastructure, and business development. Relations have improved significantly in some areas such that patrols are invited into local Afghan homes. Overall, the increase in cellular telephone service penetration throughout Helmand Province, coupled with a greater confidence in coalition forces, has increased the number of tips on insurgent movements and IED emplacements.

In many cases we have seen that as coalition forces initially move into an area, the atmospherics are often quite hostile, with Afghan nationals often avoiding coalition force patrols. However, our experience has been that atmospherics improve as more Afghans interact with coalition forces. As security grows and the Afghans become more accustomed to coalition forces, they are more likely to greet coalition forces personnel, speaking freely with them in the open.

WITHDRAWAL FROM IRAQ

106. Senator MCCAIN. General Amos and Admiral Roughead, in your personal opinion, do you think that Iraq will be able to take over the logistics, intelligence, and air sovereignty missions that U.S. forces have been doing for Iraq by the December 31 deadline for all of our combat troops to leave Iraq?

General AMOS. Given that the preponderance of Marine Corps forces exited Iraq by January 2010 and that there are only 18 marines left in Iraq at this time, U.S. Army units are conducting the preponderance of training missions with Iraqi Army at this time. As such, senior leadership from the U.S. Army and those from CENTCOM are in the best position to provide assessments of the current and future projected capabilities of Iraqi Security Forces.

Admiral ROUGHEAD. Iraqi security forces appear to have sufficient capabilities to confront Sunni and Shia extremist groups and to provide for their internal security,

but gaps in their external defense capabilities will exist after U.S. combat forces depart. By the end of the year the Iraqi Navy will be manned, equipped, and trained to effectively patrol their internal waterways and to defend their critical infrastructure in the northern Arabian Gulf. Continued training to enhance the logistics, sustainment, and intelligence capabilities that support such riverine and maritime security operations would benefit the Iraqi Navy. Iraq will not be able to fully enforce its air sovereignty for some time. Scheduled, rotational deployments of our normal forces, to include carriers, to the Arabian Gulf in support of our national interests in the region could provide the means to help the Iraqi Air Force develop its own air defense capabilities.

107. Senator MCCAIN. General Amos and Admiral Roughead, if it were your decision to make, what sort of troops or capabilities do you think would continue to be valuable in Iraq?

General AMOS. [Deleted.]

Admiral ROUGHEAD. Navy training teams have been tasked as part of OND to train the Iraqi Navy in two general mission areas—riverine warfare and maritime security operations. The riverine training mission was declared complete in November 2010 by USF–I, but periodic training with the Iraqis could be beneficial. In maritime security, the Iraqi Navy has assumed force protection responsibilities for one of their two major oil platforms. Responsibility for the second platform will be transferred to the Iraqis in summer 2011, with U.S. Navy ships remaining within range to respond to a threat, if required. By the end of 2011, U.S. naval forces will remain on station in the North Arabian Gulf in international waters, with the Iraqi Navy fully responsible for maritime infrastructure protection within their territorial waters. The Navy currently has a robust exercise program with the Iraqi Navy and Coast Guard, and will continue these efforts as they stand up their capabilities at sea. The most significant challenge facing the Iraqi Navy is maintenance of their patrol boats. There will be a continued need for U.S. training in this regard and to work with the Iraqis in developing the requisite logistical expertise to sustain these craft which are used to protect the oil platforms. When Iraqi Navy capability and capacity permit, the focus of the Navy's security assistance and security cooperation activities could expand to include maritime sovereignty enforcement, joint defense of Iraq from external aggressors, and advanced interoperability with coalition forces to enable the Iraqi Navy to contribute to regional maritime security initiatives such as counter-piracy operations.

108. Senator MCCAIN. General Amos and Admiral Roughead, how do you see Iran's influence in Iraq changing after December 31?

General AMOS. [Deleted.]

Admiral ROUGHEAD. From a maritime perspective, Iran is likely to continue its assertiveness in the maritime domain. Iran, however, will encounter a stronger and more capable Iraqi Navy with the capability to defend its critical maritime infrastructure and ultimately the full extent of its territorial waters in the Northern Arabian Gulf. By 31 December 2011, the Iraqi Navy will be capable of effectively patrolling the waters surrounding two of Iraq's most important oil terminals, as well as the Shatt al-Arab waterway forming the border between Iraq and Iran. Complimenting Iraq's recent patrol boat acquisitions, and improvements in coordination between the Iraqi Navy and other regional coalition forces, is the strategic partnership between Iraq and the United States, which is expected to extend well beyond 31 December 2011, and should counter continuing Iranian assertiveness in the maritime domain.

109. Senator MCCAIN. General Amos and Admiral Roughead, what was the toll on Marine Corps equipment from duty in Iraq?

General AMOS. Our equipment returned from Iraq required extensive depot level maintenance or replacement in order to meet future demands for use by our operational forces. Approximately half the items returned from Iraq to the United States required maintenance reset actions at the depot or field levels of repair. We replaced a significant portion of the remaining equipment due to obsolescence. A very small portion required no reset actions and was returned to our operating forces.

Admiral ROUGHEAD. I defer to the Commandant for the current disposition and location of Marine Corps equipment returning from Iraq as the status of Marine Corps equipment falls within his man, train, and equip responsibilities.

110. Senator MCCAIN. General Amos and Admiral Roughead, how much was sent to Afghanistan and how much was sent back to the United States?

General AMOS. Approximately 40 percent of the current equipment density list supporting the Marines in Afghanistan today is comprised of equipment shifted directly from Iraq to Afghanistan during the 2009 surge. The balance of equipment in Iraq was redeployed to the United States.

The equipment redeployed from Iraq to Afghanistan included most of our deployed medium tactical vehicle fleet, the majority of our MRAP vehicle fleet, light armored reconnaissance vehicles, other hard-to-move equipment items, and many theater-specific items. This same equipment comprises a significant portion of our total service level reset liability. Thus, much of our reset requirement will remain deferred as long as this equipment continues to be used in Afghanistan. Moreover, our future reset costs will grow exponentially as long as the war continues.

Admiral ROUGHEAD. I defer to the Commandant for the current disposition and location of Marine Corps equipment returning from Iraq as the status of Marine Corps equipment falls within his man, train, and equip responsibilities.

LIBYA

111. Senator MCCAIN. General Amos, I understand the USS *Kearsarge* and USS *Ponce* are now in the Eastern Mediterranean with about 1,400 marines standing by to assist should events in Egypt, Libya, or Tunisia take a turn for the worst. In your professional military opinion, would a no-fly zone over Libya be something that could be done from our ships and bases in the Mediterranean?

General AMOS. Marine Corps forces, currently embarked aboard amphibious shipping, could contribute significantly to the establishment of a no-fly zone. However, they likely would require augmentation from other U.S. or coalition assets. The limited number of fixed-wing aviation assets embarked aboard the USS *Kearsarge* precludes the Marine Corps from providing 24/7 coverage of desired air spaces. In that regard, additional Navy or Air Force assets can also provide airborne or sea-based command, control, and communication coverage and surveillance beyond the organic capability of Marine assets.

Marine aviation assets, operating from amphibious ships in close proximity to coastlines, provide an extremely rapid response to fleeting air threats, and can prove invaluable in the recovery of personnel that have been isolated as a result of an aircraft crash or pilot ejection. This was evidenced most recently in the successful recovery of a U.S. airman from Libyan soil after his aircraft experienced a mishap. Sea-based aviation assets also help to obviate complex basing, over-flight, and staging arrangements with adjacent nations.

112. Senator MCCAIN. General Amos, what do you think a no-fly zone would do to the combat effectiveness of Libya's air force?

General AMOS. Coalition air operations under UNSCR 1973 have rendered the Libyan Air Force incapable of sustained attacks on opposition forces, or disrupting coalition aviation operations. To date, coalition air power continues to operate with no aircraft or personnel losses resulting from hostile fire, attesting to the ineffectiveness of Libya's air force due to the coalition's establishment and enforcement of a no-fly zone.

113. Senator MCCAIN. General Amos, how could the marines now standing off shore in the Mediterranean be used to help out should events in North Africa deteriorate?

General AMOS. In general, a Marine Expeditionary Unit (MEU) is able to provide an array of 12 missions across the range of military operations to include limited objective raids or stability operations such as humanitarian assistance, non-combatant evacuation, and security assistance.

A MEU also can provide a fixed-wing strike capability, tactical recovery of aircraft and personnel support, such as the 26th MEU recently conducted in support of a downed U.S. Air Force F–15E in Libya.

114. Senator MCCAIN. General Amos, I understand that the marines on *Kearsarge* and *Ponce* were actually just recently flown over to meet the ships. Where are the marines who deployed on those ships?

General AMOS. The USS *Ponce* and USS *Kearsarge* are two of the three vessels that comprised the *Kearsarge* Amphibious Ready Group (ARG). The *Kearsarge* (ARG) contained embarked marines from the 26th MEU, whose primary Ground Combat Element (GCE) was Battalion Landing Team 3d Battalion, Eighth Marine Regiment (BLT 3/8). Based on a request from the Commander, CENTCOM, in Janu-

ary 2011, BLT 3/8 deployed temporarily from the *Kearsarge* ARG to southwestern Afghanistan in order to consolidate gains and success.

When conditions began to deteriorate in the Middle East and North Africa in February and it became clear that Marine forces organic to the 26th MEU were needed for crisis response, we determined the need to backfill BLT 3/8. Within 20 hours of notice, elements of 1st Battalion, 2d Marine Regiment deployed from Camp Lejeune, NC, to Souda Bay, Crete where they linked up with the USS *Kearsarge* and the USS *Ponce,* thus reconstituting a portion of the MEU's GCE at sea. Since that time, the 26th MEU redeployed to the United States and was relieved in place by the 22nd MEU, whose GCE is 2d Battalion, 2d Marine Regiment, also from Camp Lejeune, NC. The 22nd MEU continues the same missions that the 26th MEU conducted in support of Operation Unified Protector.

END STRENGTH

115. Senator MCCAIN. General Amos, Secretary Gates' efficiency plans call for reducing the size of the Marine Corps by about 15,000 from its current level of about 202,000, beginning as we plan to reduce the number of troops in Afghanistan in 2014. What happens if something else we haven't planned for comes up before 2014?

General AMOS. Secretary Gates directed the Marine Corps to not begin reducing our overall end-strength until after the draw-down of the approximately 20,000 marines present today in Afghanistan. Therefore, we will remain prepared to respond to crises and maintain our commitment to Afghanistan between now and 2014.

116. Senator MCCAIN. General Amos, can you cut 15,000 troops without breaking faith with those who served so well?

General AMOS. Yes. However, until we draw down from Afghanistan, we cannot significantly reduce our overall end strength. When we do reduce our end strength, we will need to do so in a measured way so as not to break faith with the marines who have done so much over the past 10 years. The number of marines that we can draw down in any given year is directly related to the number of marines we enlisted 4 years prior. This number is somewhere in the vicinity of 4,000 and represents the maximum number of marines that can be drawn down in a given year without breaking faith.

STRESS ON THE FORCE

117. Senator MCCAIN. General Amos, I understand your most stressed military occupational specialties continue to be intelligence analysts, imaging specialists, signals collection operators, UVA operators and mechanics, and linguists. What is being done to train more people in these fields or expand the number in inventory?

General AMOS. We continue to use Enlistment and Selective Reenlistment Bonuses as the primary incentives to attract and retain the most qualified marines needed to meet this demand. Due to the time required to train these fields, our Operating Forces do not immediately see adjustments in the number of personnel in these fields following these adjustments.

STATUS OF REALIGNMENTS OF FORCES ON OKINAWA AND GUAM

118. Senator MCCAIN. Secretary Mabus, I have a question about the decision to relocate 8,000 marines and their families from Okinawa to Guam. Your Record of Decision last year related to the environmental impact on Guam did not consider two major issues—potential damage to coral reefs in the Apra Harbor and the impact to cultural resources from the acquisition of private land for Marine Corps training ranges. Both issues, as well as the adequacy of Guam's civilian infrastructure, are of significant concern to Guam residents and should be of equal concern to DOD. Does DOD have a firm plan to ensure the marines have the training land they need to meet their needs on Guam? If so, what is that plan?

Mr. MABUS. Over the past year, DOD has engaged the Government of Guam to better understand the community's concerns, identify potential solutions, and develop a way forward. From these discussions we now better understand concerns regarding issues such as access to cultural sites and the expansion of DOD's footprint. As training on Guam is essential for Marine Corps forces, DOD is working diligently to ensure their training requirements will be met.

Senior DOD officials and Guam's leaders are discussing ways to resolve issues related to the site proposed for a live-fire training range complex. Our preferred training site is located on the eastern shore of Guam near Andersen Air Force Base

South and adjacent to Route 15. DOD has committed to four principles for reaching a negotiated settlement for acquiring the Route 15 property:

- One Guam: Address infrastructure improvements outside the fence that are directly related to the buildup, and work with other Federal agencies to identify solutions for addressing Guam's needs indirectly or unrelated to the military realignment.
- Green Guam: Develop the most energy efficient base possible and support Guam's efforts to develop sustainable and renewable energy projects.
- Unfettered Access to Pagat Village and Cave: Conduct training activities in a manner which will allow access to the Pagat Village and Pagat Cave historical sites 24 hours per day, 7 days per week, as it is today.
- Net Negative: Following the completion of the realignment, DOD will have a smaller footprint than it has today. This commitment will directly address concerns regarding an expanding DOD footprint on Guam. This concept is currently in the early stage of development. Studies will be conducted to determine if missions can be relocated and assess any potentially underutilized properties.

As a result of these discussions with Guam's leaders, the Governor of Guam has stated publicly his willingness to discuss land use issues with DOD. We will continue to have discussions with the Governor and Guam Legislature with a goal of being ready to commence formal land negotiations once appropriate congressional approval for land acquisition has been received. DOD will continue to update Congress on land use matters and the status of informal discussions with the Government of Guam.

119. Senator McCAIN. Secretary Mabus, will that plan meet the Marine Corps' requirements?

Mr. MABUS. Yes. Developing an achievable plan for delivering required training capabilities on Guam to support the realignment of Marine Corps forces from Okinawa is a priority. The Route 15 area remains the Navy's preferred alternative for the location of a live-fire training range complex. As we negotiate with the Government of Guam over this site, DOD has committed to conduct training activities in a manner which will allow unfettered access to the Pagat Village and Pagat Cave historical sites. This commitment, which was made in the Programmatic Agreement, can be kept without compromising Individual Training Standards (ITS) for marines on Guam. Regarding the timing for land acquisition, our focus is on ensuring training ranges are in place by the time relocating units will need them.

120. Senator McCAIN. Secretary Mabus, why were military construction funds originally planned for fiscal year 2012 to acquire training lands not included in the budget request for 2012?

Mr. MABUS. Based on the lack of a Programmatic Agreement under the National Historic Preservation Act (NHPA), the lack of a Record of Decision (ROD) selecting the final site for the live fire training range complex, and other factors, the budget request for fiscal year 2012 was reevaluated and it was determined that budgeting for land acquisition to support a live fire training range complex would be premature.

121. Senator McCAIN. Secretary Mabus, shouldn't we ensure we have the training lands issues resolved before investing hundreds of millions of dollars to improve other areas on Guam for the marines?

Mr. MABUS. The projects appropriated in fiscal year 2010, those authorized for appropriation in fiscal year 2011, and those requested in fiscal year 2012 are necessary to enable subsequent vertical construction and to support Marine Corps operations. Waiting to begin military construction projects until after training range land acquisition issues are resolved would create a significant bottleneck in Guam's limited construction capacity by delaying a large volume of site preparation and other preliminary development necessary to support follow-on vertical construction of the new Marine Corps base. The force flow of Marines to Guam will be based upon the availability of requisite facilities and infrastructure. Therefore, a delay in the early horizontal construction stage of the program will potentially delay the Marines' ability to relocate from Okinawa in fulfillment of our international agreement with Japan.

RELOCATION OF MARINE CORPS AIR STATION FUTENMA, JAPAN

122. Senator MCCAIN. Secretary Mabus, part of our agreement with the Government of Japan to realign forces on the Island of Okinawa was to relocate the Marine Corps Air Station (MCAS) at Futenma up north to Camp Schwab. What is the status of this initiative?

Mr. MABUS. Some construction on the ground at Camp Schwab, which will enable the airfield construction to move forward more rapidly, has been underway for the past few years. We expect agreement on a configuration for the runway at the "2+2" (Secretary of Defense, Secretary of State, Minister of Defense, Minister of Foreign Affairs) meeting, which has been postponed due to the earthquake, tsunami, and nuclear events. The 2+2 meeting is now expected to be held in May or June. We do not yet have a firm timetable for the landfill permit process, but in our judgment the Japanese remain committed to the roadmap.

123. Senator MCCAIN. Secretary Mabus, how does the Navy define tangible progress by the Government of Japan to carry out this relocation?

Mr. MABUS. We see tangible progress on the Futenma Replacement Facility (FRF), not as a single specific event, but rather as a series of steps taken roughly in parallel between Japan and the United States, as spelled out in our bilateral understandings on the realignment. As the Government of Japan makes progress on the FRF, the United States will take associated steps to move forward on Guam. There are a number of different indicators of this progress, starting with the decision on the runway configuration that we expect at the upcoming 2+2 meeting with Japan, the issuance of the landfill permit, the construction of the sea wall, and progress on the landfill itself.

An essential point of our realignment understanding with Japan is that preparations for facilities on Guam need to begin well in advance of the actual construction of the replacement facility at Camp Schwab. It is necessary to ensure that when we are satisfied with the progress Japan has made on the FRF, suitable facilities will be available on Guam to allow the phased relocation of Marines from Okinawa, such that any relocation can be sequenced to maintain unit cohesion and operational readiness.

EMINENT DOMAIN SEIZURE OF GOLIAD AIRPORT, TX

124. Senator MCCAIN. Secretary Mabus, your staff recently notified this committee of DOD's intent to use the Federal Government's authority to seize a deed to private property through eminent domain in order to establish an outlying landing field at Goliad, TX, supporting T–6 operations at Naval Station Corpus Christi. The local community had rejected previous offers by the Navy to buy the airport, citing concerns with significant increase in noise and a loss of potential economic development. Statutes require you to certify to Congress that you have pursued, to the maximum extent practicable, all other available options for the acquisition or use of the land, such as the purchase of an easement or the execution of a land exchange. Can you describe how you complied with this provision of law the extent of all other available options you pursued for the acquisition of the land?

Mr. MABUS. In September 2006, the Airspace/Air Field Usage Working Group (AFUWG) was established in response to selection of the T6-Texan as the new aviation training platform. The AFUWG looked at all region air space issues associated with this new platform and it was concluded in October 2007 that Outlying Landing Field (OLF) Goliad is the only option. The Navy reviewed other options, including Aransas County Airport, NALFs Waldron and Cabaniss, NAS Kingsville, Victoria Airfield, NOLF Orange Grove, and Beeville Airport, for an OLF, but none fully met the operational requirements of the T–6.

Negotiations with Goliad County, the owner of the subject property, began in July 2008 when the county made an unsolicited offer to sell the subject property to the Navy for $675,000, which was later rescinded. Since July 2008, all efforts to acquire fee simple title by means of a negotiated sale have been unsuccessful. During negotiations with Goliad County, the Navy tendered an offer in an amount equal to the appraised fair market value (FMV). The county did not accept the initial FMV offer and subsequently rejected a second offer to acquire the property by sale for FMV, which also included a commitment by the Navy to examine and consider the following additional items of importance as expressed by the county: (1) Specific county/private use of some land within the airfield footprint; (2) Water rights; (3) Future county use of the airfield for an annual revenue producing event; (4) Potential development of revenue stream for the county; (5) Joint use of the airfield; and (6) Development of WIFI for external use.

On 27 September 2010, in an extraordinary effort to avoid condemnation, Mr. Roger Natsuhara, PDASN (EI&E), attended the meeting of the Commissioners' Court of Goliad County and provided a statement outlining the Navy's requirement and expressing the Navy's willingness to work with the local community, but the commissioners took no action and the Navy's second offer letter expired on 28 September 2010. Condemnation of fee simple title of the 1,136+ acres of land and improvements is necessary. Execution of an easement, lease, land exchange, or other real estate instrument is not feasible in this instance as an exclusive use T–6 OLF with substantial military construction (MILCON) investment is required by September 2012.

125. Senator MCCAIN. Secretary Mabus, the long-term viability and safe operation of an outlying landing field requires the cooperation of the local community to protect approach zones and accident potential zones through compatible local zoning. How does the Navy plan to ensure the local development of land around Goliad is compatible with Navy T–6 operations?

Mr. MABUS. The Navy has completed a draft Air Installations Compatible Use Zone (AICUZ) Study for NOLF Goliad, which is under final review prior to release. The Goliad AICUZ study is based on statistical predictions of accident potential zones (APZ) and scientifically derived day-night average noise contours (using the DOD Noisemap Program). The AICUZ program is designed to help State and local governments promote compatible land use and development near military air installations. The goal of the program is to protect military operational capabilities as well as the health, safety, and welfare of the public by achieving compatible land use patterns and activities in the vicinity of military installations. The AICUZ program recommends community land uses that are compatible with noise levels, APZs, and flight clearance requirements associated with military airfield operations with the goal that the information will be incorporated into local community planning programs. With final review and release of the AICUZ study, Navy will work with the local community leadership and landowners to coordinate acceptable and compatible land use.

126. Senator MCCAIN. Secretary Mabus, given the current antagonism with the local community, how do you plan to work with the local community in the future to protect the Navy's investment at Goliad?

Mr. MABUS. Our policy is always to act as good neighbors with the local community, through frequent contact and working together on any issues of concern. In addition, the Navy will, to the fullest extent possible without interfering with the primary mission of training our pilots, look for opportunities to allow traditional community activities that occurred on the airfield to continue. Naval Air Station Corpus Christi will continue to engage with local leaders to foster mutual understanding and trust. Our civilian liaison planning officer for that area will develop relationships with Goliad County officials and leaders, and, with base leadership, look for ways to build relationships and reduce misunderstandings. The Navy and Goliad have a long history in the 20th century, and we trust that we will have a win-win relationship with the county in the 21st century.

MOBILIZATION AUTHORITIES

127. Senator MCCAIN. Admiral Roughead, reliance on the Navy Reserve has grown, and it now looks like key capabilities, such as naval construction battalions, riverine squadrons, and maritime expeditionary security forces will increasingly become part of the Reserve Forces. Do you see the need for statutory changes that would enhance the ability to mobilize and use Navy Reserve Forces?

Admiral ROUGHEAD. Yes, I do see a need for statutory changes that would enhance the ability to deploy Navy Reserve Forces. Demand for Navy capabilities will remain the same or increase in the future, and Navy Reserve will play a vital role in Navy's Total Force that will deliver these capabilities. As stated in the 2010 Quadrennial Defense Review (QDR) Report, "prevailing in today's wars requires a Reserve component that can serve in an operational capacity—available, trained, and equipped for predictable routine deployment. Preventing and deterring conflict will likely necessitate the continued use of some elements of the Reserve component, especially those that possess high-demand skills, in an operational capacity well into the future." Current statutes, however, do not allow for the involuntary activation of members of the Reserve component for routine deployments in times of non-emergency steady-state security environments. Addressing this gap would provide the following benefits:

- Enhances Total Force capacity by allowing Reserve component units and members to be included in long-range planning processes;
- Allows Reserve component units with high-demand skill sets to maintain a higher overall readiness level, preventing those skills from atrophying and ensuring a more robust Total Force response capacity for future contingency operations; and
- Provides predictability of future routine military obligations to the individual Reserve members, their families, and their employers.

128. Senator MCCAIN. General Amos, do you see a changing role for the Marine Corps Reserve?

General AMOS. Sustained combat operations and worldwide theater security cooperation and training commitments over the last decade point towards an essential requirement for the Marine Corps Reserve to continue focusing at the operational, rather than strategic, level of warfare.

The transition in use of the Marine Corps Reserve from a strategic to an operational perspective, as affirmed by our force structure review, expands our ability to perform as America's Expeditionary Force in Readiness. Sharing the culture of deployment and expeditionary mindset that has dominated Marine Corps culture, ethos and thinking since our beginning more than two centuries ago, the Marine Corps Reserve is optimally organized, equipped, and trained to perform as an operational Reserve.

A future role of the Marine Corps Reserve should remain consistent with the Marine Corps Total Force construct, supported by current force planning goals of creating and maintaining capabilities within the Reserve component to support the augmentation, reinforcement, or reconstitution of the Active component. The Marine Corps aims to continue managing the use of the Reserve component through the Service's existing force allocation processes, developing the best available sourcing solutions in support of validated combatant commander requirements.

WALTER REED NATIONAL MILITARY MEDICAL CENTER AT BETHESDA, MD

129. Senator MCCAIN. Secretary Mabus, in August 2010, DOD submitted to Congress the second part of the Comprehensive Master Plan for the National Capital Region Medical which detailed the plan to ensure a world-class medical center is available for our wounded military personnel at the Walter Reed National Military Medical Center at Bethesda, MD. The plan identified construction and renovation projects totaling over $829 million to be completed by 2018 at Bethesda, MD, to achieve a world-class standard. Do you support the goal to establish world-class medical facilities at Bethesda?

Mr. MABUS. I, along with the Chief of Naval Operation and Commandant of the Marine Corps, strongly believe we are currently delivering world-class healthcare to our sailors, marines, their families, and all our beneficiaries at the National Naval Medical Center, Bethesda. I am privileged to witness this exemplary level of care firsthand when I visit our wounded warriors and their families. This commitment will not waiver with the opening of the Walter Reed National Military Medical Center later this year.

130. Senator MCCAIN. Secretary Mabus, understanding that cost estimates are still begin refined, what is the current cost estimate to carry out the projects required to achieve world-class facilities?

Mr. MABUS. As described in the comprehensive Master Plan provided to Congress by the Deputy Secretary of Defense in 2010, the current estimate to complete the projects required to achieve world-class facilities at Walter Reed National Military Medical Center in Bethesda, MD, is $816 million from fiscal year 2012 through fiscal year 2017. The Joint Task Force National Capital Region Medical reports that this amount is over and above anticipated routine restoration and modernization projects for the hospital, totaling roughly $300 million annually.

131. Senator MCCAIN. Secretary Mabus, is funding contained in the budget request for fiscal year 2012 that would be used to carry out projects to achieve that goal? If so how much? If not, why not?

Mr. MABUS. The President's 2012 budget requested the projects listed below to be included in the Defense Health Program for fiscal year 2012:

- $66 million in MILCON funding to commence/continue the designs for the construction projects identified in the Walter Reed National Military Medical Center Comprehensive Master Plan. These projects include a new clin-

ical building, child development center, traffic/parking improvements and parking expansion, utility upgrades, associated demolition, renovations, temporary facilities, and installation appearance.

• $18 million in MILCON funding for the construction of the child development center.

• $25 million in operation and maintenance funding to continue planning and execute projects addressing campus wayfinding, Americans with Disabilities Act accessibility, and other pedestrian improvements.

132. Senator MCCAIN. Secretary Mabus, is the Navy committed to meeting the goal of 2018 for completion of the projects?

Mr. MABUS. The Office of the Assistant Secretary of Defense for Health Affairs (ASD(HA)) is budgeting and managing these projects rather than Navy. That being said, ASD(HA), the Navy, and Joint Task Force National Capital Region Medical are committed to the goal of 2018 to complete the Comprehensive Master Plan for the National Capital Region provided to Congress in 2010.

133. Senator MCCAIN. Secretary Mabus, can you explain why the Navy believes an EIS is required to carry out projects which will not change or add to the primary mission of the medical center at Bethesda?

Mr MABUS. The Navy recommended an EIS be required for the Walter Reed National Naval Medical Center (WRNNMC) due to the potential for individual and cumulative impacts to historical features, traffic concerns, and the surrounding community. Environmental counsel has reviewed and concurs with this course.

The communities surrounding the WRNNMC are very sensitive to the constant recent construction and its impact on their quality of life. Through an open and ongoing public engagement process, the Navy has maintained a positive and understanding relationship with the surrounding community. The EIS drafting process will provide opportunities for public review and input and facilitate dialogue regarding the need for, and impacts of, these projects among the WRNNMC, its neighbors, and other stakeholders.

CAMP LEMONNIER, DJIBOUTI

134. Senator MCCAIN. Secretary Mabus, the Ike Skelton NDAA for Fiscal Year 2011 contained language expressing concerns with the safety and security of U.S. forces stationed at Camp Lemonnier, Djibouti, due to cramped conditions and the lack of deliberate planning to address vulnerabilities. Congress asked for a master plan that would include options for expanding the footprint of the base in order to allow for greater separation of functions and a better opportunity to meet anti-terrorism/force protection standards for almost $500 million worth of facilities planned for construction at the base over the next 5 years. Will you review the master plan to ensure adequate measures and planning have been incorporated to provide for the safety and security of U.S. forces deployed to Camp Lemonnier?

Mr. MABUS. The Camp Lemonnier Master Plan will be reviewed and staffed to ensure that it provides the measures and planning details for modern, secure facilities that will protect U.S. military personnel and support enduring operations throughout the Horn of Africa.

135. Senator MCCAIN. Secretary Mabus, will the Navy proceed with construction activities without your approval of the master plan?

Mr. MABUS. Previously authorized and appropriated construction activities can proceed at Camp Lemonnier without my approval of the master plan.

TRAINING LANDS ON GUAM

136. Senator MCCAIN. General Amos, on the issues of the relocation of 8,000 marines from Okinawa to Guam, in your opinion, are we on course on Guam to provide the Marine Corps with the ranges needed on the island for Marine Corps training requirements?

General AMOS. The ranges on Guam are critical to the future training and readiness of marines scheduled to relocate there. The Marine Corps position is that the relocation cannot commence until the ranges are in place. The programmatic agreement signed in March was a step forward in meeting this requirement. Our understanding is that the Navy will release a Training Record of Decision this summer that will identify the location of the ranges. Once that occurs the Navy can request the funds to obtain the land needed to build the ranges. Assuming that funding oc-

curs during fiscal year 2013, I am satisfied the ranges can be constructed in time to support the relocation.

137. Senator MCCAIN. General Amos, where are you on the proposal to update the composition of Marine Corps forces moving from Okinawa to Guam in order to provide the Commander of Marine Corps Forces Pacific with a force posture meeting Marine Corps doctrine for command and control?

General AMOS. The Marine Corps continues to analyze and refine alternative lay-down concepts. Much of this effort remains conceptual and pre-decisional; however, we are working with U.S. Pacific Command (PACOM) and OSD on a lay-down that provides the combatant commander with maximum operational viability and command and control capability. Upon OSD approval, I expect DOD and the Department of State will then reach consensus with the Government of Japan. Once an agreement between the two governments is reached, Congress will be formally briefed on a decision that will maximize the strategic presence of U.S. forces in the region for the foreseeable future.

RESET AND RECONSTITUTION OF EQUIPMENT FOR THE MARINE CORPS

138. Senator MCCAIN. General Amos, your written statement describes very clearly your priority to ensure adequate funding in this budget and future budgets to reset Marine Corps equipment being used overseas and to reconstitute home-station equipment. You state that approximately 68 percent of non-deployed Marine Corps units report degraded levels of readiness. Given the fact that Marine Corps units are called upon to serve our country with very little notice, this high rate of degraded levels increases the risk that these units may be deployed in the future without the equipment they need. You state that the budget request for fiscal year 2012 includes $2.5 billion for reset and $253 million for reconstitution against total bills of $7.5 billion for reset and $5 billion for reconstitution. Do you need more funding in fiscal year 2012 to address reconstitution requirements? If not, why not?

General AMOS. The Marine Corps' $2.5 billion request in fiscal year 2012 for reset is directly related to the repair and replacement costs of overseas contingency operations in Iraq and Afghanistan. In many ways our ability to conduct reset in fiscal year 2012 is constrained by the lack of equipment that has returned for reset actions. The equipment redeployed from Iraq to Afghanistan in support of the 2009 surge included most of our deployed medium tactical vehicle fleet, the majority of our MRAP vehicle fleet, light armored reconnaissance vehicles, other hard-to-move equipment items, and many theater-specific items. This same equipment comprises a significant portion of our total reset liability. Thus, much of our reset requirement will remain deferred as long as this equipment continues to be employed in Afghanistan. Moreover, our future costs for reset will grow exponentially as long as the war continues.

The reconstitution requirement of $5 billion is an amount entirely separate from our reset costs. This requirement specifically relates to table of equipment shortfalls. Therefore, if this amount is funded, there will be concurrent increases in our non-deployed readiness levels. While we have begun to address our reconstitution shortfall by requesting $253 million in fiscal year 2012 for equipment procurement, the Marine Corps does have many more equipment deficiencies (as evidenced by the degraded state of non-deployed Marine Corps unit readiness) that additional funding could be applied against immediately.

As a forward-deployed and expeditionary force, the Marine Corps must be able to meet and sustain known operations and respond to new requirements. Within the past year, the Marine Corps has successfully responded to multiple crises and new operational requirements (e.g. Haiti, Pakistan, the Philippines, Japan, Libya, and the introduction of a seventh Marine battalion task force into Afghanistan) despite the personnel and equipment shortfalls affecting the non-deployed force. The primary concern is our ability to respond to a second, major contingency (planned or unforecasted). Each new crisis diminishes the pool of ready, available forces to respond, which is reflected in the current degraded state of readiness of non-deployed units. This increases risk in the timely execution of large-scale contingencies.

139. Senator MCCAIN. General Amos, what rate of funding over the next 3 years for reconstitution will raise your nondeployed unit readiness levels to acceptable levels?

General AMOS. Our estimate to reconstitute our tables of equipment is $5 billion, which is an amount entirely separate from our reset costs. This requirement specifically relates to table of equipment shortfalls. Therefore, if this amount is funded,

there will be concurrent increases in our non-deployed readiness levels. While we have begun to address our reconstitution shortfall by requesting $253 million in fiscal year 2012 for equipment procurement, the Marine Corps does have many more equipment deficiencies (as evidenced by the degraded state of non-deployed Marine Corps unit readiness) that additional funding could be applied against over the next 3 years.

140. Senator MCCAIN. General Amos, are you concerned that your future reset and reconstitution requirements may be funded from Marine Corps accounts included in the base budget at the sacrifice of other Marine Corps priorities?

General AMOS. Once drawdown from Afghanistan commences, the rapid reset of equipment and its swift reintegration into the inventory of our Operating Forces is the single-most critical factor in our ability to successfully reconstitute after the war. Thus, funding for repair or replacement of equipment returning from combat is not optional. If adequate supplemental funding for reset is not available in the future, we will be forced to fund reset within our baseline service budget. This will have three primary impacts:

(1) It will increase the amount of time required to complete reset operations and as a result, prolong the already degraded readiness status of our Operating Forces.
(2) It will force the Marine Corps to delay or defer critical modernization programs as a result of having to divert base budget funds for reset.
(3) It will create a potential decision point on budgeting for these items at the expense of our manpower accounts.

One final consideration is that the harsh environments and tempo of operations in Iraq and Afghanistan through nearly 10 years of constant combat have accelerated wear and tear on our equipment. Our equipment returning from Iraq has required extensive depot level maintenance or replacement. Approximately half the items returned from Iraq to the United States required either depot level or field levels of maintenance as part of their reset actions. Our planning estimates for equipment returning from Afghanistan lead us to predict even greater depot level repair requirements and greater wash-out rates than was experienced from equipment returning from Iraq.

MILITARY CONSTRUCTION

141. Senator MCCAIN. General Amos, the Marine Corps has requested over $440 million in fiscal year 2011 and fiscal year 2012 to construct or improve facilities at MCAS, Yuma, AZ, and at the Barry M. Goldwater Range in order to support the stationing of multiple F–35 B squadrons. Does the delay in the acquisition plan for the Marine Corps variant of the F–35 affect the need for the MILCON projects?

General AMOS. Changes in the acquisition plan for the Marine Corps variant of the F–35 do not affect the need nor the programming schedule of the projects requested in fiscal year 2011 or fiscal year 2012. MCAS Yuma will continue to serve as the primary location for aviation pre-deployment training and large-scale aviation exercises besides having dedicated operational squadrons. Dedicated aircraft hangars, apron, and training facilities are needed to support permanently based squadrons and transient aircraft that are deployed to MCAS Yuma on a regular basis.

Since the JSF is not comparable to existing legacy aircraft and cannot operate in a legacy hangar due to different power requirements, maintenance and security requirements, and higher level of security, MILCON must be completed prior to F–35 aircraft arrival. The estimated timeframe to complete an F–35 hangar (construction, outfitting, and security certification) is 3 years as follows: (1) 3 months for design utilizing a design/build construction contract acquisition strategy; (2) 24 months for construction; and (3) 6 to 9 months for outfitting and security certification.

Between fiscal year 2012 and fiscal year 2016, approximately 30 JSF aircraft will arrive at MCAS Yuma. These aircraft will fully resource two squadrons and partially resource a third squadron. Three hangar modules are required by fiscal year 2015 to support these three permanently-based Yuma squadrons. One hangar module was requested in fiscal year 2011. However, due to the fiscal year 2011 CR, this project cannot be awarded for construction, thereby impacting our ability to support the initial operational capability (IOC) of the first squadron scheduled for fiscal year 2012. Two hangar modules requested in fiscal year 2012 are required to support two squadrons, which will reach IOC in fiscal year 2015/2016. Appropriate utilities in-

frastructure and training facilities (e.g. simulator buildings, Field Carrier Landing Practice training facilities) also are needed to support the F–35.

INDEPENDENT REVIEW PANEL TO STUDY THE JUDGE ADVOCATE REQUIREMENTS OF THE DEPARTMENT OF THE NAVY

142. Senator MCCAIN. Secretary Mabus, on February 22, 2011, the members of the Independent Review Panel to Study the Judge Advocate Requirements of the Navy submitted to the Secretary of Defense the report required by section 506 of the NDAA for Fiscal Year 2010. The panel was composed of experts in military law and took extensive testimony about the requirements for judge advocates in the Navy and Marine Corps. Among other witnesses, General David Petraeus, Commander, CENTCOM; VADM Harry Harris, USN, Commander, U.S. Sixth Fleet; VADM John Bird, USN, the Director of the Navy Staff; and Lt. Gen. John F. Kelly, USMC, Commander, Marine Forces Reserve and Commander, Marine Forces North, testified about the current and growing need for judge advocates in military operations.

The panel concluded that there is a requirement in the Navy for approximately 950 Active Duty judge advocates and a requirement in the Marine Corps for approximately 550 Active Duty judge advocates. The panel noted that the Marine Corps is on track to maintain a target inventory of 550 judge advocates over the next 5 years. Surprisingly, the panel also noted that the Navy, which has 811 judge advocates on Active Duty at the end of fiscal year 2010, is planning to reduce the inventory of its judge advocates over the next 5 years to 747 in fiscal year 2016. How would you evaluate the contribution by Navy and Marine Corps judge advocates to the mission of the Navy and Marine Corps in OEF, OIF, and OND, to individual sailors, marines, and their families, and to the ability the Navy overall in performing its mission?

Mr. MABUS. Navy and Marine judge advocates are involved in every aspect of operations in support of OEF, OIF, OND, and dozens of other operations across the globe.

In an operational environment that has become increasingly complex and legally intensive, the ability of judge advocates to identify legal and related policy issues in divergent areas (e.g., rules of engagement, international law, domestic law, and U.S. policy) and synthesize the issues rapidly in order to give timely and coherent legal advice to military commanders, staffs, seniors civilians, and tactical forces is paramount to mission success. These personnel understand, rely on, and demand the counsel they receive from their judge advocates.

- Across the CENTCOM AOR and other parts of the globe, wherever U.S. forces are engaged in military activities and contingency operations, Navy and Marine Corps judge advocates are involved at every step of an operation—from tactical guidance to strategic level planning.
- Through the administration of a fair and balanced military justice system, as well as through the provision of legal assistance to sailors, marines, and their families, judge advocates ensure command and individual readiness, which is essential to accomplishment of the overall Navy mission.
- Not only are judge advocates meeting the day-to-day legal demand signal of individual sailors, marines, and their families, they also respond effectively and efficiently to the uptick in legal demand generated by natural disasters (e.g., Hurricane Katrina, flooding in Millington, TN, earthquakes and tsunamis in Indonesia (2006) and Japan (2011)) and global conflict (e.g., pre-deployment, deployment, and post-deployment of individual augmentees), allowing sailors, marines, and their families to receive the legal support they need in order to focus effectively on the Navy's overall mission.

143. Senator MCCAIN. Secretary Mabus, in view of the conclusions of the panel regarding the requirements for Active Duty judge advocates in the Navy and Marine Corps, what measures are you taking with respect to the growth—or reduction—of judge advocates in the Navy JAG Corps?

Mr. MABUS. Navy plans to fund, within our base program, 31 JAG Corps billets, currently detailed to the Office of Military Commissions until the end of fiscal year 2015, and continue increasing the number of JAG Corps billets to 821 over the FYDP. This is consistent with the number of Active Duty JAG officer billets Vice Admiral Houck testified before the 506 Panel are needed to meet baseline mission requirements. We have also begun to train enlisted members of the Legalman rating to obtain certification through the American Bar Association as paralegals, which

will gradually ease much of the administrative burdens currently levied on JAG Corps officers.

144. Senator MCCAIN. Secretary Mabus, what other actions are you taking in response to the panel's findings and recommendations?

Mr. MABUS. In direct response to the recommendations made by the Independent Review Panel, I have approved revisions to Secretary of the Navy Instruction 5430.27C "Responsibility of the Judge Advocate General of the Navy and the Staff Judge Advocate to the Commandant of the Marine Corps for Supervision and Provision of Certain Legal Services."

The revisions will:

- institutionalize the Military Justice Oversight Council (MJOC) and the JAG's Annual Report on the State of Military Justice within the Navy;
- clarify and strengthen the role of the Staff Judge Advocate (SJA) to Commandant of the Marine Corps (CMC);
- establish a direct relationship between the Secretary of the Navy and the SJA to CMC;
- provide the SJA to CMC with authority and responsibility to supervise the administration of military justice and legal assistance in the Marine Corps, including the authority to conduct frequent inspections in accordance with title 10, section 806 of the U.S. Code; and
- make the SJA to CMC responsible for the professional and technical supervision of Marine judge advocates.

The panel recommended that implementation of a single court-martial case tracking system could improve the Navy's military justice practice. I am committed to pursuing an integrated Navy and Marine Corps case management system. An ongoing Center for Naval Analyses (CNA) study is assisting in identifying potential options for an integrated Navy and Marine Corps system. Once CNA provides final recommendations, the Navy will make an overall assessment of the IT system(s) to pursue.

145. Senator MCCAIN. Admiral Roughead, what is your view of the validity of the panel's conclusion that the Navy should have approximately 950 Active Duty judge advocates to meet its requirements for legal services?

Admiral ROUGHEAD. We have experienced increased demand for JAG Corps officers in areas such as operational law and support for sailors and their families. Based on Navy's internal assessment that was provided to the Independent Review Panel by Vice Admiral Houck, I intend to increase the number of JAG Corps billets to 821 across the FYDP.

146. Senator MCCAIN. Admiral Roughead, do you support current Navy personnel planning that will reduce the number of Active Duty judge advocates from 811 to 747 over the next 5 years?

Admiral ROUGHEAD. In fiscal year 2011, Navy's program of record was to decrease our Judge Advocate General Corps (JAGC) officers from 801 to 747 by fiscal year 2016. I plan to fund, within Navy's baseline budget, an additional 31 JAG Corps billets which are currently detailed to the Office of Military Commissions until the end of fiscal year 2015 to meet the 821 JAGC officers required to meet baseline requirements over the FYDP.

147. Senator MCCAIN. General Amos, what is your view of the validity of the panel's conclusion that the Marine Corps should have approximately 550 Active Duty judge advocates to meet its requirements for legal services?

General AMOS. I am confident in the validity of the Panel's conclusion that the Marine Corps requires approximately 550 Active Duty judge advocates. My confidence results from the Panel's conclusion based on determinations made by the Marine Corps' force structure and manpower management systems, with the considered input of the SJA to the CMC.

As noted by the Panel, Marine Corps judge advocate requirements are driven by the Marine Corps organizational force structure, the requirement to fill a proportionate share of non-legal assignments ("B-billets"), and the need to maintain a sufficient inventory to sustain the force (e.g. at any given time there are a required number of student judge advocates in the accessions pipeline, and a required number of career judge advocates attending in-service, resident training and education). The force structure requirement is determined by the Total Force Structure Division (TFSD), under the Deputy Commandant for Combat Development and Integration, in concert with subject matter experts and functional advocates. The requirement

for B-billets and sustainment are determined by Manpower Management (MM) Division, under the Deputy Commandant for Manpower and Reserve Affairs. These requirements are continuously reviewed to ensure structured requirements meet mission requirements.

The SJA to the CMC, as the Occupational Field Manager and Functional Advocate for the Marine legal community, is formally integrated into this process, working with TFSD and MM to ensure we get it right. This process determined that an inventory of approximately 550 judge advocates would be needed to meet Service, Department, and Joint legal billet requirements, as well as requirements for non-legal assignments and sustainment overhead for the next 5 years. Recent studies and reviews by both the Judge Advocate Division as well as successive Uncompensated Review Boards, which the Panel found "realistic and useful," served to buttress this determination.

148. Senator McCain. General Amos, how will the recently completed Force Structure Review, and projected reductions in end strength, affect the Marine Corps ability to increase substantially the number of Active Duty judge advocates?

General Amos. It should be noted that judge advocate structure, which largely determines required inventories, has had modest, yet steady, increases over the past 5 years (i.e. average 2 percent annually), and is projected to have continued, yet modest, increases in fiscal year 2012 (2 percent) and fiscal year 2015 (8 percent). This has led to corresponding increases in accessions, which in turn have led to increases in the inventory of Active Duty judge advocates. As such, current, as well as projected, inventories are already meeting these requirements.

That being said, the Panel noted several factors, which if they occur, could affect projected requirements for judge advocates including: (1) a significant increase in the military justice mission once marines redeploy from Afghanistan; (2) structured operational law requirements continuing to increase at or near the same rate as has been experienced since September 11, 2001; (3) the SJA to CMC being provided additional authority to supervise Marine judge advocates and the delivery of legal services; or (4) a significant reduction in Marine Corps total officer and enlisted end strength. I concur that these factors could, if and when they occur, affect the Marine Corps' requirements for judge advocates.

The Report of the 2010 Marine Corps Force Structure Review Group (FSRG), published in March 2011, depicts a reduced end strength in the Marine Corps Active component from 202,000 to approximately 186,800 personnel following the completion of operations in Afghanistan.

This reduced end strength will not necessarily result in a reduction of the judge advocate inventory. On this point, I note the Panel's observation that "overall legal requirements do not necessarily or directly correlate to force structure or total end-strength." For example, as the Panel observed "[t]here are certain inviolate costs associated with operating a comprehensive military justice system worthy of our men and women in uniform, such as maintaining independent trial and appellate judiciaries;.maintaining a cadre of qualified military counsel capable for trying complex cases; and maintaining SJA offices that have the capability to effectively discharge military justice responsibilities despite competing wartime demands."

As the FSRG recommendations are implemented, we will continuously manage the number of Active Duty judge advocates to ensure a total inventory sufficient to fulfill the manpower requirements for the overall legal mission and requirements of the Marine Corps.

Questions Submitted by Senator James M. Inhofe

MARINE CORPS END STRENGTH

149. Senator Inhofe. General Amos, what effect will a reduction of 15,300 have on dwell time ratios?

General Amos. Assuming operational demands do not increase but the Marine Corps is allowed to reduce the force at a measured and responsible pace, dwell time ratios should not be significantly affected. A 4-year timeline would allow for reductions in end strength and force structure to be executed in conjunction with reducing operational requirements.

150. Senator Inhofe. General Amos, what was the driver behind the decision to increase the Marine Corps 4 years ago?

General Amos. In January 2007, the Secretary of Defense authorized both the Army and Marine Corps to increase their respective Active components to sustain

combat operations in Iraq. Warfighting units within both Services had been on a 1:1 deployment-to-dwell ratio which placed serious stress on the force and families. The Marine Corps' growth to 202,100 personnel was designed not only to reduce stress on the force by achieving a 1:2 deployment-to-dwell ratio, but also to allow the Marine Corps to continue training to other missions across the Range of Military Operations rather than those solely focused on counterinsurgency and irregular warfare. This end strength growth also helped to create three balanced Marine Air-Ground Task Forces to better support Overseas Contingency Operations.

151. Senator INHOFE. General Amos, what conditions have changed?

General AMOS. Looking ahead to the end of combat operations in Afghanistan, the Marine Corps has determined that a smaller force makes more sense from an operational perspective. A future end strength of 186,800 marines provides the country a "middleweight" force that is forward deployed and forward engaged, and ready to conduct complex expeditionary operations across the range of military operations in accordance with National Strategy. A reduction in end strength also frees resources for much-needed modernization, reset, and reconstitution efforts.

152. Senator INHOFE. General Amos, what types of challenges will the Marine Corps face if required to reduce the strength by 15,300 in a 2-year time span?

General AMOS. Significant involuntary separations would be required to reduce the force in a 2-year timeframe. A rapid draw-down throughout the Active component could decrease dwell time among our most heavily deployed and stressed occupational fields.

153. Senator INHOFE. General Amos, will this have an impact on future retention?

General AMOS. The actions necessary to achieve a 2-year draw-down may have a negative impact on future retention, primarily due to the perception that the Marine Corps is willing to break faith with its career force. Additionally, excessively small accession cohorts, needed to facilitate a rapid drawdown, would result in insufficient retention populations at the 4-year reenlistment point.

154. Senator INHOFE. General Amos, what risks are associated with reducing the Corps' size?

General AMOS. The planned reduction of Marine Corps personnel in the Active component from 202,000 to 186,800 personnel is based on mission requirements beyond OEF. The imperative for the Marine Corps is to preserve capabilities developed since September 11, expand our engagement efforts, respond to crisis, and still be able to project power for the most dangerous threat scenarios. To that end we will accept a degree of risk by reducing our Active component capacity for conducting multiple, sustained operations ashore, relying on an operationalized Reserve component to mitigate that risk. Of necessity, our force structure represents many judiciously considered factors and makes pragmatic trade-offs in capabilities and capacities to achieve a posture that creates opportunity and provides an operational stance that enables flexibility and rapid response. The Marine Corps does not plan on reducing end strength until it has withdrawn combat units from OEF. A 186,800 force will provide the United States a middleweight force capable of operating across the range of military operations.

155. Senator INHOFE. General Amos, how will a reduction in the size of the Marine Corps affect the Corps' ability to sustain combat operations in the future?

General AMOS. The 2010 Marine Corps Force Structure Review Group developed the organization, posture, and capabilities to reshape and enhance America's Expeditionary Force in Readiness in a fiscally-constrained, post-OEF environment.

Reshaping the Marine Corps from a wartime footing of 202,000 marines to a force of approximately 186,800 imposes some risk. We wargamed all proposed force structure changes against approved DOD scenarios and select operation plans. We determined that the resulting force would be capable of operating across the range of military operations. However, we assumed some risk in our capacity to conduct sustained or simultaneous major operations and campaigns.

156. Senator INHOFE. General Amos, what assurances do we have that we will not need a larger Marine Corps in the future?

General AMOS. There is no assurance. However, the 2010 Marine Corps Force Structure Review Group developed the organization, posture, and capabilities to reshape and enhance America's Expeditionary Force in Readiness in a fiscally-constrained, post-OEF environment. We wargamed all proposed force structure changes against approved DOD scenarios and select operation plans. We determined that the

resulting force would be capable of operating across the range of military operations. However, we assumed some risk in our capacity to conduct sustained or simultaneous major operations and campaigns.

MARINE CORPS PREPOSITIONING PROGRAM

157. Senator INHOFE. General Amos, it is my understanding that to support recent Marine Corps combat operations, the Marine Corps has drawn from its propositioned stock sets, and reset of these stocks is underway and will be done in conjunction with the Marine Corps procurement programs. Last year, this committee was briefed that in Norway, the current percentage of on-hand major end-item equipment was 47 percent of authorized allowances and the percentage of on-hand supplies was 78 percent. What is the current status of the Marine Corps prepositioned stocks?

General AMOS. When measured against authorized allowances, the percentage of major end item equipment (Class VII) currently present in the Maritime Prepositioning Force program is 97 percent, and the percentage of all starter stocks currently present is in excess of 95 percent.[1] Starter stocks represent the initial supplies (e.g. food stores, ammunition, medical supplies) needed in the first 30 days to supply a Marine Expeditionary Brigade (MEB).

In Norway, the current percentage of on-hand major end-item equipment (Class VII) measured against authorized allowances is 51 percent; the percentage of on-hand sustainment is 85 percent.[2]

158. Senator INHOFE. General Amos, is there adequate funding in the near- or far-term to fully restock propositioned equipment and supplies?

General AMOS. Yes. The Marine Corps has adequate operations and maintenance funding to support the annual maintenance of existing equipment and the rotation/replenishment of supplies and materials.

Our prepositioning programs have been used to source equipment for forward-deployed and deploying units. As a result, the Marine Corps has assumed risk within its Maritime Prepositioning Force (MPF) program and Marine Corps Prepositioning Program in Norway while supporting ongoing Overseas Contingency Operations.

When measured against authorized allowances, the percentage of major end-item equipment (i.e. Class VII) currently present in the MPF program is 97 percent; the percentage of all starter stocks (e.g. initial sustainment) currently present is in excess of 95 percent.[3] Starter stocks represent the initial supplies (e.g. food rations, medical supplies, ammunition) needed in the first 30 days to supply a Marine Expeditionary Brigade (MEB). In Norway, the current percentage of Class VII equipment measured against authorized allowances is 51 percent while the percentage of on-hand sustainment is 85 percent.[4]

We anticipate restoring our prepositioned stocks to 100 percent at the end of our Afghanistan force drawdown once remaining equipment, currently in combat, undergoes reset.

AFRICA

159. Senator INHOFE. Secretary Mabus and Admiral Roughead, I understand the Navy is expanding its survey of ports in Africa in order to initiate more contact with African countries through port visits, continuing to build relationships with our African partners. How do you view the importance of continued Navy operations in and around the African continent?

Mr. MABUS. The Navy's presence and maritime security force assistance initiatives within U.S. Africa Command's area of responsibility continue to grow in strategic importance. A number of African partners have measurably improved their maritime security capacity as a result of training provided through Africa Partnership Station and other Navy efforts conducted throughout the continent.

The practical value of such initiatives is exemplified by the Africa Maritime Law Enforcement Partnership (AMLEP), a joint Navy and Coast Guard initiative that began in 2008. To date, five separate AMLEP training events have been conducted. Participating African partners have disrupted illegal fishing within their Economic Exclusion Zones and seized a total of five vessels that were violating national fish-

[1] Data as of 2 August 2011.
[2] Data as of 2 August 2011.
[3] Data as of 2 August 2011.
[4] *Ibid.*

ing laws. These successes reinforce the rule of law; reduce lost revenue and food supplies by states that were incapable of enforcing their maritime rights; and generate revenue from fines that can be used to sustain and enhance the maritime security capacity of their Navy and Coast Guard forces. Importantly, the basic capabilities and proficiency that enable offshore fisheries enforcement also underpin counter-piracy, counter-trafficking, and critical infrastructure protection operations, leading to enhanced national and regional maritime security that benefits not only the African states, but also the global economy.

Africa Partnership Station missions, as well as focused, shorter duration maritime security force assistance events, are designed to incorporate subject matter experts from other U.S. agencies (e.g. Coast Guard, National Oceanic and Atmospheric Administration, U.S. Agency for International Development, and the Departments of State, Energy, Homeland Security, and Transportation), who work alongside the Navy in a comprehensive U.S. Government approach to building partner capacity. The Navy provides expeditionary capability that efficiently extends the reach of U.S. agencies as well as that of numerous nongovernmental organizations, international organizations, and other nations' naval personnel. In this way, Africa Partnership Station deployments foster and sustain cooperative relationships that enhance national and international effectiveness during crisis response operations.

The Navy appreciates the importance of sustained, predictable engagement in Africa and will work to increase the maritime security capacity of the African littoral states for the foreseeable future.

Admiral ROUGHEAD. The Navy's presence and maritime security force assistance initiatives within U.S. Africa Command's area of responsibility continue to grow in strategic importance. A number of African partners have measurably improved their maritime security capacity as a result of training provided through the Africa Partnership Station and other Navy efforts conducted throughout the continent.

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160. Senator INHOFE. Secretary Mabus and Admiral Roughead, the commander of U.S. Naval Forces Africa is also the commander of U.S. Naval Forces Europe and has an area of responsibility that covers all of Russia, Europe, and nearly the entire continent of Africa—105 countries, more than one billion people, 20 million square miles of ocean, and a landmass of over 14 million square miles. Given current and forecasted defense budgets coupled with increase demand for Navy assets, is the Navy adequately resourced to increase the activity and operations around the continent of Africa?

Mr. MABUS. The Navy's force structure supports a forward naval posture to meet warfighting and peacetime requirements across the entire spectrum of current and future conflicts. This force structure meets the minimum demands as generated through the Combatant Commander and Service capability identification process through the 2020 timeframe; however, simultaneously sourcing all of the COCOM demands, including those of AFRICOM, for warfighting, deterrence, security objectives, and prompt response to all possible crises would require a larger Navy than is currently resourced. The risk resides primarily in meeting portions of the security objectives and prompt response to a crisis with forces already in theater. As mitiga-

tion, DOD will employ a comprehensive GFM process to most effectively allocate naval forces to the highest priority COCOM requirements.

The Navy's President's budget for 2012 continues support for the Africa Partnership Station (APS), a collaborative strategy designed to help coastal nations in West and Central Africa achieve safety and security in the Gulf of Guinea as well as cooperative training for East Africa. APS missions include maritime training, collaboration, infrastructure-building, and cross-border cooperation to assist African nations in securing maritime regions and sovereign waters. These efforts address criminal activity, piracy, environmental and fisheries violations, resource theft, arms smuggling, and narcotics and human trafficking. APS is a direct response to the growing international interest in forming cooperative global maritime partnerships to ensure global maritime security.

Admiral ROUGHEAD. The Navy's force structure meets the minimum demands currently identified by combatant commanders, including AFRICOM. DOD utilizes a comprehensive GFM process to most effectively allocate naval forces to the highest priority COCOM requirements as the security environment evolves.

MISSILE DEFENSE

161. Senator INHOFE. Secretary Mabus and Admiral Roughead, I continue to have concerns about our current missile defense plan. While the SM–3 Block IB will be tested this year and hopefully fielded in 2015, the SM–3 Block IIA is in design with a 2018 projected fielding date and the SM–3 Block IIB is still only a concept. However, intelligence estimates state that Iran may have a long-range ballistic capability by 2015. What is current level of confidence in being able to deploy the SM–3 Block IIA by 2018 and the SM–3 Block IIB by 2020?

Mr. MABUS. The MDA, which is responsible for developing and procuring BMD missiles, is working closely with Navy to deliver the SM–3 Block IIA by 2018 and the SM–3 Block IIB by 2020. We will keep Congress fully informed as these important programs progress.

Admiral ROUGHEAD. The Navy and MDA are working closely to develop, procure, and deliver the SM–3 Block IIA by 2018 and the SM–3 Block IIB by 2020. We will keep Congress fully informed as these important programs progress.

162. Senator INHOFE. Secretary Mabus and Admiral Roughead, the 2010 Ballistic Missile Defense Review notes, "the demand for missile defense assets within each region over the next decade will exceed supply." Do we have enough Aegis ships and missiles to not only protect Europe from an Iranian threat but also have Aegis ships deployed around the globe to conduct its missile defense mission as well as its maritime security, anti-submarine warfare, and surface warfare missions?

Mr. MABUS. The Navy currently has sufficient capacity to meet the most critical demands for its multi-mission Aegis ships; however, Navy does not have the capacity to meet all GCC demands for BMD-capable ships without breaking established Personnel Tempo program limits.

The Navy has a sufficient inventory of SM–3 missiles to satisfy global missile defense requirements today. However, given the relatively small number of missiles in the current inventory (76), we are using the Global Force Management system to provide a "fair share" of SM–3s to deploying ships and then shifting those missiles to successive ships as deployment rotations occur. Ultimately, the MDA plans to procure a total of 523 SM–3 missiles, which will permit increased loadouts aboard deploying ships and obviate the requirement to transfer missiles in theater in the future. This increased inventory will also provide for contingency surge readiness and an adequate war reserve of SM–3 missiles.

To meet the increasing demand for these ships and reduce the risk to our long-term force structure caused by the increased operational tempo from longer deployment lengths, the Navy, working in conjunction with MDA, has established a plan to increase the number of BMD-capable Aegis ships from 23 in fiscal year 2011 to 41 in fiscal year 2016 (see Figure 1 below). This plan balances the need for meeting current operational requirements against the need to upgrade existing BMD-capable Aegis ships to pace the future threat. Included in this plan are increases in the Navy's capacity and the capabilities of Aegis ships through the installation of an Aegis BMD 3.6.1/4.0.1 suite, the Aegis Modernization program, or new construction (commencing with DDG–113).

A key attribute of all Aegis ships is their multi-mission capabilities within the maritime domain, which allows the Navy to employ Aegis ships in multi-mission roles rather than for exclusive missions. These ships can perform a variety of other non-BMD missions either concurrently or sequentially as the GCC requires.

The Navy's operating concept for maritime BMD features a graduated readiness posture that allows BMD-capable Aegis ships to be on an operational tether and available for other tasking when not directly involved in active BMD operations. Aegis ships operating in support of a BMD mission do not lose the capability to conduct other missions; however, specific mission effectiveness may be affected by ships' position and/or application of ship resources to those missions.

The Navy is not large enough to deploy ships for single mission purposes, and thus with the exception of deterrent patrols by SSBNs, does not advocate deploying warships for single mission tasking. Single mission use of our Aegis ships for BMD will result in shortages in other mission areas and a loss of operational flexibility for the GCCs.

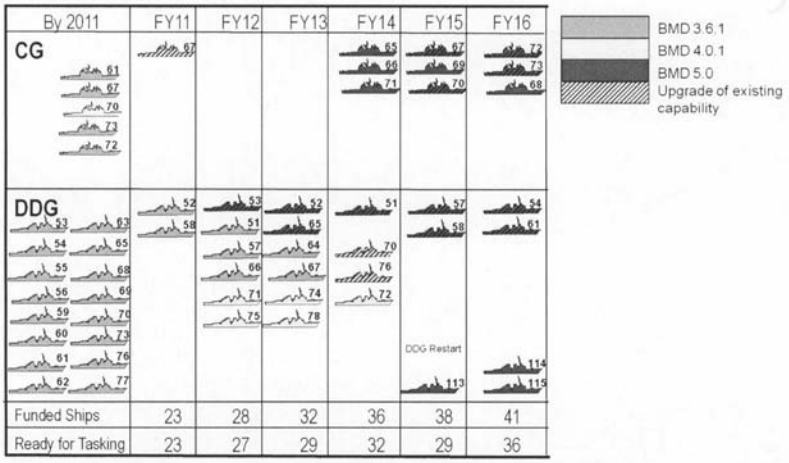

Figure 1: Aegis BMD Ship Profile, Presidential Budget for FY2012

Admiral ROUGHEAD. The Navy currently has sufficient capacity to meet the most critical demands for its multi-mission Aegis ships; however, we do not have the capacity to meet all GCC demands for BMD without exceeding established Personnel Tempo program limits for deployment lengths, dwell tempo, or homeport tempo. Based on threat analysis, and current indications from GCCs, and assuming standard 6-month deployment lengths, the Navy and the MDA concluded that GCC demand for surface combatants with Aegis BMD capability will outpace capacity through approximately 2018.

Single mission use of our Aegis ships for BMD will result in shortages in other mission areas and a loss of operational flexibility for the GCCs. To ensure GCCs demands are met, the Navy employs Aegis ships in multi-mission roles rather than for exclusive missions on an enduring basis. These ships can perform a variety of other non-BMD missions such as strike warfare, air warfare, submarine warfare, surface warfare, information warfare, high value asset protection, or maritime interdiction either concurrently or sequentially as the GCC requires. The Navy has created a flexible operating concept for maritime BMD which features a graduated readiness posture that allows BMD-capable Aegis ships to be on an operational tether and available for other tasking when not directly involved in active BMD operations. Aegis ships operating in support of a BMD mission do not lose the capability to conduct other missions; however, specific mission effectiveness may be affected by ships' position and/or application of ship resources to those missions.

To meet the increasing demand for these ships and reduce the risk to our long-term force structure caused by the increased operational tempo from longer deployment lengths, the Navy, working in conjunction with MDA, has established a plan to increase the number of BMD-capable Aegis ships from 23 in fiscal year 2011 to 41 in fiscal year 2016 (see Figure 1 above). This plan balances the need for meeting current operational requirements against the need to upgrade existing BMD-capable Aegis ships to pace the future threat. Included in this plan are increases in the Navy's capacity and the capabilities of Aegis ships through the installation of an Aegis BMD 3.6.1/4.0.1 suite, the Aegis Modernization program, or new construction

(commencing with DDG–113). The current CR and the President's budget for fiscal year 2012 may impact this plan.

The Navy has a sufficient inventory of SM–3 missiles to satisfy global missile defense requirements today. However, given the relatively small number of missiles in the current inventory (76), we are using the Global Force Management system to provide a fair share of SM–3s to deploying ships and then shifting those missiles to successive ships as deployment rotations occur. Ultimately, the MDA plans to procure a total of 523 SM–3 missiles, which will permit increased loadouts aboard deploying ships and obviate the requirement to transfer missiles in theater in the future. This increased inventory will also provide for contingency surge readiness and an adequate war reserve of SM–3 missiles.

163. Senator INHOFE. Secretary Mabus and Admiral Roughead, how is the Navy managing the limited number of Aegis BMD ships when demand is greater than supply?

Mr. MABUS. All Aegis ships are allocated to the GCCs through the DOD Global Force Management (GFM) process, which takes into consideration GCC surface combatant requirements in all mission areas. The Navy employs the FRP as the framework to provide a structured process to prepare and posture Navy forces to meet GFM requirements, including but not limited to BMD. The FRP balances the need to maintain and upgrade equipment, train for the full spectrum of operations, and deploy in support of GCC requirements.

Admiral ROUGHEAD. The Navy currently has sufficient capacity to meet the most critical demands for its multi-mission Aegis ships; however, we do not have the capacity to meet all GCC demands for BMD without exceeding established Personnel Tempo program limits for deployment lengths, dwell tempo, or homeport tempo. Based on threat analysis and current indications from GCCs, and assuming standard 6-month deployment lengths, the Navy and the MDA concluded that GCC demand for surface combatants with Aegis BMD capability will outpace capacity through approximately 2018.

The Navy employs the FRP as the framework to provide a structured process to prepare and posture Navy forces to meet GFM requirements, including but not limited to BMD. The FRP balances the need to maintain and upgrade equipment, train for the full spectrum of operations, and deploy in support of GCC requirements.

To meet the increasing demand for these ships and reduce the risk to our long-term force structure caused by the increased operational tempo from longer deployment lengths, the Navy, working in conjunction with MDA, has established a plan to increase the number of BMD-capable Aegis ships from 23 in fiscal year 2011 to 41 in fiscal year 2016 (see Figure 1 above). This plan balances the need for meeting current operational requirements against the need to upgrade existing BMD-capable Aegis ships to pace the future threat. Included in this plan are increases in the Navy's capacity and the capabilities of Aegis ships through the installation of an Aegis BMD 3.6.1/4.0.1 suite, the Aegis Modernization program, or new construction (commencing with DDG–113).

164. Senator INHOFE. Secretary Mabus and Admiral Roughead, why are Aegis ships which are configured to carry 20 missiles only carrying 10 to 11 missiles?

Mr. MABUS and Admiral ROUGHEAD. Currently deployed Aegis ships are carrying a limited number of SM–3 missiles due to the still growing inventory of BMD weapons in our Navy. Given the combatant commander demand for Navy BMD ships on station, we are utilizing the Global Force Management process to provide a fair share of existing inventory to deploying BMD capable ships. Ship loadouts will be increased as additional SM–3 missiles are procured and the overall Navy BMD inventory increases.

165. Senator INHOFE. Secretary Mabus and Admiral Roughead, according to a June 2010 Defense News article, the Aegis radar systems are "in their worst shape ever, raising questions about the surface fleet's ability to take on its high-profile new mission next year defending Europe from ballistic missiles." The article describes a Fleet Review Panel assessment, started in September 2009 by the head of Fleet Forces Command, that Aegis "SPY manpower, parts, training, and performance are in decline," and suggests that these deficiencies would affect the Navy's ability to meet its missile defense mission requirements, including the European PAA. Are there Aegis readiness concerns?

Mr. MABUS. Today's Aegis Fleet is heavily stressed by the pace of operations around the globe. This has led to a decline in Aegis readiness that we are addressing by increasing our investment in Aegis-specific equipment, training, and spare parts in a coordinated effort to sustain this vital system at optimal readiness.

Admiral ROUGHEAD. Today's Aegis Fleet is heavily stressed by the pace of operations around the globe. This has led to a decline in Aegis readiness. We are addressing these issues through investment in Aegis-specific equipment, training, and spare parts in a coordinated effort to sustain this vital system at optimal readiness. We are moving approximately 1,900 sailors from shore billets onto our ships to meet operational demands while maintaining acceptable Fleet readiness levels and sailor dwell time. To enhance the material readiness of our Fleet, we are improving our ability to plan and execute maintenance by increasing manning at our RMCs, and by institutionalizing our engineered approach to surface ship maintenance, converting the successes of our SSLCM initiative I began 2 years ago into the SURFMEPP. I remain focused on ensuring our Navy has a force that is maintained and trained to provide the capability and forward presence required in the two areas of interest identified in our Maritime Strategy, the Western Pacific, and the Arabian Gulf, while preserving our ability to immediately swing from those regions and our Fleet concentration areas in the United States to respond to contingencies globally.

F–35

166. Senator INHOFE. Secretary Mabus, Admiral Roughead, and General Amos, what is your assessment of the F–35 restructure and what impact will it have on Navy and Marine Corps strike aircraft capabilities?

Mr. MABUS. The F–35 restructure was based upon the most in-depth, bottoms-up Technical Baseline Review (TBR) of the F–35 program to date. The TBR involved more than 120 technical experts investigating all aspects of the program which enabled us to assess the overall progress and current status of the F–35 program. Based on this review, we support the Secretary of Defense assessment that the F–35 Systems Development and Demonstration (SDD) phase should be restructured; variants of the F–35 aircraft decoupled; and the production ramp reduced to mitigate concurrency. Impacts of the F–35 program delays have been accounted for in the Navy's Strike Fighter Inventory Management (SFIM) plan, which shows that the Navy is required to resource a SLEP for legacy Hornet aircraft and procure additional F/A–18E/F Super-Hornets. Additional SFIM plan details have been provided to Senior Professional Staff Members. While F–35 has been challenged this past year, and additional developmental challenges may arise, we remain strongly committed to the F–35 program as it is essential to our long-term national security as the future backbone of U.S. combat air-superiority and the core of Navy and Marine aviation.

Admiral ROUGHEAD. Navy remains strongly committed to the F–35 program as an essential element to our long-term national security serving as the backbone of U.S. combat air-superiority and the core of Navy and Marine Corps aviation. The TBR conducted last year involved more than 120 technical experts investigating all aspects of the program which enabled us to assess the overall progress and current status of the F–35 program. Based on the recommendations from the TBR, Navy supports the Secretary of Defense assessment that the F–35 SDD phase should be restructured; variants of the F–35 aircraft decoupled; and the production ramp reduced to mitigate concurrency. Impacts of the F–35 program delays due to restructuring have been accounted for in the Navy's SFIM plan, which shows that the Navy is required to resource a SLEP for legacy Hornet aircraft and procure additional F/A–18E/F Super-Hornets.

General AMOS. There are three factors impacting the delivery of all JSF variants: (1) production delivery delays; (2) flight test progress; and (3) the rate of software development. The restructure of the F–35 program was designed to provide the time necessary to remedy these deficiencies while retaining capabilities the aircraft requires to perform in support of operational tasking. The slower production rate impacts our rate of transition from an aging legacy aircraft inventory. Currently, we are successfully managing our strike fighter aircraft inventory to meet our operational commitments.

167. Senator INHOFE. Secretary Mabus, Admiral Roughead, and General Amos, what risks do you see that could make the strike fighter shortfall rise even higher in the years ahead?

Mr. MABUS. The Navy's plan to mitigate the strike fighter shortfall is to procure a total of 556 F/A–18E/Fs, which is 41 above the previous program of record and to extend the service life of 150 F/A–18A–D aircraft in the Navy and Marine Corps. This will lower the projected peak shortfall from about 100 to 65 in 2018. The key risk to this plan is the ability to extend the service life of the F/A–18A–D aircraft

from 8,000 to 10,000 flight hours. The Naval Air Systems Command (NAVAIR) has extensive expertise in the field of extending the service life of tactical aircraft and processes for managing the risk of these programs.

The first step is to extend the aircraft service life from 8,000 to 8,600 flight hours with the High Flying Hour (HFH) inspection program and then induct the aircraft in the SLEP to achieve an additional 1,400 hours to 10,000 flight hours. The HFH Revision A inspection extending the aircraft 600 flight hours is now completing the Validation and Verification process. Until our technical knowledge increases with the completion of more HFH inspections, unknown schedule and cost risks will remain. To extend the service life from 8,600 to 10,000 flight hours, select aircraft will be inducted into the SLEP for depot inspection and modification. The first SLEP candidate aircraft will be inducted in fiscal year 2012.

Admiral ROUGHEAD. The Navy's plan to mitigate the strike fighter shortfall is to procure a total of 556 F/A–18E/Fs, which is 41 above the previous program of record and to extend the service life of 150 F/A–18A–D aircraft in the Navy and Marine Corps. This will lower the projected peak shortfall to 65 in 2018.

The NAVAIR, my executive agent for the service life extensions, has extensive expertise in the field of extending the service life of tactical aircraft and the processes for managing risk related to SLEPs.

General AMOS. The two most significant factors affecting the strike fighter shortfall are operational demand and the corresponding utilization of the remaining service life on our legacy F/A–18 Hornet aircraft. Our Hornets are reaching the end of their effective service life at the same time as we are procuring F–35B replacement aircraft.

Delays in the JSF program have created a gap in available aircraft. The Marine Corps is addressing this issue by means of an aggressive service life management program for legacy F–18C/D aircraft. The current shortfall is manageable; however, risk will arise if further F–35B procurement delays occur, utilization rates on our legacy aircraft increase, and/or if there is a reduction of funding for necessary SLEPs.

168. Senator INHOFE. Admiral Roughead, in light of the results of the F–35's TBR, does the Navy still believe it can achieve F–35 IOC in 2016?

Admiral ROUGHEAD. Due to the recent JSF TBR and program restructuring efforts, the F–35C IOC has not yet been determined. We are reviewing the results of the TBR and restructuring to determine when IOC will be achieved. The Navy's IOC requirements will remain unchanged and will be based on the level of capability delivered at the completion of the initial operational test and evaluation of the F–35C equipped with Block 3 software.

The Navy's intent is to stand up squadrons as aircraft become available and declare IOC when sufficient capability is tested and delivered. IOC requires the following:

- All key performance parameter thresholds must be met
- Sufficient aircraft quantity (10 Primary Aircraft Authorized)
- Mission planner; and adequate trainers, spares, support equipment, and publications
- Fully functional Autonomic Logistics Information System (ALIS) installed and available aboard a nuclear powered aircraft carrier (CVN)
- Adequately trained aircrew, maintainers, and support personnel
- Desired capability to conduct all Operational Requirements Document missions, to include air interdiction (AI); offensive counter-air (OCA); defensive counter-air (DCA); Close Air Support (CAS); suppression of enemy air defenses/destruction of enemy air defenses (SEAD/DEAD); and combat search and rescue (CSAR) in a denied, near-peer environment better than legacy aircraft
- Completion of all ship qualifications and certification to deploy aboard CVN
- Completion of operational test (all mission capabilities)

169. Senator INHOFE. General Amos, how has the F–35B 2-year probationary period and decrease of F–35B procurement in the FYDP affected the Marine Corps' strike fighter shortfall?

General AMOS. Slowing the production rate of the F–35B to allow for the responsible design and incorporation of technical adjustments was a prudent decision in light of the progress the JSF program had made to date. However, this slower production rate concurrently slows down our rate of transition from legacy aircraft to ones with fifth generation capabilities.

Currently, we are successfully managing our legacy strike fighter aircraft inventory to meet operational commitments through a variety of service life management initiatives until the F–35B is fielded. Additionally, our procurement of some F–35Cs within the FYDP will ensure that we meet our enduring commitment to carrier-based Tactical Aircraft Integration, while partially off-setting the delay in F–35B procurement.

170. Senator INHOFE. Secretary Mabus, Admiral Roughead, and General Amos, when does the Marine Corps plan to achieve F–35B LOC?

Mr. MABUS. The Navy's plan for Limited Operational Capability (LOC) is to maintain F–35B operational requirements and field F–35B when the inherent capabilities of the aircraft are cleared for operational use; pilots are trained; and a support infrastructure is in place. An LOC date is still to be determined as it will depend upon the outcome of Service and Program Office F–35B technical and sustainment reviews, to include the results of flight test, aircraft delivery schedules, and implementation of the F–35 sustainment strategy.

Admiral ROUGHEAD. The Marine Corps' plan for the F–35B is to maintain its operational requirements, field the aircraft, train to the capabilities as they are cleared for operational use, and achieve IOC when they are delivered the aircraft without limitations. An IOC date is still to be determined as it will depend upon the outcome of Service and Program Office F–35B technical and sustainment reviews, to include the results of flight test, aircraft delivery schedules, and software development progress.

General AMOS. An IOC date has not yet been determined and will depend upon the outcome of technical and sustainment reviews being conducted both at the Service and Program Office level. These reviews include the results of flight testing, aircraft delivery schedules, and software development progress and the like. Current projections from the Joint Program Office and from Lockheed Martin suggest that IOC can occur in 2014. As a result, the Marine Corps is targeting June 2014 as an objective IOC date with June 2015 as a threshold IOC date. Nonetheless, delivery of aircraft to the first training squadron will occur later this year with delivery of the first Marine Corps operational aircraft beginning in 2012.

CANCELLATION OF THE EXPEDITIONARY FIGHTING VEHICLE

171. Senator INHOFE. General Amos, the EFV fulfilled a new requirement to enable marines to be delivered from Navy ships that were 25 nautical miles from the shore. This was based on the threat of new enemy anti-ship missiles. The new requirement drops the 25-nautical-mile requirement in favor of the old 15-nautical-mile requirement. Does cancelling the EFV mean that the threat of anti-ship missiles was overstated?

General AMOS. Cancelling the EFV does not mean the threat of anti-ship missiles was overstated. Rather, over the years subsequent to the establishing of EFV performance requirements, the threats in the littorals and U.S. capabilities to counter and overcome those threats have evolved. We now believe that improvements in the capabilities fielded or currently in development mitigate the threat to an acceptable level of risk for a naval force operating at a 12-nautical-mile stand-off range.

172. Senator INHOFE. General Amos, does the Marine Corps still see amphibious warfare as its primary mission?

General AMOS. With a naval tradition as the foundation of our existence, the Marine Corps remains firmly partnered with the Navy with the ability to come from the sea rapidly to project power across the global commons. As America's Expeditionary Force in Readiness, the Marine Corps is forward deployed and forward engaged: shaping, training, deterring, and responding to all manner of crisis and contingency operations. We stand ready to conduct complex expeditionary operations across the Range of Military Operations regardless of the threat envelope.

173. Senator INHOFE. General Amos, what will replace the Amtrack?

General AMOS. The Marine Corps will pursue an integrated new vehicle program, crafted from the beginning for affordability and taking advantage of the investment made in the EFV. The Marine Corps intends to mitigate risks associated with a new vehicle program and to maximize value by the use of an integrated acquisition portfolio approach. This approach is comprised of three efforts: (1) an acceleration of the planned procurement of Marine Personnel Carriers (MPC); (2) investment in a SLEP and upgrades for a portion of the existing AAVs; and (3) the development of a new ACV. This new amphibious vehicle, known currently as the ACV, and the

MPC represent the modern, enduring, and complementary capability solution that ultimately will replace the AAV.

REPEAL OF DON'T ASK, DON'T TELL

174. Senator INHOFE. Admiral Roughead and General Amos, there is legislation being considered that would add the requirement for the Service Chiefs to certify along with the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the President that repeal of DADT will not degrade combat readiness or recruiting and retention. What are your personal thoughts regarding legislation requiring Service Chiefs' certification that repeal of DADT will not degrade combat readiness or recruiting and retention?

Admiral ROUGHEAD. I am confident my assessment of Navy's readiness for repeal will be carefully considered by the Secretary of Defense and the Chairman during the certification process, and I do not believe it is necessary to provide additional or separate input outside of this process. My recommendation to the Secretary of Defense and the Chairman of the Joint Chiefs of Staff will be based on my assessment of objective and subjective data, to include the number of individuals and units trained, policies ready for issue to the force, reports from commanders regarding observed impacts to effectiveness, readiness, recruiting, and retention, and repeal-related incidents, as well as a review of force-wide personnel readiness data, retention data, and our regular surveys of the force. I provide regular updates on Navy's progress to the Secretary of Defense and the Chairman, and will remain personally engaged with them throughout this process.

General AMOS. I believe requiring my certification is unnecessary. I have had sufficient opportunity to openly communicate with the Chairman of the Joint Chiefs of Staff and with the Secretary of Defense on this issue. OSD and the Services meet regularly to have frank and honest discussions on this issue and will continue to do so between now and certification.

175. Senator INHOFE. Admiral Roughead and General Amos, how is the Navy and Marine Corps handling the more difficult aspects of the repeal of DADT: concerns about individual privacy, fairness in providing benefits to heterosexual and gay and lesbian families, the process for reentry of servicemembers separated under DADT, and fair treatment for individuals with strongly held religious beliefs concerning homosexuality, to include military chaplains?

Admiral ROUGHEAD. Sexual orientation remains a personal and private matter. Commanders may not establish practices that segregate servicemembers according to sexual orientation. Consistent with current policy, commanders will continue to maintain the discretion to alter berthing or billeting assignments in accordance with Navy policy in the interest of maintaining morale, good order and discipline, and consistent with performance of the mission.

There will be no changes at this time to eligibility standards for military benefits. The Defense of Marriage Act currently prohibits extension of many military benefits to same-sex couples. All servicemembers will continue to have various benefits for which they may designate beneficiaries in accordance with the rules governing each program, to include Servicemembers' Group Life Insurance beneficiary, G.I. Bill death beneficiary, Thrift Savings Plan beneficiary, and Wounded Warrior Act Designated Caregiver.

Upon repeal, former servicemembers who were discharged solely under 10 U.S.C. section 654 may apply to reenter the Armed Forces. They will be evaluated according to the same criteria and requirements applicable to all prior servicemembers seeking reentry into the military at that time. Sexual orientation will not be a factor.

Sailors with different religious beliefs already work, live, and fight together. Existing policies regarding individual expression and free exercise of religion are adequate and will not change. The Chaplain Corps' First Amendment freedoms and their duty to care for all will not change. Military personnel who do not uphold these standards are subject to discipline under the Uniform Code of Military Justice.

General AMOS. The Marine Corps is addressing these concerns through leadership, training, and a rigorous service policy review and reconciliation. The law has not changed in regard to benefits, and we continue to follow guidance from OSD as we address such issues. The reentry of servicemembers, who have been discharged under the current law, has not begun because they are prohibited from reentry until repeal occurs. For all persons of faith, we continue to uphold the highest standards of fair treatment. We have confidence in our leaders at all levels that they will han-

dle these issues with professionalism to ensure all marines are treated with dignity and respect.

176. Senator INHOFE. Admiral Roughead and General Amos, what aspects of the implementation of repeal of DADT have been sources of concern?

Admiral ROUGHEAD. I am not concerned with any aspect of the implementation of the repeal of DADT. Feedback from our sailors indicates the training they are receiving is comprehensive, well-delivered, and effective. Additionally, we have not observed any impacts to readiness, effectiveness, cohesion, recruiting, or retention. We are on track to complete our training by July 1, 2011.

General AMOS. Our main concern centered on impacts to the readiness and cohesion of our combat units. Other concerns centered on matters of billeting and benefits. I am confident that the detailed work of DOD's Comprehensive Review Working Group, and the guidance issued by the Secretary of Defense have addressed these concerns. We also feel that the extensive DADT related training we have conducted to date has mitigated these concerns. (Note: The Marine Corps is complete with Tier 1 (special staff) and Tier 2 (leadership) training. As of 30 June 2011, Tier 3 (Marines) training is 95 percent complete.)

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

OHIO REPLACEMENT PROGRAM

177. Senator CHAMBLISS. Secretary Mabus and Admiral Roughead, the *Ohio* Replacement Program will replace the 14 *Ohio*-class ballistic missile submarines with 12 next generation SSBN(X)s. The Navy is estimating that each SSBN(X) will have 16 tubes as opposed to the 24 currently on *Ohio*-class submarines. With implementation of New START, the Navy will inactivate 4 tubes per submarine so that only 20 missiles are aboard each SSBN, bringing the fleet capacity down to 240 submarine-launched ballistic missiles. These steps will eventually take our sea-launched ballistic missile fleet from 336 missiles to 192 missiles. SSBNs represent the most survivable leg of the triad. The Navy has campaigned for 16 tubes per SSBN to lower procurement costs; however, I understand STRATCOM wants 20 tubes per SSBN, an additional 48 missiles total, and STRATCOM campaigned for more tubes because it gives them more flexibility and resilience.

Other than cost concerns, the Navy's desire for fewer tubes is also based on the presumption that the world's largest nuclear powers will continue the trend toward reducing their arsenals. Regarding procurement cost, arguments have surfaced that reducing the number of tubes will do relatively little to reduce procurement cost. With a growing threat of strategic nuclear advancement in countries such as Iran, and with SSBNs accounting for the most survivable leg of the triad, does this reduction in SLBMs make sense, and how will it affect our ability to provide strategic deterrence for the United States and our allies?

Mr. MABUS. The Navy conducted an in-depth, extensive review of the capability requirements for the *Ohio* Replacement SSBN in parallel with development of the service cost position required at Milestone A. This analysis concluded that a force of 12 *Ohio* Replacement SSBNs with 16 missile tubes can carry all the sea-based warheads and maintain excess capacity in the event of a fundamental deterioration of the security environment or as a hedge against technical challenges within one or more of the other legs of the triad. A force of 12 SSBNs with 20 missile tubes could carry the Nation's entire operationally deployed warheads with excess capacity remaining. These conclusions are based on the current requirements of the New START treaty.

It is the Navy's judgment that the Nation's sea-based strategic requirements can be met with a force of 12 *Ohio* Replacement SSBNs with 16 tubes. Given the substantial budgetary pressures facing DOD and Navy shipbuilding, a 20-tube *Ohio* Replacement SSBN would inappropriately sacrifice other conventional shipbuilding requirements for unneeded excess capacity. OSD, Joint Staff, and STRATCOM have since concurred with the Navy's position on this military requirement.

Admiral ROUGHEAD. The Navy conducted an in-depth review of the capability requirements for the *Ohio* Replacement SSBN in parallel with development of the Service Cost Position required at Milestone A. This analysis concluded that a force of 12 *Ohio* Replacement SSBNs with 16 missile tubes can carry the sea-based warheads required and maintain excess capacity in the event of a fundamental deterioration of the security environment or as a hedge against technical challenges within one or more of the other legs of the triad. A force of 12 SSBNs with 20 missile tubes could carry the Nation's entire operationally deployed warheads with excess capac-

ity remaining. These conclusions are based on the current requirements of the New START treaty. To meet the operational requirement to deploy SSBNs to both the Atlantic and Pacific oceans, a force of at least 12 operational submarines is required.

It is the Navy's judgment that the Nation's sea-based strategic requirements can be met with a force of 12 *Ohio* Replacement SSBNs with 16 tubes. Given the substantial budgetary pressures facing DOD and Navy shipbuilding, a 20-tube *Ohio* Replacement SSBN would inappropriately sacrifice other conventional shipbuilding requirements for unneeded excess capacity. OSD, Joint Staff, and STRATCOM have since concurred with the Navy's position on this military requirement.

RESET

178. Senator CHAMBLISS. General Amos, in your prepared statement you discuss the Marine Corps' significant backlog in resetting your equipment based on nearly 10 years of war and redeploying equipment from Iraq to Afghanistan which resulted in deferring previously-planned reset actions. I am extremely impressed with what the Marine Corps has been able to accomplish—with both your people and your equipment. It is a testimony to your leadership and can-do attitude. However, this bill is going to come due and—as you say in your statement—the bill for resetting your equipment is $10.6 billion, most of which is not yet funded. Looking forward, and assuming you get the money you need to perform this reset and regeneration work, do you have the people and other resources you need to perform this work? You only have two Marine Corps depots—one of which is in Georgia—and I'm curious if you've thought about whether you can accomplish all your reset and regeneration requirements with the people and resources you have, or might more be required?

General AMOS. As long as sufficient funding resources are available, Marine Corps depot activities have the ability to expand and contract as necessary to meet workload requirements. There are multiple options to adjust capacity, including implementation of overtime and/or multiple shifts, hiring of contract and/or temporary labor, hiring full time additional labor or contracting with commercial vendors.

We can also utilize capacity at other service depots. As an example, Marine Corps Logistics Command, Maintenance Centers in Albany, GA, and Barstow, CA, increased production in 2008 and executed 4.4 million direct labor hours. In 2009, the Marine Corps estimated a requirement for 5.45 million direct labor hours in preparation for the influx of equipment returning from Iraq. Both depots hired additional personnel for those years in accordance with section 2472 of title 10, U.S.C., with the expectation that the workload, and therefore the workforce, would remain throughout reset. However, the calendar year 2009 workload did not materialize due to harvesting of significant amounts of equipment in Iraq to support Afghanistan surge requirements.

Once the timelines and rate of drawdown from Afghanistan are known, Marine Corps Logistics Command will conduct reset workload forecasts and develop plans to expand depot capacity using the options described above.

QUESTION SUBMITTED BY SENATOR SCOTT BROWN

OPEN ARCHITECTURE SOLUTION

179. Senator BROWN. Secretary Mabus, the Navy has been providing quarterly reports to Congress regarding its progress in implementing an open architecture solution across the surface ship Navy. What are your views on the successes and status of this effort to date and the implementation plan for the next 3 years for large surface combatants, including DDG–51 Flight 3, amphibious ships, and any future new construction ships?

Mr. MABUS. Naval programs have made progress in implementing OA practices and principles in recent years in the areas of policy and guidance creation and adoption, competitive contracting, component reuse, and open system development, testing, and fielding. Within the surface ship Navy, Advanced Capability Builds (ACB) deliver an integrated combat system capability to the Surface Navy in an effective, safe, reliable, and readily producible manner.

The Ship Self Defense System (SSDS) Combat System was designed from the beginning with its software decoupled from hardware, based on non-standard open architecture software and COTS hardware components. However, from its inception, SSDS has incorporated a common source library (CSL) approach where the software for all ship classes employing SSDS comes from a single source library (SSL). This permits new capability development investments to be applicable across all SSDS-

based combat system baselines. When a new SSDS software component is developed, it is placed in the SSDS SSL and is then available to other SSDS-based combat system configurations. Beginning in fiscal year 2008, SSDS was modified to become compliant with Open Architecture Computing Environment standards. SSDS combat systems software in the SSL has evolved to align to middleware standards and toward future commonality with Aegis combat system software.

Eight different SSDS configurations are supported by the SSL:

- SSDS MK 2 Mods 1, 1A, and 1B for CVN–68 *Nimitz*-Class Aircraft Carriers
- SSDS MK 2 Mods 2, 2A, and 2B for LPD–17 *San Antonio*-Class Amphibious Transport Docks
- SSDS MK 2 Mod 3A for LHD–1 *Wasp*-Class Amphibious Assault Ships
- SSDS MK 2 Mod 4B for LHA–1 *Tarawa*-Class Amphibious Assault Ships

The following configurations are under development as part of SSDS ACB 12 and will be added to the SSL upon completion:

- SSDS MK 2 Mod 6C for CVN–78 *Gerald R. Ford*-Class Aircraft Carriers
- SSDS MK 2 Mod 2C for LPD–17 *San Antonio*-Class Amphibious Transport Docks
- SSDS MK 2 Mod 3C for LHD–1 *Wasp*-Class Amphibious Assault Ships
- SSDS MK 2 Mod 5C for LSD–41 *Whidby Island*- and LSD 49 *Harpers Ferry*-Class Landing Ship Docks

Over the next 3 years SSDS systems will be fielded on the following ships:

- Fiscal year 2012—USS *Harry S. Truman* (CVN–75) and PCU *Arlington* (LPD–24)
- Fiscal year 2013—USS *Theodore Roosevelt* (CVN–71), USS *Tortuga* (LSD–46), USS *New Orleans* (LPD–18), USS *Iwo Jima* (LHD–7), PCU *Arlington* (LPD–24), PCU *Somerset* (LPD–25), and PCU *America* (LHA–6)
- Fiscal year 2014—USS *Wasp* (LHD–1) and PCU *John P. Murtha* (LPD–26)

The Aegis combat system was initially designed as an integrated and tightly coupled hardware and software combat system. As the Aegis combat system is modernized and transitions to a network-based commercial off-the-shelf (COTS) computing environment it will use a CSL to support an affordable and sustainable ACB process. The actual rate of modernization will be driven by fleet availability and future budgets. Over the next 3 years, ACB12 in conjunction with the CSL is being used across multiple programs (Aegis Modernization, DDG–113, and Aegis Ashore) and is planned for installation on the following Aegis ships:

- Fiscal year 2012—USS *Normandy* (CG–60), USS *Chancellorsville* (CG–62), and USS *John Paul Jones* (DDG–53)
- Fiscal year 2013—USS *Princeton* (CG–59), USS *Cowpens* (CG–63), USS *Gettysburg* (CG–64), USS *Barry* (DDG–52), and USS *Benfold* (DDG–65)
- Fiscal year 2014—USS *Chosin* (CG–65), USS *Hue City* (CG–66), USS *Cape Saint George* (CG–71), and USS *Arleigh Burke* (DDG–51)

Commencing in fiscal year 2012, five different Aegis combat system configurations will be supported from a CSL:

- Baseline 9A—CG without the Multi-Mission Signal Processor (MMSP) and without BMD capability (CG–59–64)
- Baseline 9B—CG with MMSP and integrated BMD capability (CG–65–73)
- Baseline 9C—DDG with MMSP and integrated BMD capability (DDG–51–112)
- Baseline 9D—DDG–113 + New Construction with MMSP and integrated BMD capability (DDG–113 and follow)
- Baseline 9E—Aegis Ashore with MMSP and integrated BMD capability

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QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

CHINA'S NAVAL MODERNIZATION

180. Senator CORNYN. Admiral Roughead, reports indicate that over the past 2 decades, the People's Liberation Army's Navy (PLAN) has added more submarines to its fleet than any other country in the world, in addition to 15 guided missile destroyers; a similar number of frigates; more than four dozen high-speed cruise-missile armed patrol craft; and scores of new amphibious ships. The PLAN is also reportedly moving forward with an aircraft carrier program. According to DOD's 2010 Report on the Military Power of the People's Republic of China, the PLAN's

investments "suggest that China is seeking to support additional missions beyond a Taiwan contingency." Given China's naval build-up, how much emphasis should be placed on U.S. Navy programs and spending for countering improved Chinese naval forces in the coming years?

Admiral ROUGHEAD. China's naval procurements and military modernization are noteworthy and rapid. Absent greater transparency from China, China's efforts have significant implications for regional stability and they challenge conducting naval operations in contested areas. Our Navy has made significant investments in kinetic and non-kinetic capabilities to address anti-access challenges (specific investments are best provided in a classified setting). Our President's budget for 2012 submission achieves the optimal balance among building sufficient capability and capacity to meet the most likely threats, ensuring effective operations and maintenance of our forces, and taking care of our people.

181. Senator CORNYN. Admiral Roughead and General Amos, according to the DOD's 2010 Report on the Military Power of the People's Republic of China, the PLAN's "primary focus will remain on preparing for operations within the 'first and second island chains,' with emphasis on a potential conflict with U.S. forces over Taiwan." In 1996, China conducted a series of provocative missile tests for the purpose of influencing Taiwan's first direct presidential election. In response, in March 1996, President Clinton ordered two U.S. aircraft carriers into the Taiwan Strait to send the Chinese a message. Shortly thereafter, Taiwan conducted its first presidential election peacefully. Considering China's dramatic enhancement of its naval and anti-access capabilities, coupled with its aggressive rhetoric on Taiwan, if a scenario similar to the one that occurred in 1996 arose again in the immediate future, would today's U.S. Navy be able to react as it did in 1996, without exposing our forces to undue levels of risk?

Admiral ROUGHEAD. Today's Navy is a more formidable and capable force than it was in 1996. Inherent in today's force structure is the ability to respond quickly with flexible and adaptive force packages that are tailored to deliver effects across the full range of military operations—from demonstrations as was done in 1996 to major combat operations in today's evolving, sophisticated anti-access/area denial environments.

There are an increasing number of foreign capabilities that have the potential to cause our forces to operate from distances further from a crisis than desired, or to slow or disrupt the deployment of friendly forces into the theater. Capabilities that impact our forces in this manner are termed anti-access capabilities and include long-range, precise, anti-ship and land attack ballistic and cruise missile systems; advanced combat aircraft and electronic warfare technologies; advanced Integrated Air Defense systems; submarines and subsurface warfare capabilities; surface warfare capabilities; C^4ISR capabilities and cyber warfare technologies.

The Navy has and will continue to develop programs and capabilities to address the anti-access environment emerging in the Western Pacific and other theaters of operation. Accordingly, we are strengthening our alliances and partnerships, modernizing our forces, fielding new capabilities and technologies, and developing new operational concepts.

One specific initiative that will help preserve access in the Pacific is implementation of the Air-Sea Battle Concept. Air-Sea Battle implementation will ensure continued U.S. advantage against emerging anti-access threats. This does not mean the risks associated with conducting naval operations in an anti-access/area denial environment will be eliminated. Rather, comprehensive implementation of the joint Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF) actions that comprise the Air-Sea Battle Concept initiatives will enable enduring forward presence; robust training, exercises and military-to-military engagement with our allies and like-minded partners; and crisis response operations necessary to protect our national interests in the Pacific within tolerable risk levels.

General AMOS. The Marine Corps maintains rotational MEU Amphibious Ready Group forces in the PACOM Area of Responsibility (AOR) consisting of marines embarked aboard naval amphibious shipping. There are Marine Corps forces also arrayed in Japan, Okinawa, and Hawaii. Collectively, these marines are able to respond to crises or operational missions throughout the AOR when directed.

AIR-SEA BATTLE CONCEPT

182. Senator CORNYN. Admiral Roughead and General Amos, the 2010 QDR directs the development of a joint Air-Sea Battle (ASB) concept between the Navy and

the Air Force. In his speech last week at the U.S. Air Force Academy, Secretary Gates said this new doctrine recognizes "the enormous potential in developing new joint warfighting capabilities—think of naval forces in airfield defense, or stealth bombers augmented by Navy submarines—and the clear benefits from this more efficient use of taxpayer dollars." What is the current status of the development and implementation of the ASB concept?

Admiral ROUGHEAD. ASB is a limited operational concept that focuses the development of integrated air and naval forces on addressing the evolving anti-access/area denial (A2/AD) environment. The Navy, Marine Corps, and Air Force Service Chiefs recently signed the ASB Concept, and the Services are now refining and synchronizing the DOTMLPF, initiatives necessary to implement the concept. This effort will continue in a deliberate manner for a number of years.

General AMOS. The Marine Corps has participated in the development of the ASB concept and is a full partner in the ASB office that will continue concept and capability development. We will integrate ASB tenets into our force development process after appropriate validation through experimentation and wargaming with our Navy and Air Force counterparts. Innovative, new, joint capabilities have been incorporated into the ASB concept. Some of these new capabilities are already showing potential, and recent operations in Libya have relied upon forward-leaning capabilities that are part of the Marine Corps Program of Record. The recent tactical rescue of an Air Force F–15E conducted from Navy amphibious ships by Marine Corps V–22 tilt-rotor and fixed wing platforms to affect the rescue of Air Force personnel deep in Libyan territory is an example of such innovative joint capability sets.

With the introduction of the F–35B STOVL JSF, marines will be optimized for the type of engagements envisioned in ASB. The enhanced Anti-Access and Area Denial systems, platforms, and forces of potential adversaries, such as precision ballistic missiles, will make fixed bases and airfields problematic. The ability of STOVL aircraft to readily disperse, operate from short and degraded runways, and double the number of capital ships—11 aircraft carrier and 11 amphibious—capable of fixed wing provide a significant contribution to the force by preserving its ability to generate tactical air integration sorties in Anti-Access and Area Denial environments. Marine capabilities to rapidly build and operate expeditionary airfields in austere locations will provide the combatant commander with a force that can shape and improve his posture as he prosecutes the ASB, as will the traditional capability of marines to seize and hold critical terrain that enables sea-control. I have recently joined with the Chief of Naval Operations and Chief of Staff of the Air Force in signing the ASB concept, and we are now engaged together in the establishment of the ASB office which will oversee the continued development of the concept and related initiatives.

183. Senator CORNYN. Admiral Roughead and General Amos, to what extent has the ASB concept already influenced the investment decisions reflected in the Navy's fiscal year 2012 budget request and the latest FYDP, and to what extent will it guide investment decisions in the future?

Admiral ROUGHEAD. The ASB concept was still under joint development by the Navy and Air Force throughout the POM12 cycle. However, the discussions and preliminaries decisions indirectly informed the fiscal year 2012 budget. POM12 was primarily focused on implementing the 2010 QDR and the DOD-wide efficiency initiatives. Many of the ASB themes are consistent with established CNO/Fleet warfighting priorities for POM12; investments made across these areas in PB12 have given the Navy a head-start on programmatic requirements that aid in implementing the ASB concept.

The Navy continues to assess POM13 and make investment decisions to help support the ASB concept within the constraints of our current fiscal environment.

General AMOS. The Marine Corps force development process is concept based. Ideally, we begin with a concept, such as ASB and then conduct a robust wargaming and experimentation effort to validate the concept and gain insights on the functional capabilities that are required to implement it. The concept experimentation phase affords a more refined understanding of operational and systems requirements and the necessary changes necessary to support them (i.e. DOTMLPF process). With the knowledge gleaned from experimentation and wargaming, we are better prepared to propose programs and acquisition initiatives. We believe this deliberate process affords the best use of the resources entrusted to Marine Corps. We are still early in the concept experimentation and validation phase regarding ASB. Once we have validated the triservice requirements for ASB, those shared requirements will influence our future investment decisions, the extent of which cannot be determined until that time.

INDEPENDENT PANEL ASSESSMENT

184. Senator CORNYN. Admiral Roughead, the Independent Panel Assessment of the 2010 QDR recommended a Navy fleet of 346 ships, yet the Navy's current plans are for only a 313-ship fleet. In fact, in your testimony, you referred to 313 ships as the "minimum" our Navy needs. If Congress were to appropriate the funding necessary for the Navy to buy an additional 33 ships, beyond the planned 313 ships, what type and mix of ships would you recommend?

Admiral ROUGHEAD. To propose a force structure for a 346-ship Navy, further study and analysis must be conducted to determine: (1) the additional missions expected of a 346-ship battle force; (2) the actual break-down of ship types, quantities, and capabilities to be procured and; (3) the associated cost and effects on the shipbuilding industrial base in procuring a proposed 346-ship fleet.

I have stated that the Navy requires a minimum of 313 ships to meet operational requirements globally. This minimum remains valid; however, we are continually evaluating this requirement to address increased operational demands and expanding requirements for BMD, intra-theater lift, and forces capable of confronting irregular challenges. 313 ships remain the floor. The Navy remains committed to building a 313-ship fleet by 2020, as detailed in our Long-Range Plan for Construction of Naval Vessels for fiscal year 2011.

Beyond the FYDP, the need to fund SSBN recapitalization will result in some risk to the Navy's fiscal year 2011 Shipbuilding Plan to maintain the 313-ship floor. While the SSBN(X) is being procured, the Navy will be limited in its ability to procure other ship classes. The lower build rates in the fiscal year 2022 to fiscal year 2031 timeframe will result in reduced force structure in the fiscal year 2032 to fiscal year 2040 timeframe. If additional funding were to be provided to fund SSBN(X) procurement during this time period, the Navy would be able to apply its shipbuilding funds to raise other ship procurement rates to reduce the impact on the shipbuilding industry and to increase the overall battleforce inventory. Additional ships would include guided missile destroyers and attack submarines. Additional funding would help reduce future ship inventory shortfalls and provide a more stable production base.

WIND FARM IMPACT ON FLIGHT OPERATIONS

185. Senator CORNYN. Admiral Roughead, in a response to a recent request for information from my office, the Navy stated that "wind turbine operations may create harmful interference to National Airspace System Sensors, hindering safe airspace operation and aircraft separation and control." It is apparent that the systems most adversely affected are air traffic control radars and approach systems (e.g., Precision Approach Radar). Due to the rotating windmill blades, these systems can be degraded by false targets, shadowing, and target loss. What steps is the Navy taking to ensure that wind farm encroachment around naval and MCASs does not hinder or completely degrade the ability of bases to complete their mission?

Admiral ROUGHEAD. There are several means by which Navy attempts to ensure that wind farm encroachment around Navy and MCASs does not hinder or completely degrade the ability of bases to complete their mission:

- Navy implements an Encroachment Management Program focused on systematic identification, quantification, and mitigation of encroachment concerns. Navy partners with communities, State, and local governments, and conservation organizations to preserve training and operations by implementing land use controls. To this end, Navy has already acquired over 9,000 acres of restrictive easements to reduce incompatible development near installations.
- The Joint Land Use Study (JLUS) Program enables cooperative agreements between Navy and local governments. When the potential for incompatible development, such as wind farms, is identified, Navy may partner with the Office of Economic Adjustment to initiate a JLUS. JLUS implementation measures may involve land exchanges; transfer of development rights; and revisions to a community comprehensive plan and can take the form of traditional land use and development controls, such as zoning and structural height restrictions.
- When appropriate, the Navy and the Marine Corps participate in the Federal Aviation Administration's (FAA) Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) process to review proposed construction projects for navigational safety hazards. This process has provided DOD awareness and influence on potential wind farm encroachment. However, it

does not include all potential wind turbine hazards, nor does it provide FAA or DOD authority to prohibit construction.

• Navy is participating in the processes of the recently established DOD Energy Siting Clearinghouse, which will monitor energy project compatibility and gather compatibility evaluations from the Navy and the other Services. Compatibility reviews will include consideration of all potential conflicts with military missions and activities from wind farm development.

• Through the Bureau of Ocean Energy Management Regulation and Enforcement's (BOEMRE) Renewable Energy State Task Force process, the Navy and OSD evaluate areas of the outer continental shelf for renewable energy opportunities, while minimizing potential conflict with training and operational missions. For example, Navy and OSD successfully liaised with BOEMRE to prevent leasing operational range space in the VACAPES operating area, Atlantic Test Range, and Atlantic Coast Warning Areas, to preserve critical offshore training and testing operational areas.

186. Senator CORNYN. Admiral Roughead, Section 358 of the NDAA for Fiscal Year 2011 gives DOD 30 days to assess renewable energy proposals that have unacceptable impacts on military operations. In response to a recent request for information from my office, the Air Force stated that, "proposals that are found to present significant operational impacts will be hard-pressed to meet the new requirements within 30 days." Do the NDAA for Fiscal Year 2011 provisions provide the Navy with adequate time to conduct a thorough analysis and make informed objections to proposed wind farm developments, when necessary, because of impacts on military operations?

Admiral ROUGHEAD. The NDAA for Fiscal Year 2011 provisions provide Navy with enough time to do a preliminary assessment of the impact. Thirty days is not enough time to conduct a thorough analysis of whether the proposal creates an "unacceptable risk to national security." The NDAA does not require this latter finding within 30 days.

Section 358(e)(1) of the 2011 NDAA gives DOD 30 days to conduct a "Preliminary Assessment." This document would assess the level of risk of adverse impact on military operations and readiness that would arise from the project and discuss the extent of mitigation that may be needed to address such risk. I believe this can be done in the 30 days.

Section 358(e)(2) sets forth procedures under which DOD could make a "Determination of Unacceptable Risk" regarding a proposed energy project. Such a determination can only be made upon a finding of "unacceptable risk to the national security of the United States." In contrast to a Preliminary Assessment, this section has no time limit. However, I recognize the national interests in developing renewable power and will strive to conduct a thorough and timely analysis when a complete assessment is required.

In 2006, the "Report to the Congressional Defense Committees, The Effect of Windmill Farms on Military Readiness," informed Congress that among other things, site and project specific studies are required for complete analysis of impacts and of potential mitigations. This is not possible in 30 days. The 2006 study is available online at www.defense.gov/pubs/pdfs/windfarmreport.pdf.

187. Senator CORNYN. Admiral Roughead, do the NDAA for Fiscal Year 2011 provisions take into account the electromagnetic effects of wind turbines on radar systems and provide adequate protection for Navy-owned radars and other sensors?

Admiral ROUGHEAD. The 2011 NDAA provisions account for the electromagnetic effects of wind turbines on radar systems by asking for an assessment of the risk associated with electromagnetic interference on military readiness, including the effects on testing and evaluation ranges. However, the provisions also establish a very high standard for DOD objection to a proposed renewable energy project, requiring a finding of "adverse effect on national security." Once DOD makes such a determination, the provisions do not empower either the DOD or the FAA to prevent construction of wind turbines based on that finding. The current FAA process only provides for notice of hazard.

188. Senator CORNYN. Admiral Roughead, when a wind farm is proposed, an application must be submitted to the FAA. In response, the FAA determines whether or not a hazard to aviation exists. However, in its review process, the FAA fails to take into account the electromagnetic effects of wind turbines on radar systems when the proposed wind farm would be within line of sight of a military radar tower. In your opinion, does the FAA's "OE/AAA" process need to be revised to ac-

count for the impact of electromagnetic (or any other) interference on airport surveillance and long-range radars?

Admiral ROUGHEAD. I am interested in coordinating with the FAA to revise the OE/AAA process to improve electromagnetic effect screening tools for military airport surveillance radars and update military airport obstruction criteria to ensure Special Use Airspace and Military Training Routes are properly identified. The FAA OE/AAA process provides for a review of proposed construction projects and makes a hazard determination for projects evaluated as a navigational safety hazard. Although impacts of interference on airport surveillance and long-range radars are considered during the evaluation process, it is limited to navigational safety, rather than preserving military airspace needed for unique training requirements such as low-level training routes or student jet pilot training. This includes military and special use airspace, not associated with airports or runways, but is critical to Navy training and readiness.

189. Senator CORNYN. Admiral Roughead, there is clear evidence that the electromagnetic effect of wind turbines can have a negative impact on the military's ability to conduct air operations. Does the Navy believe that some form of Military Impact Statements (MIS) should be required for renewable energy projects? If so, what would be the most appropriate time in the certification process to require the MIS?

Admiral ROUGHEAD. Several studies indicate that electromagnetic effects from wind turbines could adversely affect Navy's ability to conduct air missions. Some form of MIS should be included as part of the siting process for renewable energy projects. Our experience with the BOEMRE process in assessing offshore mineral and wind energy development leasing blocks shows that many areas can be compatible for development if certain conditions can be met. In some instances, it can be as little as moving one or two wind turbines in a project, or as substantial as blocking off large areas. While there is not a single process for approving renewable energy projects, early notification is critical. Navy must be able to provide an initial assessment, and then be allowed additional time and resources to conduct compatibility analyses if the process is to maximize available wind resources without impacting military readiness. The Navy would like to work with DOD to develop a screening tool that would show which areas within which wind turbine development could be excluded.

190. Senator CORNYN. Admiral Roughead, what type of mandatory information would be most appropriate for inclusion in the MIS?

Admiral ROUGHEAD. A MIS would be an entirely new process and set of requirements. A proper recommendation of what should be included requires significant coordination throughout Navy and the other Services. Fundamentally, the MIS should contain an assessment by all branches of the military of a proposed project's impact on training, testing, and operations. The exact elements of a MIS must consider the level of effort and resourcing that will be required, and should provide a proportionate legal mechanism capable of preventing incompatible construction. I appreciate any opportunity to assist in developing or reviewing such a concept.

JOINT STRIKE FIGHTER

191. Senator CORNYN. Admiral Roughead, compared to the F–35A and F–35B, the aircraft carrier variant F–35C has received relatively little attention in the media as of late. It is my understanding that we will see the first F–35C operational squadron in 2015. This critical platform will replace aging F–18s and soon become the backbone of the Navy's Tactical Aviation *Enterprise*. Please provide an update on this critical variant of the JSF and its importance to the future of our Navy.

Admiral ROUGHEAD. The first F–35C SDD aircraft (CF–1) delivered to NAS, Patuxent River in November and has been actively clearing the flight envelope, demonstrating flight to just above supersonic and an altitude of 30,000 feet. As of early March, CF–1 has flown a total of 40 sorties for 59 hours. The next two F–35C aircraft are also expected to be delivered to NAS Patuxent River by the summer of 2011.

Testing and analysis model verification also continues with F–35C variant specific ground testing. Drop testing of the ground test article, CG–1, has demonstrated carrier landings up to 26.4 feet per second and has been reconfigured to conduct static testing of the F–35C aircraft. Static testing of the aircraft catapult and arrestment has been completed. These tests support our early efforts toward ship integration and lay the foundation for jet blast deflector and other ship suitability testing this summer at Naval Air Engineering Station (NAES) Lakehurst. This series of tests

fully transitions our focus on F–35 air/ship integration as we strive to refine analysis and validate with formal test results. To date, there are no known air/ship integration issues which we cannot overcome.

The Navy remains committed to the JSF program. The F–35C will provide the Carrier Strike Group commanders a survivable, "day-one" strike capability in a denied access environment with the tactical agility and strategic flexibility to counter a broad spectrum of threats and win in operational scenarios that cannot be addressed by current legacy aircraft. While the overall F–35 program has been challenged this past year, the Navy strongly supports the F–35 program as an essential element to our long-term national security and the future backbone of combat air-superiority and the core of Navy and Marine Corps Aviation.

192. Senator CORNYN. Admiral Roughead, when do you expect to conduct carrier testing of the F–35C, and what obstacles might it encounter during this testing?

Admiral ROUGHEAD. The F–35C carrier suitability testing will be conducted using multiple F–35C test assets aboard a CVN. Test planning continues to be refined based on the overall program restructure, but shipboard testing will be conducted in three phases. The first is expected to occur in May 2013 with test aircraft CF–3 and CF–5. Subsequent test periods will investigate ever increasing carrier-based operations and are scheduled approximately 1 year apart in order to more completely expand the F–35C operational envelope.

One focus area will be to collect environmental data surrounding the jet blast deflectors (JBD). The thermal impacts of the JSF on the CVN are currently being studied by modeling exhaust impacts on the JBD and flight deck systems. Preliminary data is positive and indicates additional ship-based cooling infrastructure may not be necessary. The land-based testing at NAES Lakehurst is necessary to validate modeling and determine the scope of shipboard modifications.

193. Senator CORNYN. Admiral Roughead and General Amos, due to the limited space aboard Navy ships, it is vital to consider the size and weight of equipment that is brought on board. The fate of the F136, the extra engine for the JSF is still in question. However, if its development continues, it is possible that the Navy might eventually be forced to carry two different engines and the accompanying support equipment aboard its aircraft carriers, instead of just the one. What issues, if any, might an extra engine cause on an aircraft carrier, where space is limited?

Admiral ROUGHEAD. The F135 and F136 engines constitute two different designs by two different manufacturers. While the F136 engine would be interchangeable, there are several engine components that are not interchangeable. The Fan, Gear Box, and Power Section modules are unique by F135 and F136 propulsion systems. Only the Augmenter and Exhaust Nozzle modules are common by F–35 variant. Supporting two engines would require unique spares, unique support equipment, and unique training. The JSF specification only requires engines to perform to specified criteria and physically fit into the F–35. Maintenance/repair technical requirements are different, requiring different instructions and training with differences in assembly hardware and special tools for off-aircraft repair.

The large size of the F135 and F136 (approximately 18.7 feet and weighs ~9,300 lbs in its container) necessitates greater sparing aboard ships as neither the assembled engine nor the power section module can currently be replenished underway. Similarly, due to the weight and height of critical engine spares, it is not feasible to store all JSF engine spares in legacy store-rooms or stack them aboard ships as is done for legacy system. This would necessitate work-around in hangar deck spaces normally reserved to store and maintain tactical aircraft. Adding an alternate engine makes the shipboard logistics even more challenging as it is not a one-for-one exchange.

General AMOS. The JSF engine is the largest tactical fighter engine in size and overall logistics footprint (LFP) in the history of DOD. In comparison to the Model F414 engine of the F/A–18E/F, the F135 engine of an F–35 is approximately twice its size. While the performance of the F135 engine brings significant performance gains and warfighting advantage for the JSF, it also presents a logistical challenge for all the Services, which perhaps is most pronounced in the Navy and Marine Corps, whose aircraft for expeditionary operations are housed in already constrained spaces aboard L-class amphibious shipping and CVN aircraft carriers.

The Navy has indicated that the implementation of two JSF engines onboard aircraft carriers is suboptimal due to increased operational LFPs. Both JSF engines are currently too large to fit within the aviation bulk storage or jet shop, and so there is a resulting LFP challenge posed to existing hangar deck space. The LFP problem compounds in cases where both the F135 and F136 engines would be afloat on the same ship given that each engine has unique support equipment and tools,

increasing the required LFP. Storing and supporting two engines would negatively affect hangar bay aircraft spotting and maintenance operations.

EXPEDITIONARY FIGHTING VEHICLE

194. Senator CORNYN. General Amos, the fiscal year 2012 DOD budget request seeks to halt the EFV program. It is my understanding that, in its place, the Marine Corps would pursue three separate acquisition efforts: (1) the creation of a New Amphibious Vehicle; (2) the service life extension and improvement of the AAV; and (3) the acceleration of the MPC. Please list the order of priority on these three efforts? What is your general vision for these efforts and how they will complement each other?

General AMOS. As we move forward, we intend to mitigate risks associated with a new vehicle program and to maximize value by using an integrated acquisition portfolio approach. This approach will have three efforts: (1) an acceleration of the planned procurement of MPC; (2) investment in a SLEP and upgrades for a portion of the existing AAVs; and (3) the development of a new ACV.

From an investment perspective and understanding the imperative for a modern amphibious vehicle capability, the ACV emerges as our priority effort. From the perspective of current operations and near-term relevance, the AAV SLEP is a near-term operational priority. We must upgrade a portion of the current inventory of AAVs now in order to provide a more survivable capability until the ACV is fielded. The complementary capability to achieve greater protection for our forces is the MPC.

The ACV and the MPC represent the modern and enduring capability solution. The ACV will provide the surface amphibious assault capability and will be the heavy armored combat vehicle during sustained operations ashore. The MPC will provide armored mobility for the reinforcing element of the amphibious assault and also will provide armor protected mobility during sustained operations ashore. As the MPC is a wheeled vehicle, we envision it as a versatile platform capable of employment across the range of military operations and in urban settings. It will incorporate the high levels of underbody protection needed in an irregular warfare environment. Together, the ACV and MPC will satisfy our lift requirement to support 12 Infantry Battalions—8 Battalions supported by ACV and 4 by MPC.

SHIP RECYCLING

195. Senator CORNYN. Secretary Mabus and Admiral Roughead, Navy ship recycling creates local jobs in places like South Texas, provides materials for construction, stimulates local economies, and provides the government with economic incentive and a best value solution. In the last year, the Navy has released seven ships for recycling. However, in the fiscal year 2012 budget request, only one Navy ship is slated for recycling. At a time when Congress is looking to maximize each and every taxpayers' dollar, how much funding would go to maintain the Navy's so-called ghost Fleet under the fiscal year 2012 budget request?

Mr. MABUS. The fiscal year 2012 budget request for conventionally powered ship disposal focuses on the dismantling of the aircraft carrier ex-*Forrestal* (AVT–59). The Navy also plans to dismantle other ships under sales contracts solicited through the General Services Administration (GSA) for combatant ships and the Maritime Administration (MARAD) for merchant-type vessels. Using the budget for ship disposal, the Navy will continue to provide full-time, on-site surveillance of ship dismantling awarded under sales contracts.

The fiscal year 2012 budget request for conventionally powered ship disposal focuses on the dismantling of the aircraft carrier ex-*Forrestal* (AVT–59). However, the Navy also plans to dismantle non-carriers under sales contracts solicited through GSA for combatant ships and the MARAD for merchant-type vessels. Using the budget for ship disposal, the Navy will continue to provide full-time, onsite surveillance of ship dismantling awarded under sales contracts.

As of March 30, 2011, the Navy's inventory of conventionally-powered inactive ships consists of 49 ships. Of this number, 14 are designated for dismantling, consisting of 4 aircraft carriers, 6 combatant ships, and 4 merchant-type ships. Of the remaining inventory, 10 are retention assets for possible future reactivation, 11 are designated for foreign military transfer, 3 are logistic support assets to support the Active Fleet, 7 are available for donation as a museum/memorial, and 4 are designated as targets for Fleet training exercises.

The fiscal year 2012 budget is $10.6 million for operation of the government-owned, contractor-operated inactive ship maintenance facilities at Philadelphia, PA,

Bremerton, WA, and Pearl Harbor, HI; the maintenance of those inactive ships in conformance with environmental laws and CNO policies; and the maintenance of eight Navy-owned vessels at MARAD's Beaumont, TX, Reserve Fleet and two Navy-owned vessels at MARAD's Suisun Bay, CA, Reserve Fleet.

Admiral ROUGHEAD. The fiscal year 2012 budget is $10.6 million for operation of the government-owned, contractor-operated inactive ship maintenance facilities at Philadelphia, PA, Bremerton, WA, and Pearl Harbor, HI, and the maintenance of eight Navy-owned ships at MARAD's Beaumont, TX, Reserve Fleet and two Navy-owned ships at MARAD's Suisun Bay, CA, Reserve Fleet. The maintenance of those inactive ships is in conformance with environmental laws and CNO policies.

As of March 30, 2011, the Navy's inventory of conventionally-powered inactive ships consists of 49 ships. Of this number, 14 are designated for dismantling, consisting of 4 aircraft carriers, 6 combatant ships, and 4 merchant-type ships. Of the remaining inventory, 10 are retention assets for possible future reactivation, 11 are designated for foreign military transfer, 3 are logistic support assets to support the Active Fleet, 7 are available for donation as a museum/memorial, and 4 are designated as targets for Fleet training exercises.

196. Senator CORNYN. Secretary Mabus and Admiral Roughead, would it not be more cost-effective for the Navy to release more ships for recycling in the near future?

Mr. MABUS and Admiral ROUGHEAD. The Navy must reduce the inactive ships inventory in a cost-effective manner while maintaining strict compliance with environmental and occupational safety regulations. Maintaining ships in the inactive inventory drains fiscal resources while not contributing to operational readiness. Of the 14 conventionally-powered ships designated for dismantling 4 carriers and 2 non-carriers are ready for solicitation. The Navy is actively pursuing getting these six ships under contract for dismantlement.

The Navy is currently soliciting the dismantling of ex-*Saratoga* (CV–60), the first *Forrestal*-class aircraft carrier to be dismantled. *Forrestal*-class aircraft carriers have classified side protection systems in the structure of the hulls, requiring a dismantling contractor to obtain a confidential facility security clearance, its employees must be U.S. citizens, and its employees having access to classified areas of the ship must obtain confidential security clearances. The Navy will incorporate lessons learned from the results of this solicitation into plans for the dismantling of three additional aircraft carriers currently designated for dismantling. The request for proposal for dismantling ex-*Saratoga* (CV–60) is anticipated to be a fiscal year 2011 award utilizing fiscal year 2011 O&MN budgeted funding.

Among the 10 non-carriers in the inventory that are designated for dismantling, 2 ships recently completed disposal preparations (including equipment stripping) and are ready for solicitation. The remainder are not yet ready for solicitation; two were recently removed from active service and are completing inactivation work; four are undergoing equipment stripping to support Active Fleet requirements; one was recently redesignated from a logistic support asset and is undergoing disposal preparations; and one is subject to a recently executed Memorandum of Agreement with the Advisory Council on Historic Preservation addressing stipulations to mitigate the adverse effects of the Navy's plan to dismantle the ship.

A 5-year Indefinite-Delivery, Indefinite Quantity (IDIQ) contract (non-carrier) expired in July 2010. The Navy is developing contracting strategies for dismantling of additional non-carrier inactive ships, utilizing GSA sales contracting officers for combatant ships and MARAD sales contracting for non-combatant ships. Agreements with GSA and MARAD are not yet finalized.

As of March 30, 2011, the Navy's inventory of conventionally-powered inactive ships consists of 49 ships. The inactive ships inventory at the end of fiscal year 2012 is projected to be 42. This is a significant reduction from the peak of nearly 200 inactive ships in 1997 and considering the additions to the inventory resulting from ship decommissionings since 1997.

Of the current inventory of 49 ships, 14 are designated for dismantling, 10 are retention assets for possible future reactivation, 11 are designated for foreign military transfer, 3 are logistic support assets to support the Active Fleet, 7 are available for donation as a museum/memorial, and 4 are designated as targets for Fleet training exercises.

[Whereupon, at 12:44 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, MARCH 17, 2011

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

DEPARTMENT OF THE AIR FORCE

The committee met, pursuant to notice, at 9:34 a.m., in room SD–G50, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Akaka, Nelson, Udall, Hagan, Begich, Manchin, Shaheen, Blumenthal, McCain, Inhofe, Sessions, Chambliss, Brown, Portman, Ayotte, and Collins.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Jonathan D. Clark, counsel; Madelyn R. Creedon, counsel; Creighton Greene, professional staff member; Jessica L. Kingston, research assistant; and Jason W. Maroney, counsel.

Minority staff members present: David M. Morriss, minority staff director; Christian D. Brose, professional staff member; Pablo E. Carrillo, minority investigative counsel; Daniel A. Lerner, professional staff member; and Christopher J. Paul, professional staff member.

Staff assistants present: Christine G. Lang, Brian F. Sebold, and Breon N. Wells.

Committee members' assistants present: Christopher Griffin, assistant to Senator Lieberman; Nick Ikeda, assistant to Senator Akaka; Ann Premer, assistant to Senator Nelson; Patrick Day, assistant to Senator Webb; Casey Howard, assistant to Senator Udall; Michael Harney, assistant to Senator Hagan; Joanne McLaughlin, assistant to Senator Manchin; Anthony Lazarski, assistant to Senator Inhofe; Lenwood Landrum, assistant to Senator Sessions; Clyde Taylor IV, assistant to Senator Chambliss; Joseph Lai, assistant to Senator Wicker; Charles Prosch, assistant to Senator Brown; and Brad Bowman, assistant to Senator Ayotte.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody.

I want to welcome our witnesses here today, Secretary Donley and General Schwartz. They are coming back to the committee this morning to testify on the plans and programs of the Air Force and our review of the fiscal year 2012 annual budget and Overseas Contingency Operations (OCO) requests.

Gentlemen, please extend, on behalf of the committee, our gratitude to the men and women of the Air Force and their families for the many sacrifices that they have made on behalf of our Nation. Thanks to both of you for your long careers of leadership and service.

We are truly mindful this morning, as we meet here, of the terrible devastation that the Japanese people have experienced with the earthquake and the tsunami that struck that nation. Our thoughts and our prayers go out to them. Such incidents remind us just how indiscriminate natural disasters can be, and they provide us the opportunity to once again demonstrate America's commitment to support our valued ally in the Pacific.

The Department of Defense (DOD) has already been providing support to the Japanese people, and that effort will increase over the coming weeks. We know that the Air Force has played a critical role in supporting previous relief efforts around the world, and that is the case again in Japan.

We applaud those efforts. This committee stands ready to work with DOD to ensure that the Department, and the Air Force as part of that Department, is able to continue to provide support to this critical humanitarian disaster response effort in the weeks and the months ahead.

We are also very mindful that DOD maintains a number of facilities in Japan, including Air Force bases in Yokota, Misawa, and Kadena. These bases provide opportunities for U.S. Forces to support the government and the people of Japan. But we are also concerned about the safety of our own service personnel and their families that are stationed there, and we hope that you will tell us more about the situation this morning from your perspective and based on what you know.

There is a number of ongoing critical issues that confront the Air Force. We know that the Air Force is providing forces to the U.S. Central Command's (CENTCOM) war efforts in a number of traditional roles but is also providing airmen in support of land component tasks. So, we expect this morning to hear about how the Air Force is supporting these current operations while preparing its forces to deal with other demands and with future demands.

This committee has sought to ensure that our combatant commanders have what they need to succeed in those conflicts, including technologies to counter improvised explosive devices and intelligence, surveillance, and reconnaissance (ISR) assets. This committee will continue to support the needs of our warfighters in those conflicts.

I would note that, in particular, the new budget will continue the expansion of ISR orbits within the theater, with the goal of achieving 65 orbits in fiscal year 2013. Each orbit consists of two to three air vehicles and the appropriate ground support equipment necessary to operate them.

The committee has been pressing DOD in general and the Air Force in particular to field more unmanned aerial vehicles (UAV) for at least the last 15 years and has regularly provided additional funds for that purpose. I should note the fact that General Schwartz has been taking extra steps to accelerate that fielding by altering Air Force approaches to pilot training and accelerating production of Predator and Reaper UAVs.

The Air Force has included funding in its fiscal year 2012 budget request to begin a new bomber program that will be both conventional and nuclear capable. The goal is to utilize mature technologies to increase the likelihood that the new bomber is fielded on time and on budget.

In addition, the Air Force has proposed to reduce a small number of B–1 bombers, while modernizing and sustaining all three bomber aircraft, the B–1, B–2, and B–52. The committee needs a detailed explanation of this new proposal to develop a new long-range strike system.

After a significant number of failures a few years ago, the Air Force has refocused on managing nuclear forces. The Global Strike Command is now in place to do that. There has been a lot of hard work on the part of dedicated professionals, but recent incidents have shown that the force structure itself needs attention. We are interested in the plans to improve the critical nuclear infrastructure.

The Air Force has made some recent changes to deal with the management of space programs, including bringing acquisition of space programs under the regular Air Force acquisition process. In reviewing the cost of buying space programs, however, it has become clear that a different approach needs to be developed to prevent these programs from becoming unaffordable.

The committee has encouraged the Air Force to look at ways to buy space systems that reduce cost and technical risks in these very complicated systems. To that end, the Air Force is evaluating a variety of approaches that might achieve the cost savings and program stability goals, and we look forward to receiving a proposal and any legislation needed to implement it. I expect that we will be hearing more about the Air Force's current thinking on that issue as well this morning.

Another acquisition challenge, which is facing the Air Force, is the stretching out of production lines which delay modernization programs. Foremost among these is the Joint Strike Fighter (JSF) program.

Given recent identification of additional troubles and delays with the system design and demonstration phase of the JSF program by the new program manager, the Air Force is apparently responding by extending the service lives for existing fighters, including the F–16 and the F–15 fighter fleets, and we need to hear more about that.

One acquisition program that appears to be moving forward as planned is the Strategic Tanker Modernization Program. The Air Force determined a winner of the tanker competition in late February, and apparently, the other bidder is not protesting the contract award.

We look forward to receiving more details from the Air Force this morning on its plans for executing that program.

Underlying all of these major acquisition concerns is an acquisition management issue. Secretary Donley, we hope that you will tell us this morning about your efforts to bolster the numbers within and the quality of the Air Force Acquisition Corps.

Part of improving the acquisition process is an extensive effort to hire additional acquisition personnel, including additional technically qualified personnel, so that the Air Force will be a smart buyer of weapon systems and provide better oversight of the contractors. We would also like to hear how that effort is progressing and whether or not it has been impacted by recent hiring and salary freezes.

The Weapon System Acquisition Reform Act (WSARA) of 2009 has required DOD to make significant changes in its regulations and procedures governing the acquisition system. But this legislation will fully address past problems only if there are concerted efforts within the executive branch to implement that legislation and improve past behavior within DOD.

We look forward to hearing how the Air Force is proceeding to implement the provisions of the WSARA.

On the subject of current operations, a significant readiness concern continues to be the inadequate levels at which the Air Force funds their weapon system sustainment accounts. For several years now, the Air Force has funded these accounts at less than 100 percent of the stated requirement. It is my understanding that the fiscal year 2012 budget request only provides for meeting 84 percent of the sustainment requirement, even if we include the OCO funding in the base budget request.

During last year's budget review cycle, this committee authorized additional resources for sustainment that were identified as an unfunded requirement by General Schwartz. So we will be interested in hearing from our witnesses what maintenance and readiness shortfalls exist, if any, for the Air Force and what amount of funding would be needed to address any potential backlogs, along with any plans and cost to address readiness shortfalls during the budget year and the rest of the Future Years Defense Program (FYDP).

Senator McCain.

STATEMENT OF SENATOR JOHN McCAIN

Senator MCCAIN. Thank you, Mr. Chairman.

I want to thank the witnesses for being here this morning and thank you for their outstanding service.

I had planned this morning to ask questions concerning the tanker program and the recent decision there, our continued frustration concerning the F–35 JSF—I understand there is another setback because of an oil leak—the Advanced Extremely High Frequency Satellite program, and the Global Hawk program and others.

But I am going to seize this opportunity this morning to try to find out what the capability of the U.S. Air Force is in order to impose a no-fly, no-drive program, course of action over Libya.

We are seeing the momentum and the success of Muammar Gaddafi and his killers massacring people while we sit idly by. One of the arguments used is that we somehow can't do it, despite the

fact that General Odierno just a few days ago said that it would take a very short period of time in order to impose a no-fly zone.

I want to know about the assets we have in the region, our bases at Aviano and in Sicily, and our capabilities there. Let us have no illusion about what is happening in Libya.

This morning's L.A. Times carries a story concerning the government troops' attack on Ajdabiya, one of the towns closer to Benghazi. A woman said, "The shelling went on until 3 a.m. When it stopped, we saw people dead in the streets and cars destroyed. There were snipers on rooftops with red lasers on their guns, and they shot teenage boys who raised their arms."

A massacre is about to take place if the Libyan forces take Benghazi. I think the American people deserve to know what course of action we are going to take. I understand the United States finally, following the leadership of France and Britain, is going to the United Nations (U.N.) Security Council today.

I think the American people need to know what our capabilities are. Obviously, the imposition of such a restriction or attempt to stem the tide of Gaddafi and his murderers is dependent upon our air assets, as well as our naval assets.

So when it comes time for my questioning, Mr. Chairman, I will want to know from the Chief of Staff and the Secretary what we can do and how quickly in order to try to prevent at the 11th hour the fall of Benghazi, which would effectively allow Gaddafi to obtain an overwhelming victory when the President of the United States' stated policy is that Gaddafi must go.

So I thank the witnesses. General, I hope you are prepared to give us a little straight talk on what we can do, if necessary, to prevent the massacre that is taking place as we speak.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator McCain.

I understand we have a briefing also for all Senators this afternoon, which will involve DOD personnel, as well as State Department personnel. I don't know that the location has been set, but I believe the time is 2 p.m.

Secretary Donley?

STATEMENT OF HON. MICHAEL B. DONLEY, SECRETARY OF THE AIR FORCE

Secretary DONLEY. Thank you, Chairman Levin, Senator McCain, members of the committee.

It is a pleasure to be with you today, representing more than 690,000 Active Duty, Guard, Reserve, and civilian airmen. I am also honored to be here with my teammate and a tireless public servant, General Norty Schwartz.

We are pleased to report that America's Air Force continues to provide the Nation's unmatched global vigilance, reach, and power as part of the joint team, with an uncompromising commitment to our core values of integrity, service before self, and excellence in all we do.

We are requesting $150 billion in our baseline budget for fiscal year 2012 and $16 billion in the OCO supplemental appropriation to support this work. This budget represents a careful balance of resources among Air Force core functions necessary to implement

the President's national security strategy and between today's operations and investment for the future.

Before discussing our fiscal year 2012 budget request, I would like to address some unfinished business from fiscal year 2011 and also set in context the changes in your Air Force over the last several years.

First, operating without a defense appropriation bill in fiscal year 2011 is having a significant impact on our Air Force. The decision to extend the continuing resolution at fiscal year 2010 levels through the remainder of this year will delay our ability to reach and sustain the Secretary of Defense's directed goal of 65 MQ–1/9 combat air patrols by 2013 in support of operations in Afghanistan.

It will cause a production break and a likely increase in the unit cost of the Wideband Global Satellite Communications Satellite, the F–15 radar modernization, and other programs. Deeper reductions to our modernization programs would be required to fund over $4 billion in must-pay bills for urgent operational needs in Afghanistan and Iraq, for military healthcare, and the military pay raise of 1.4 percent, which Congress authorized but has not funded.

Without fiscal year 2011 appropriations, we face delay or cancellation of some depot maintenance, weapon system sustainment, and other day-to-day activities in order to prioritize our most critical needs under the lower funding levels in a full-year continuing resolution.

Finally, fiscal year 2011 appropriations are also required for 75 military construction projects now on hold, which support ongoing operational needs and improve the quality of life for airmen and their families. Passing a fiscal year 2011 defense appropriations bill is essential to avoid these severe disruptions, and we appreciate the efforts currently underway by members of this committee and others to resolve this situation.

Over the past decade, the Air Force has substantially reshaped itself to meet the immediate needs of today's conflicts and position itself for the future. While we have grown in some critical areas, it has been at the expense of others.

We have added ISR capacity with 328 remotely piloted aircraft (RPA) and over 6,000 airmen to collect, process, exploit, and disseminate intelligence. We have added over 17 aircraft and over 2,400 airmen to bolster special operations capacity necessary in the counterinsurgency operations we now face.

We have added over 160 F–22s now and 120 C–17s to our inventory. We have funded over 30 satellites and added 2,200 airmen for critical nuclear and cyber operations and acquisition support.

In this same period, however, we have retired over 1,500 legacy aircraft. We have canceled or truncated procurement of major acquisition programs. We have shed manpower in career fields less critical for the fight and deferred much-needed military construction in order to balance these capabilities within the resources available.

In all, during the last 7 years, the size of the Active Duty Air Force has been reduced from 359,000 in 2004 to about 333,000 today. The Air Force's baseline budget, when adjusted for inflation

and setting aside the annual wartime supplemental appropriations, has remained flat.

Looking ahead, we face a multiyear effort to recapitalize our aging tanker, fighter, bomber, and missile forces; to continue modernizing critical satellite constellations and meet dynamic requirements in the cyber domain; and replace aging airframes for pilot training and presidential support.

We continue to recognize the requirement for fiscal constraint and are committed to remaining good stewards of every taxpayer dollar, improving management and oversight at every opportunity. The fiscal year 2012 budget request incorporates over $33 billion in efficiencies across the FYDP, which will be shifted to higher priority combat capability by reducing overhead costs, improving business practices, and eliminating excess troubled or lower priority programs.

By consolidating selected organizational structures, improving our processes in acquisition, procurement, and logistics support, and streamlining operations, we have been able to increase investment in core functions, such as global precision attack, integrated ISR, and space and air superiority, reducing risk by adding tooth through savings in tail.

We are fully committed to implementing these planned efficiencies, and I have already assigned responsibilities to senior officials and put in place the management structure to oversee this work and track progress on a regular basis. Having faced the need to reshape our force structure and capabilities within constrained manpower and resources over the past several years, we do not view the current need for efficiencies as a singular event, but as an essential and continuing element of prudent management in the Air Force.

Our investment priorities remain consistent with minimizing risk and maximizing effectiveness and efficiency across the full spectrum of potential conflict. Proceeding with development and production of the KC–46 tanker aircraft, implementing the JSF restructuring, meeting the combatant commanders' need for more ISR, investing in the long-range strike family of systems, including a new penetrating bomber, and enhancing space control and situational awareness all remain critical capabilities for both today's and tomorrow's Air Force.

In addition to these investments, we will continue to address challenges in readiness—in particular the slow, but persistent decline in materiel readiness most notable in our nondeployed forces—and the personnel challenges across 28 stressed officer and enlisted career fields, both of which are the result of today's high operational tempo.

Of course, we will continue to support our Active, Guard, Reserve, and civilian airmen and their families with quality housing, healthcare, schools, and community support.

With respect to healthcare, I would like to convey the Air Force's support for DOD's TRICARE reforms that will modestly increase premiums for working-age retirees, premiums that have not changed since they were initially set in 1995. Going forward, we must continue to seek and develop reforms in the benefits that our

men and women in uniform earn to make them economically sustainable over the long term.

Mr. Chairman, good stewardship of the Air Force is a responsibility that General Schwartz and I take very seriously. We remain grateful for the continued support and service of each member of this committee, and we look forward to answering any questions you may have.

Thank you.

[The joint prepared statement of Secretary Donley and General Schwartz follows:]

JOINT PREPARED STATEMENT BY HON. MICHAEL B. DONLEY AND GEN. NORTON A. SCHWARTZ, USAF

INTRODUCTION

The United States faces diverse and complex security challenges that require a range of agile and flexible capabilities. From the ongoing conflicts in Afghanistan and Iraq, to potential confrontation with aggressive state and non-state actors, to providing humanitarian assistance, the U.S. Air Force continues to provide capabilities across the full spectrum of potential military operations. The Air Force's fiscal year 2012 budget request aims for balance and versatility to meet the demands of this environment. We believe the request enables our efforts to prevail in today's wars, prevent and deter conflict, and prepare to defeat adversaries across the range of military operations—all the while preserving and enhancing the All-Volunteer Force.

We remain mindful of our Nation's budgetary challenges and fiscal constraints, because fiscal responsibility is a national security imperative. This environment requires that we balance our capabilities between current combat operations and the need to address emerging threats and challenges. We continue to pursue cost-effective systems that leverage existing capabilities and maximize interoperability and integration of legacy and future systems. The commitment of the Air Force to collectively discern, access and provide tailored and scalable effects with Global Vigilance, Reach, and Power virtually anywhere in the world is reflected in our acquisition priorities. These priorities are:

- Tanker Recapitalization (KC–X);
- Joint Strike Fighter (F–35) Restructure and F–16 Service Life Extension Program (SLEP);
- Intelligence, Surveillance, and Reconnaissance (ISR) Systems;
- Long-Range Strike Family of Systems; and
- Space Systems and Launch Capability Acquisition Strategy.

Global Vigilance is the ability to provide surveillance around the world. As the demand for ISR continues to grow, the Air Force is aggressively fielding enhanced ISR capability and capacity across the widest range of military operations to counter threats and defeat our adversaries. The Air Force will continue to enhance space control and situational awareness capabilities, as well as space management, to ensure we operate effectively in the increasingly competitive, congested and contested space domain. This includes implementing the Evolutionary Acquisition for Space Efficiency (EASE) concept to drive down costs, improve stability in the fragile space industrial base, invest in technology that will lower risk for future programs, and achieve efficiencies through block buys of satellites. There is also an ongoing collaboration between the Air Force, the National Reconnaissance Office (NRO) and the National Aeronautics and Space Administration (NASA) to maintain a healthy industrial base to meet government launch and range requirements in an efficient manner.

Global Reach is the ability to project capability responsively and advantageously without regard to distance. Air Force mobility assets are essential to Joint, Interagency and Coalition operations in peace and war as we provide critical supplies and personnel through strategic and tactical delivery—airlift and airdrop. Air refueling aircraft play an integral role by providing reach and persistence for aircraft to operate inter-theater and intra-theater, alike. As such, the procurement of the KC–X remains the top acquisition and recapitalization priority for the Air Force.

Global Power is the ability to hold at risk any target in the world. The Air Force must continue to modernize and recapitalize our aircraft inventory to remain effective against global and regional competitors as they continue to modernize and im-

prove their own air defense capabilities and harden valued targets. We will continue to work with Congress to enhance capabilities in our existing fighter and bomber fleets to mitigate delays in the F–35 development and procurement programs. One key to that mitigation effort is a focused F–16 SLEP. We must sustain our ability to consistently hold any target on the planet at risk with the development of a Long-Range Strike Family of Systems capability—including a new penetrating bomber—to create desired effects across the full range of military operations in both permissive and contested environments. Lastly, a multi-faceted effort is underway to enhance our air superiority legacy fighters, maximize the capabilities of the F–22 fleet, invest in preferred air-to-air munitions, and optimize our electronic warfare systems.

The Air Force must take the necessary steps today that will allow future generations to continue to provide consistent, credible, and effective air, space, and cyber capabilities on which our Nation depends. Our ability to do so is constrained by the increasing costs to design and build platforms and by the accelerating costs of personnel benefits and other must-pay operational bills in a particularly challenging budget environment. We will ensure we maximize combat capability out of each taxpayer dollar by identifying waste, implementing efficiencies, pursuing continuous process improvement initiatives and making smart investments. We will provide the necessary capability, capacity and versatility required to prevail today and in the future.

Lastly, our fiscal year 2012 budget request recognizes the need to properly manage our force structure. We recognize that our most valuable assets—our people—are critical to achieving our broadest strategic goals, and our near- and far-term mission success is inextricably linked to the overall well-being of our airmen and their families.

CONTINUING RESOLUTION

Operating without a defense appropriations bill in fiscal year 2011 is having a significant impact on the Air Force. Under a Continuing Resolution (CR), we are unable to raise procurement to requested levels in several critical areas. Constraining MQ–9 procurement to 24 aircraft versus the 48 requested will delay our ability to reach the Secretary of Defense's directed goal of 65 MQ–1/9 Combat Air Patrols (CAPs) by 2013 in support of ongoing operations in Afghanistan. The inability to initiate a contract for the Wideband Global SATCOM (WGS)-7 satellite will cause a production break and a likely increase in unit cost. Production breaks and delayed procurements will also negatively affect the Joint Air-to-Surface Standoff Missile (JASSM), F–15 active electronically scanned array (AESA) radar, F–15 APG 63 radar, and other programs. In addition to these impacts, deeper reductions to our modernization programs would be required to fund over $3 billion in must-pay bills for urgent operational needs in Afghanistan and Iraq, military healthcare, and the military pay raise of 1.4 percent, which was authorized by Congress and is being implemented, but was not funded. Fiscal year 2011 appropriations are also required for 75 military construction (MILCON) projects, now on hold, which support ongoing operational needs and improve the quality of life for Air Force personnel and their families. Lastly, the Air Force would have to delay or cancel some depot maintenance, weapon system sustainment and other day-to-day activities in order to prioritize our most critical needs under the lower funding levels in a full year CR.

In summary, continuing the CR far beyond March 4 would severely impact program and budget execution in the Air Force, delaying modernization and causing significant restructuring and potential cost increases to many acquisition programs, and creating larger backlogs for maintenance and other operations. Passing a fiscal year 2011 defense appropriations bill is essential to avoid these severe disruptions.

EFFICIENCIES AND ENHANCEMENTS

In June 2010, the Secretary of Defense challenged the Services to increase funding for mission activities by identifying efficiencies in overhead, support and other less mission-essential areas. The efficiency target for the Air Force was $28.3 billion across this Future Years Defense Program (FYDP). The Air Force is committed to enhancing capabilities by reducing expenses allocated to overhead and support functions, while shifting resources to modernization and readiness programs.

As part of the fiscal year 2012 budget, the Air Force exceeded our efficiency target by $5 billion and identified $33.3 billion in efficiencies in an effort to make resources available to better support warfighter and readiness programs across the FYDP. Examples of these efficiencies include:

- Consolidating 3 Numbered Air Forces with colocated Major Command staff and consolidating the activities of 4 Air and Space Operations Centers

into 2, thereby achieving a redistribution of 347 military authorizations (228 in fiscal year 2012 and 119 in fiscal year 2013) across the FYDP and eliminating 212 civilian authorizations beginning in fiscal year 2013 which will save $100.1 million across the FYDP;

• Consolidating installation support management to improve Air Force-wide standardization and prioritization;

• Reallocating 5,600 active duty billets over the FYDP from lower priority support functions to higher priority, growth areas;

• Saving more than $3 billion from anticipated growth in Weapon System Sustainment (WSS) portfolio efficiencies across the FYDP by reviewing operational requirements, depot processes and the sustainment of the supply chain without degrading operational capabilities or support to the warfighter;

• Reducing fuel consumption within the Mobility Air Forces by leveraging proven commercial aviation practices for flight planning and weight reduction, and implementing other initiatives to save $715 million (net) across the FYDP;

• Reducing acquisition costs by consolidating services, scrutinizing contracts, reducing contract support, and more efficiently using resources to deliver capabilities and support to the warfighter;

• Reducing information technology costs by more than $1.2 billion over the FYDP by adopting DOD-level Enterprise Information Services including enterprise core services, consolidating and standardizing the network information technology infrastructure from nine Air Force and Air National Guard Regional Processing Centers to five centrally controlled centers, and migrating current and developmental applications, services and data to DOD-provided enterprise computing centers; and

• Improving our procurement of satellites with a new acquisition strategy which, subject to congressional approval, will lower procurement costs and stabilize the defense industrial base.

The realization of these efficiencies allowed the Air Force to reallocate funding to modernize and recapitalize weapons systems, improve capabilities and enhance warfighter operations. Examples of these enhancements include:

• Investing in the Long-Range Strike Family of Systems, including a new penetrating bomber as a key component of the joint portfolio;

• Investing an additional $3.5 billion to fund the Evolved Expendable Launch Vehicles (EELV) program to the Office of the Secretary of Defense (OSD) Independent Cost Assessment, with the Department of Defense (DOD) committed to buying five boosters per year to meet national space launch requirements and stabilize the industrial base;

• Repurposing 5,600 active duty billets over the FYDP to support ISR capability, U.S. Pacific Command force structure requirements, Total Force Integration, the U–2 continuation, building partnership capacity, increasing support to the Air Force District of Washington UH–1N mission, among other increases;

• Procuring an additional 16 simulators for F–35 aircrew training bringing the total procurement to 30 simulators to ensure an effective training pipeline throughput and operational unit pilot proficiency and cost control;

• Recapitalizing the aging Special Operations Forces MC–130H/W aircraft;

• Improving the aircraft computer infrastructure of the B–52 to enable more rapid machine-to-machine retargeting;

• Enhancing combat capability of the F–15C and F–15E with additional AESA radars and electronic protection software upgrades;

• Continuing to fund the development of next-generation Global Positioning System (GPS) III Operational Control Segment;

• Researching and developing electronic protection and suppression of enemy air defense (SEAD) capabilities for the F–22;

• Transitioning MC–12W Liberty Project from Overseas Contingency Operations (OCO) funding into the Air Force baseline budget beginning in fiscal year 2013;

• Continuing maximized production of the MQ–9 Reaper to ensure delivery of 65 CAPs by the end of fiscal year 2013;

• Extending U–2 operations through fiscal year 2015 to ensure a smooth high-altitude transition; and

• Baselining the Air Sovereignty Alert program across the FYDP to solidify support to homeland security operations.

The Air Force leadership recognizes the importance of achieving planned efficiencies to avoid future bills and a negative impact to our mission and our airmen. We are taking a long-term view of this initiative and will address our efficiency targets annually to further refine and identify follow-on opportunities. We assigned responsibility for initiatives to individual senior leaders who are developing their detailed implementation plans to oversee our efforts. Quarterly executive-level reviews will monitor plans and progress, and ensure that efficiency initiatives do not inadvertently impact readiness, mission performance, or quality of life for our airmen. Our continuous process improvement program, Air Force Smart Operations for the 21st Century (AFSO21), is well-established and provides our airmen with the tactics, techniques, and procedures to improve performance while achieving efficiencies.

In order to ensure Air Force leadership has reliable and relevant financial information to monitor our efficiency goals, we are further emphasizing our work in Financial Improvement and Audit Readiness. In fiscal year 2012, the Air Force is dedicating $29 million to audit readiness and validation and $327 million to modernize our business systems.

PERSONNEL AND READINESS

Mission effectiveness of the Air Force is linked to the overall well-being of our airmen and their families. The Air Force will continue to find innovative and efficient ways to provide and sustain programs that support our airmen and their families, including our critical civilian personnel. We must ensure programs and services foster a greater sense of community, strengthen a sense of belonging and value to the Air Force, and improve airman and family resiliency.

As mission demands continue to evolve and budgets flatten, the Air Force is making key strategic choices to leverage the collective talent and experience of our Total Force. Through improved integration across the Total Force Enterprise of Active, Guard, and Reserve Forces, we are seeking greater Service-wide efficiencies and effectiveness to maximize combat capability for the joint warfighter. We are developing business case analyses to inform decisions on how best to structure Active and Reserve component relationships, especially in new areas. As missions such as cyber and dynamic battlefield ISR mature, so too will the Total Force investment in these areas.

End Strength, Retention, and Recruiting

The overall programmed Air Force end strength for fiscal year 2012 is more than 690,000 personnel. This includes 332,800 active duty, 71,400 Reserve, 106,700 Air National Guard, and more than 182,000 civilian personnel. To support the efforts of our airmen and to recruit and retain the highest quality Air Force members, the fiscal year 2012 budget request includes $30.2 billion in military personnel funding and a military pay raise in fiscal year 2012 of 1.6 percent.

The retention rates in the Air Force are the highest they have been in 16 years and recruiting has also been successful. Therefore, the $626.6 million requested in the fiscal year 2012 budget for recruiting and retention bonuses is highly targeted. Bonuses are proposed for specific career fields with critical wartime skills including pilots, control and recovery, intelligence, contracting, security forces, health professionals, civil engineering, special operations, and explosive ordnance disposal.

In addition, the current economy has slowed attrition from the Air Force and had the effect of increasing active duty manning above planned levels. As a result, the Air Force is making difficult, but fiscally responsible decisions to implement force management programs that allow us to remain within authorized end strength ceilings. Specifically, we continue to progress toward an active duty end strength goal of 332,800 by the end of fiscal year 2012. To address excess end strength, particularly in the officer force, we will reduce accessions, continue to waive Active Duty Service Commitment and Time in Grade requirements for voluntary separations and retirements, continue to conduct enlisted Date of Separation rollbacks, and institute involuntary separation and retirement programs for officers through Selective Early Retirement, Reduction in Force and Force Shaping boards. We will also work with OSD to seek additional legislative authority to help the Air Force meet end strength ceilings by the end of fiscal year 2012 and maintain the appropriate level in fiscal year 2013 and beyond.

Civilian Workforce

The Secretary of Defense has limited our civilian workforce to fiscal year 2010 levels, with limited growth allowed for specific priorities like the acquisition workforce. This policy will require significant changes to previously planned civilian growth. The Air Force will also conduct an enterprise-wide review of civilian personnel end strength to facilitate DOD's efforts for efficiencies and reinvestment possibilities.

Contractor Reductions

The Air Force is looking at the way we utilize the contract workforce as we answer the Secretary of Defense's challenge to find efficiencies and to reduce duplication, overhead, and excess, and reinforce our culture of efficiency and restraint across the Air Force. This will impact the service support contract workforce in the following areas:

- Reduce our staff support contractor workforce by 10 percent per year, over the next 3 years in accordance with DOD's guidance with an estimated fiscal year 2012 savings of $127 million; and
- Reduce the funding for advisory studies by 25 percent from the fiscal year 2010 levels over the FYDP with an estimated fiscal year 2012 savings of $41 million.

The Air Force identified two other areas that will result in reductions to its headquarters contract workforce and release resources for warfighter use. These include:

- Knowledge-based services estimated at $252 million in fiscal year 2012; and
- Program Management Administration estimated at $191 million in fiscal year 2012.

Man-Days

Active Duty Operational Support days play a critical role in resourcing extended military operations. They allow for the active duty appropriation to pay for temporary use of National Guard and Reserve personnel to support military missions beyond the regular component's capability. In support of the Secretary of Defense's efficiency initiative, the Air Force reduces, by 1,250 work years, the Reserve component fiscal year 2012 man-day program that supports noncritical administrative and overhead activities.

The demand for global mobility and related airlift support remains high in fiscal year 2012 as the Air Force will continue to support a large footprint in Afghanistan. The Air Force identified $1.4 billion to support fiscal year 2012 OCO requirements. Our reliance on the Total Force is by design, and we recognize and value the contributions of the members of the Reserve components who have performed tirelessly in support of our Nation. The Air Force will continue to prioritize Reserve component requirements prudently and in accordance with mission needs as we transition to a lower steady state tempo.

Diversity

The Air Force widened the aperture beyond traditional views of diversity, and defined it to include personal life experiences, geographic background, socioeconomic background, cultural knowledge, educational background, work background, language abilities, physical abilities, philosophical/spiritual perspectives, age, and more. We declared diversity a military necessity, as both a source of greater combat effectiveness and as means toward a force that more closely mirrors American society. Deliberate plans are being developed to attract, recruit, develop, and retain a more diverse force.

Repeal of "Don't Ask, Don't Tell"

The Air Force will execute the plan established by OSD for the effective implementation of the repeal of section 654 of title 10 of the U.S.C., known as "Don't Ask, Don't Tell." We are also developing strategic communications, and we will provide initial and sustainment education and training at all levels.

Readiness

With Air Force personnel deployed to more than 135 locations worldwide on an average day, we rely heavily on the Total Force. Currently, more than 37,000 airmen are deployed and more than 57,000 are forward-stationed. In addition, approximately 134,000 airmen are directly supporting combatant commander requirements from their home stations daily. These airmen contribute in a variety of ways, to include operating the Nation's space and missile forces, processing and exploiting remotely collected ISR data, providing national intelligence support, operating and defending our networks, and executing air sovereignty alert missions.

The Air Force has flown more than 419,000 sorties in support of Operations Iraqi Freedom and New Dawn and more than 244,000 sorties in support of Operation Enduring Freedom since September 11, 2001. During this time, we delivered over 6.3 million passengers and 3.3 million tons of cargo, employed almost 23,800 tons of munitions, flew more than 15,750 personnel recovery sorties recording over 2,900 saves and 6,200 assists, and transported more than 85,000 patients and more than

15,400 casualties from the U.S. Central Command alone. In 2010, our airmen averaged approximately 400 sorties every day.

This level of activity reflects our commitment to provide Global Vigilance, Reach, and Power in today's joint fight. However, our high operations tempo (OPTEMPO) has also had some detrimental effects on our overall readiness. Readiness for full spectrum military operations is a challenge for our combat air forces and some other limited-supply/high-demand aviation units. Since 2003, we have seen a slow but steady decline in reported readiness indicators. Our OPTEMPO since 2001 has produced lower deploy-to-dwell ratios for high-demand skills. At present, 19 enlisted and 9 officer career fields are "stressed." We have improved funding to WSS; however, sustainment challenges continue as we field new weapon systems and balance contract versus organic sources of repair. To address these readiness issues, we must keep aircraft recapitalization and procurement programs on track and continue managing our force to ensure the right numbers and mix of skills in our highly tasked and highest priority mission areas.

AIR FORCE CORE FUNCTIONS

The Air Force Core Functions, assigned by the Secretary of Defense and recognized by the joint community, provide a framework for balancing investments across Air Force capabilities. While this document describes the Core Functions individually, we recognize the inherent interdependence of these capabilities within the Air Force, the Joint Force, and throughout the U.S. Government. When considered together, the Core Functions encompass the full range of Air Force capabilities. The budget request in this posture statement provides an appropriate balance of investment across our Core Functions. The table below depicts the fiscal year 2012 budget request and the projected allocation of resources across the FYDP, by Air Force Core Function.

[In billions of dollars]

Air Force Core Function	Fiscal Year 2012 PB Request	FYDP
Nuclear Deterrence Ops	$ 5.2	$ 28.0
Global Precision Attack	$16.0	$ 93.7
Air Superiority	$ 9.2	$ 46.1
Rapid Global Mobility	$15.9	$ 89.5
Global Integrated ISR	$ 8.2	$ 41.4
Space Superiority	$11.6	$ 56.2
Cyberspace Superiority	$ 4.6	$ 21.9
Command and Control	$ 6.3	$ 33.5
Special Operations	$ 1.4	$ 6.5
Personnel Recovery	$ 1.6	$ 9.0
Building Partnerships	$ 0.5	$ 1.9
Agile Combat Support	$33.8	$175.0

Note 1: This table does not include OCO, Non-Blue or classified programs.
Note 2: The funding for Nuclear Deterrence Operations includes weapon systems, support systems, as well as nuclear command, control, and communications requirements.

Nuclear Deterrence Operations

Continuing to strengthen our nuclear enterprise remains the number one Air Force priority, and we have taken positive steps within the fiscal year 2012 budget request to continue to strengthen and improve this Core Function.

Air Force Global Strike Command achieved full operational capability (FOC) on September 30, 2010, moving all Air Force nuclear-capable bombers and Intercontinental Ballistic Missiles (ICBMs) under one command. The Air Force Nuclear Weapons Center continues to pursue vital and deliberate sustainment of the nuclear enterprise through efforts such as the Air Force Comprehensive Assessment of Nuclear Sustainment process. Bomber force modernization continued in an effort to maintain a viable force beyond 2030. We have completed the transition to four B–52 operational squadrons with the addition of the 69th Bomb Squadron at Minot Air Force Base, ND. ICBM modernization and sustainment also continued with investments in new test equipment and launch facility environmental control systems. Although an initial study for the Ground Based Strategic Deterrent to replace the Minuteman III will begin in fiscal year 2011, we must continue sustainment efforts to ensure Minuteman III viability through 2030.

An important event for the ICBM force in 2010 was a temporary loss of the ability to monitor the status of 50 missiles at F.E. Warren Air Force Base, WY. At no time was there any danger to the public or to the safety and security of the weapon sys-

tem. The missiles are protected by multiple and redundant safety, security, and command and control features. The root cause of this communication interruption was identified, and the necessary technical and procedural changes to prevent future occurrences have ensued. In addition, the Air Force has completed a number of assessments including initiatives to address systemic issues with ICBM infrastructure and operating procedures as well as a report on the age and pedigree of the infrastructure and equipment associated with the ICBM system. Based on these assessments, it is clear that a significant portion of the existing infrastructure will eventually require modernization or complete replacement in the years ahead.

The fiscal year 2012 budget request of $5.2 billion continues to invest in the future of nuclear deterrence. The Air Force is committed to sustaining the ICBM force through 2030 with investment including command and control, cryptographic improvements and ballistic missile fuze sustainment. Bomber modernization and sustainment efforts include the B–52 Combat Network Communications Technology program, the B–2 Extremely High Frequency communications program and the Defensive Management Systems program. The Air Force removed early-to-need procurement funding in bomber extremely high frequency communications and the ground element of the Minimum Essential Emergency Communications Network program due to program delays. The Air Force is committed to continuing to strengthen the nuclear enterprise through other programs such as the tail kit portion of the B61 nuclear weapon life extension program, the future long-range standoff weapon, and the Common Vertical Lift Support Platform. Beyond weapon system sustainment and modernization, the Air Force is focusing on human capital as we carefully balance requirements for our limited, intensively scrutinized, high-demand airmen in the nuclear enterprise.

The Air Force is prepared for a new verification regime and is planning for the elimination and conversion of launchers under the New Strategic Arms Reduction Treaty. We will work with the OSD and U.S. Strategic Command to identify and assess options for future force structure adjustments consistent with the Treaty provisions.

Global Precision Attack

Many of our global precision attack forces are meeting the current requirements of ongoing contingency operations by performing precision strike and ISR support roles. However, the proliferation of anti-access and area-denial capabilities will challenge the ability of current fourth-generation fighters and legacy bombers to penetrate contested airspace in the longer term.

The Air Force used a balanced approach across the global precision attack portfolio in fiscal year 2011, prioritizing investment in fifth-generation aircraft while sustaining legacy platforms as a bridge to the F–35, Joint Strike Fighter. We continue to modernize our bomber fleet to sustain our capability and capacity as we invest in a Long-Range Strike Family of Systems.

The fiscal year 2012 budget request for this Core Function is $16 billion. Investments in global precision attack will fund modernization of legacy fighters and the B–1B, development and procurement of the F–35A, preferred munitions, and simulators for Tactical Air Control System training. The fiscal year 2012 budget request adds $15 million to begin design and development of structural and capability modifications for the F–16 Block 40/42/50/52 fleet. The SLEP initiatives for the F–16 airframe are scalable and responsive to the Air Force's total fighter requirements. The Air Force is also studying F–16 modernization efforts, to include a new AESA radar, center displays, electronic warfare defensive suite, and an improved data-link in anticipation of F–35A delivery delays.

The multi-role F–35A is the centerpiece of the Air Force's future precision attack capability. In addition to complementing the F–22's world class air superiority capabilities, the F–35A is designed to penetrate air defenses and deliver a wide range of precision munitions. This modern, fifth-generation aircraft brings the added benefit of increased allied interoperability and cost-sharing across Services and partner nations. It will also serve to fulfill our commitment to NATO's dual-capable aircraft mission. The fiscal year 2012 budget includes $5.3 billion for continued development and procurement of 19 F–35A, Conventional Take-Off and Landing (CTOL), production aircraft.

The F–35A program team achieved a number of accomplishments over the past year, including the first flight of the first mission systems aircraft, arrival of the first four F–35A test aircraft at Edwards Air Force Base, CA, completion of F–35A static structural testing 5 months ahead of schedule with no failures, roll out of the first Low Rate Initial Production (LRIP) F–35A, completion of 410 total F–35 test flights in 2010 of which 171 were F–35A flights, negotiation of the first fixed price

type production contract (LRIP Lot 4 – 10 CTOL aircraft), and the signing of a Letter of Acceptance to procure the F–35A by Israel.

Also in 2010, the Air Force announced the preferred alternatives for F–35A operational and training bases. Those bases are Hill Air Force Base, UT, and Burlington Air Guard Station, VT, for operational squadrons and Luke Air Force Base, AZ, for training.

The program continues to experience challenges as it transitions from development to production despite the significant accomplishments. The Secretary of Defense announced a program restructure in February 2010. The restructure resulted in increased funding for development and production in accordance with Joint Estimate Team II estimates, reduced procurement by 122 aircraft over the FYDP in the fiscal year 2011 PB, upgraded the Program Executive Office position from a 2-star to 3-star flag rank, extended development by 13 months, added an additional LRIP lot prior to entering full rate production, and reduced the ramp rate to less than 150 percent of the previous year's production. Program cost growth, including growth from the restructure, resulted in a critical Nunn-McCurdy breach in March 2010. The Under Secretary of Defense for Acquisition, Technology, and Logistics subsequently certified the program in accordance with the Nunn-McCurdy statute, allowing the F–35 program to continue.

The DOD tasked the program office to perform a bottom-up review of the remaining development effort after the program Nunn-McCurdy certification. This Technical Baseline Review (TBR), completed in November 2010, became the basis for additional program restructuring within the fiscal year 2012 PB. The TBR informed the need for an additional $4.6 billion to complete the joint development effort. To fund this new development effort, and recognizing a continued lagging performance in production, the DOD reduced procurement by 124 aircraft over the FYDP in the fiscal year 2012 PB, 57 of which were F–35As.

The Air Force intends to accelerate the procurement of the F–15E AESA radar modernization program, funding 88 radars and electronic protect software upgrades across the FYDP to keep our legacy platforms viable well into the future. Other legacy fighter improvements in the fiscal year 2012 budget include the continuation of the A–10C wing replacement program.

The fiscal year 2012 budget request includes funds to modernize the B–1B fleet, including the central integrated test system, fully integrated data link, and vertical situation display unit. To provide the funds to modernize the B–1B fleet, the fiscal year 2012 budget request also reduces B–1B force structure by 6 primary aircraft authorizations leaving 60 B–1Bs in our inventory. Investing in a new penetrating bomber is critical to maintaining our long-range strike capability in the face of increasing risk associated with anti-access and area-denied environments.

To this end, the Secretary of Defense announced on January 6, 2011, that the Air Force will invest in a new long-range, penetrating, and nuclear-capable bomber capable of both manned and unmanned operations. A major focus of this program is to develop an affordable, long-range penetrating strike capability that delivers on schedule and in quantity. This aircraft will be designed and built using proven technologies, will leverage existing systems to provide sufficient capability, and allow growth to improve the system as technology matures and threats evolve. This program should start now to ensure that the new bomber can be ready before the current aging B–52 and B–1 bomber fleets go out of service. The follow-on bomber represents a key component of a Joint portfolio of conventional deep-strike capabilities, an area that must be a high priority for future defense investment given the anti-access challenges our military faces. It is a central element in a Family of Systems that includes enabling electronic warfare, ISR, and communications capabilities, as well as new weapons.

Anti-access and area-denial challenges have also caused us to pursue the Air-Sea Battle concept in partnership with the U.S. Navy and Marine Corps, so that together we can preserve and bolster our Nation's freedom of action in the air, maritime, space, and cyberspace domains. Once implemented, Air-Sea Battle will guide us to develop a more permanent and better-institutionalized relationship between Departments that will ultimately shape our Service organizations, inform our operational concepts, and guide our materiel acquisitions.

This budget request also includes Developmental Test (DT)/Operational Test (OT) and procurement of the Joint Air-to-Surface Stand-off Missile baseline and Extended Range programs. As Small Diameter Bomb (SDB)-1 production concludes in fiscal year 2011, the Air Force plans to transition to development and production of the SDB–II in fiscal year 2012. Additionally, the fiscal year 2012 budget request continues funding for integration of the Hard Target Void-Sensing Fuze onto the BLU–113 and BLU–109 weapons, and funds weapon DT/OT for the Massive Ordnance Penetrator.

Fiscal year 2012 budget investments in global precision attack reflect the requirement to win today's fight while recognizing that proliferation of anti-access and area-denial capabilities will increasingly challenge America's ability to penetrate contested airspace. The Air Force continues to modernize the legacy fighter and bomber fleet to maintain sufficient capability and capacity as we transition to a fully operational F–35A fleet and field a modern Long-Range Strike Family of Systems.

Air Superiority

Air superiority is crucial in modern warfare. It enables air, land, and maritime operations in support of our joint, interagency, and coalition partners. For over 5 decades, Air Force investments, expertise and sacrifice in achieving air superiority have ensured that friendly ground forces operate without threat of attack from enemy aircraft. Airspace control remains vitally important in all operating environments to ensure the advantages of rapid mobility, ISR and precision strike are broadly available to the combatant commander. Ongoing air defense modernization efforts by global and regional competitors will challenge the Air Force's ability to attain the same degree of control in the future. The fiscal year 2012 budget request for air superiority is $9.2 billion.

We plan to continue upgrading to a fifth-generation fleet with F–22 modifications to provide fleet commonality and ensure the viability of our legacy weapons systems. We will also continue the development of preferred air-to-air munitions and defenses such as the AIM–9X, AIM–120D and electronic warfare capabilities.

We are currently modernizing our legacy fleet of F–15 fighter aircraft with AESA radars to ensure their viability well into the future. Other F–15C/D modernization programs underway include an advanced display core processor upgrade with vertical situation display, beyond line of sight radios, and Link-16 cryptographic upgrades. The fiscal year 2012 budget request continues funding for the F–15C/D AESA radar modernization program. The Air Force has recently restructured this program, procuring 90 radars across the FYDP and an additional 8 radars in fiscal year 2017.

The Air Force is also incrementally modernizing the F–22 Block 30/35 aircraft and requests funding in the fiscal year 2012 budget for the F–22 Block 20/30/35 Common Configuration, Reliability and Maintainability Maturation Program and enhancement of the air-to-air and SEAD capabilities on F–22 Block 30/35 aircraft.

Select electronic warfare enhancements continue in fiscal year 2011, including EC–130H Compass Call fleet upgrades, and a flight deck and mission crew simulator to increase training capacity. The fiscal year 2012 budget request begins funding 13 electronic attack pod sets for MQ–9s and the conversion of a C–130 to EC–130H Compass Call aircraft, adding two mission aircraft authorizations across the FYDP. The fiscal year 2012 budget also funds concurrent production of Miniature Air-Launched Decoy (MALD)/MALD-Jammer (MALD–J) and development of MALD–J Increment II to improve the system's electronic warfare capabilities.

The Air Force continues to enhance development, production, and integration of critical munitions for air superiority. The fiscal year 2012 budget requests funds for the development and full-rate production of the AIM–9X Block 2; development, integration, and production of the AIM–120D; and development and integration of the AGM–88 HARM control section modification. The fiscal year 2012 budget also requests research and development funding for the "Next Generation Missile," an air launched missile to replace both the AIM–120D and the AGM–88. This funding will provide for a competitive prototype demonstration and technical development preceding entrance into the Engineering and Manufacturing Development phase of the program.

Other key enhancements in the fiscal year 2012 budget request include the development and fielding of new training range equipment and updates to threat systems to provide realistic combat training. Among these are the P5 Combat Training System and Joint Threat Emitters. Also, the fiscal year 2012 budget request provides procurement of F–16 Block 40/50 Full-Mission Simulators, affording high-fidelity simulation for use in Distributed Mission Operations. Enhanced opportunities to migrate aircrew training into high fidelity simulators will help realize efficiencies in the peacetime flying hour program, as well as support energy efficiency.

The proposed fiscal year 2012 investments will sustain America's air superiority advantage and expand the multi-role capability of the Air Force's most advanced aircraft. Additionally, these investments continue the development and procurement of electronic warfare capabilities and preferred air-to-air munitions.

Rapid Global Mobility

The Air Force continues to provide unparalleled airlift and air refueling capability to support our national defense. Mobility forces provide a vital deployment and sustainment capability for joint and coalition forces, globally delivering equipment, personnel, and materiel essential for missions ranging from major combat to humanitarian relief operations worldwide.

The Air Force is accelerating the retirement of our oldest legacy airlifters, the C–5A and C–130E, in fiscal year 2011. Airlift capacity and capability will be maintained through continued recapitalization and modernization. The Air Force will take delivery of seven C–130Js, and continue to ensure worldwide airspace access through avionics modernization of C–130H2/3, KC–10, and the C–5. In 2010, the C–27J completed transition from a joint to an Air Force-led program, and we continued C–27J procurement as an investment in overall fleet viability.

The fiscal year 2012 budget request balances tanker and airlift requirements to ensure that we sustain the critical needs of the warfighter. This is accomplished by prioritizing recapitalization of the tanker aircraft while ensuring the continued viability of the legacy fleet. Tanker capability investments of $877 million are heavily weighted toward our top acquisition priority, the KC–X program. The Air Force submitted a Request for Proposal for a KC–X replacement tanker in February 2010, and is anticipating contract award in early 2011. While moving aggressively to recapitalize the tanker fleet, we also continue maintaining the health of legacy aircraft. The budget includes $147.4 million in fiscal year 2012 for the airspace access requirement and sustainment of the KC–10 and KC–135 fleets.

In conjunction with the continued procurement of C–130Js, the fiscal year 2012 budget continues to modernize C–130Hs through the Avionics Modernization Program, ensuring continued global airspace access. Similar efforts to modernize C–5 avionics remain on track and the C–5B/C Reliability Enhancement and Re-engine Program (RERP) has completed operational testing. In October 2010, OSD approved RERP for full rate production with the final C–5M "Super Galaxy" scheduled for delivery in the third quarter of fiscal year 2016. Additionally, in accordance with the results of the Mobility Capabilities and Requirements Study 2016, and subject to authorization by Congress, we intend to retire some of the oldest, least capable C–5As and C–130H1s. The C–17 Globemaster III remains the backbone of our Nation's strategic airlift fleet, and the Air Force takes delivery of 11 new C–17s in fiscal year 2011 and 8 in fiscal year 2012. These additions bring the total C–17 fleet to 221 aircraft. The Air Force will continue to modernize its mature C–17s to the production line standard by accelerating the Block 13–17 upgrade program, and retrofitting the aircraft with extended range fuel tanks and an improved on-board inert gas generating system.

Efforts to increase direct support airlift continue, with plans to beddown 38 C–27Js in the Air National Guard. The Air Force continues Operational Support Aircraft/Very Important Person Special Airlift Mission modernization with the upgrade of VC–25 avionics, with completion in fiscal year 2018 enabling unrestricted global access for the Presidential aircraft.

Global Integrated Intelligence, Surveillance, and Reconnaissance

The Air Force continues to rapidly increase its ISR capability and capacity to support all military operations. Air Force ISR provides timely, fused, and actionable intelligence to the Joint force from forward-deployed locations and distributed processing centers around the globe.

The exceptional operational value of Air Force ISR assets has led Joint Force Commanders in Iraq, Afghanistan, and the Horn of Africa to continually increase their requests for support. To help meet this demand, the Air Force currently has more than 90 percent of all available ISR assets deployed. Over the last 2 years, the Air Force increased the number of remotely piloted aircraft (RPA) and completed deployment of 30 MC–12W Project Liberty aircraft to theater to complement remotely piloted capabilities. This is being accomplished as we transitioning MC–12W Liberty Project from OCO funding into the Air Force baseline budget beginning in fiscal year 2013. Additionally, the Air National Guard, already full partners in the RPA enterprise, has also deployed the RC–26B in support of operations in Iraq. Finally, both the Air Force and Air National Guard operate the RC–135 Rivet Joint and Senior Scout, respectively, in support of global signals intelligence taskings.

In fiscal year 2011, we will increase the number of CAPs in theater to 50, maximize the MQ–9 production rate to 48 per year, complete the procurement of 11 RQ–4 Block 40, and will deliver 5 additional MC–12W aircraft. We also will maintain our current Joint Surveillance Target Attack and Radar System-based Ground Moving Target Indicator (GMTI) capability as we complete an Analysis of Alternatives to determine the future of GMTI.

Our fiscal year 2012 ISR budget request of $8.2 billion fully supports the Joint force emphasis on ISR capacity and allows the Air Force to sustain maximum MQ–9 production and achieve 65 RPA CAPs in theater by the end of fiscal year 2013. In intelligence production, we corrected an internal Operation and Maintenance shortfall within the Air Force Distributed Common Ground System to sustain intelligence analysis and dissemination. The budget request also continues support for the U–2 Dragon Lady manned aircraft through the end of fiscal year 2015 to ensure a smooth high-altitude transition to the unmanned RQ–4 Global Hawk. This extension enables a measured reduction of the U–2 program as RQ–4 Block 30 aircraft become operational and ensures continued support to national leadership, combatant commanders, and joint warfighters.

The fiscal year 2012 ISR budget also realigns resources within the RQ–4 program to correct a $979 million diminishing manufacturing sources disconnect across the FYDP. To optimize our support of the overall RQ–4 program, the Air Force decided to curtail production of the RQ–4 Block 40 at eleven aircraft. This decision allows the Air Force to fully support and sustain the required RQ–4 Block 40 capability already procured and concentrate on fielding effective Block 30 multiple intelligence platforms on time.

Space Superiority

The DOD, civilian agencies, and our Nation rely on space capabilities developed and operated by the Air Force. The fiscal year 2012 space superiority budget request of $11.6 billion will enable the Air Force to field, upgrade, and sustain vital space systems for the joint warfighter. As part of the Joint Force, we integrate and operate these capabilities to execute the space support, force enhancement, space control, and force application missions; and, as launch agent for both the defense and intelligence sectors, provide reliable and timely space access for national security purposes.

Space capabilities provide the United States and our allies' unprecedented national security advantages in national decisionmaking, military operations, and homeland security. The Air Force's budget priorities align closely with the goals and principles outlined in the National Space Policy (NSP) and support the DOD's National Security Space Strategy (NSSS) and the National Military Strategy with specific emphasis on building international partnerships to establish mutually beneficial space capabilities and developing a better understanding of the space domain. International agreements are being pursued to expand space-based communication capability through the procurement of a ninth Wideband Global SATCOM satellite (WGS–9), and to meet National Search and Rescue requirements by working to integrate the Canadian-provided Distress Alerting Satellite Systems as a secondary payload on GPS Block III Increment B&C satellites. Additionally, realizing the space domain is becoming increasingly congested, contested and competitive, we will continue efforts to establish a Space Situational Awareness (SSA) partnership with Australia by jointly employing and operating a space object detect and track radar in Australia. This system will provide better understanding of the current and future strategic space environment and establish a foundation for continuing nation-to-nation cooperation.

In close cooperation with OSD and the Office of Management and Budget, the fiscal year 2012 Air Force budget request proposes a new acquisition strategy for buying military spacecraft, Evolutionary Acquisition for Space Efficiency (EASE). The current practice of procuring satellites one-at-a-time or on a just-in-time basis has inadvertently increased costs due to production line breaks, parts obsolescence, and inefficient use of labor. Numerous space experts and congressional committees have expressed concern with the inefficiency and disruption caused by the status quo approach to procuring satellites. EASE is an acquisition strategy that encompasses the following tenets: block buys of satellites, fixed price contracting, stable research and development investment, and a modified annual funding approach. We believe this approach will result in savings that can be reinvested in research and development that will further improve the performance and lower the cost of follow-on systems. Commitment to satellite production and reinvestment in technology development provides stability and predictability for a fragile space industrial base.

The Air Force budget request reflects the use of EASE for acquisition of the next blocks of Advanced Extremely High Frequency (AEHF) protected communications satellites in fiscal year 2012 and Space Based Infrared System (SBIRS)-Geosynchronous missile warning satellites in fiscal year 2013. Once the EASE approach is proven, we will examine the application of this acquisition strategy to a wider portfolio of space programs. Relying on a combination of regular appropriations, advance appropriations, and multi-year procurement authority, the EASE proposal is consistent with the full funding principle and is a critical part of the Air Force's effi-

ciency agenda. The Air Force recognizes the need to work with Congress to define and obtain the necessary legislative authorities to achieve our vision.

Spacelift is a critical component of the national security space enterprise. Despite our having achieved a record 76 consecutive successful launches since 1999, spacelift is still a complex and costly undertaking. Three recent launch studies reached the same conclusion that immediate commitment to a fixed annual production rate for launch vehicles is imperative to sustain the industrial base and control costs. To ensure this commitment, the fiscal year 2012 budget submission requests an additional $3.5 billion across the FYDP to procure five DOD launches each year. In addition, the Air Force is working aggressively to reduce the cost of providing this critical launch capability. Additionally, the Air Force is collaborating with the NRO and NASA to explore synergistic solutions to maintain a healthy industrial base and meet government launch requirements.

Our combatant commanders and national leadership rely on satellite communications for continuous secure communications around the world. In fiscal year 2010, we successfully launched the third Wideband Global SATCOM (WGS) satellite and first AEHF satellite. AEHF will provide ten times the throughput and greater than five times the data rate of the current MILSTAR II Satellite Communication System. To increase the effectiveness of our Joint warfighting operations, we are expanding communications capability with the launch of another WGS satellite in fiscal year 2012. Each WGS satellite delivers the equivalent capacity of the entire existing Defense Satellite Communications System constellation. WGS has become the keystone for international cooperation measures in space, with our Australian allies funding the sixth WGS satellite in return for a portion of the overall bandwidth. We requested $469 million in the fiscal year 2012 budget request to fully fund WGS to meet combatant commander's bandwidth requirements. These essential systems provide our forces the vital communications needed to remain effectively coordinated, synchronized, and responsive in global operations.

For over 20 years, GPS has been the global standard for positioning, navigation and timing (PNT) and is used in everything from consumer automobiles, precision farming and smart phones, to enabling the Nation's most sophisticated weaponry and financial systems. In fiscal year 2011, we will continue to launch GPS Block IIF satellites to maintain the constellation as a global utility. The fiscal year 2012 budget request includes $1.7 billion for PNT capability and incorporates initial funding of the next generation GPS III satellite production, development of the next-generation operational control segment and upgraded military user equipment.

Our fiscal year 2012 budget request also includes $87 million for the Operationally Responsive Space program to pursue innovative capabilities that can be rapidly developed and fielded in months rather than years to respond to combatant commanders' immediate space requirements. In the critical areas of missile warning and SSA, we requested $1.2 billion for the SBIRS program, which will launch the first geosynchronous satellite in fiscal year 2011 to begin our transition to a highly effective space-based missile warning system, and $122.1 million for the Joint Space Operation Center Mission System. We will continue to improve SSA ground-based systems and space-based capabilities to ensure continued freedom to operate in the space domain. The Air Force also recognizes that space capabilities are essential to the nuclear enterprise for its operational readiness, providing key decisionmaking information through missile warning and nuclear event detection, along with essential communications. Weather and forecasting data is another important source of information for our forces in peacetime and in conflict. We requested $444.9 million for the Defense Weather Satellite System in fiscal year 2012. This system will replace the Defense Meteorological Satellite Program in the early morning orbit slot, ensuring continuity of detailed overhead weather imagery and sensing information. All elements of space capability must operate through the full spectrum of potential contingencies.

While participating, last year, in the DOD's development of the national long-term space strategy as part of the Space Posture Review and Quadrennial Defense Review, the Air Force recognized a need to review our own internal space governance structure to better position us to properly execute the direction resulting from these reviews. During our review, the position of the Under Secretary of the Air Force was identified as the focal point for oversight of all Air Force space activities. In addition, space acquisition responsibilities were consolidated in the office of the Assistant Secretary of the Air Force for Acquisition. At the DOD level, the Secretary of the Air Force was revalidated as the DOD Executive Agent (EA) for Space. The EA is charged with the integration and assessment of the DOD overall space program, the conduct and oversight of long-term space planning and architecture development, and the facilitation of increased cooperation with the intelligence community. The EA also chairs the newly established Defense Space Council with representa-

tives from across the DOD, and was directed to establish a jointly manned space office to restructure and replace the current National Security Space Office. This organization will not only better position the DOD to coordinate implementation of space policy and strategy, it will also provide the framework for the DOD's support for development of new national security space capabilities. Furthermore, the Secretary of the Air Force, in his role as the EA for Space is fully engaged with the DOD in the implementation of the recent NSP and NSSS.

Cyberspace Superiority

The Air Force fiscal year 2012 budget request includes $4.6 billion to sustain and maintain our critical cyberspace capabilities and to enable Air Force expeditionary and CONUS-based operations in support of Joint Force Commanders. The Air Force contributes to the Joint force by developing, integrating, and operating cyberspace capabilities in three mission areas: support, defense, and offense.

Cyberspace superiority enables precise force application in all domains, generates effects across the full spectrum of operations, and preserves an agile and resilient cyberspace infrastructure for assured mission execution.

Access to cyberspace is increasingly critical to meet joint and allied requirements for freedom of maneuver in all domains. Air Force networks face a continuous barrage of assaults from state-sponsored actors, terror networks, international criminal organizations, individual hackers, and all level of threats in between. We are expanding collaboration with Service, Joint, Interagency, academic, and international partners on several cyber initiatives to safeguard our access to the cyberspace domain. To this end, we are operationalizing our approach to cyberspace with emphasis in this budget request on protecting the Air Force infrastructure, developing expertise to meet mission needs, and accelerating our acquisition processes.

The 24th Air Force, the Air Force component of U.S. Cyber Command, achieved FOC on October 1, 2010, and the Air Force will expand the cyber rapid acquisition process to cope with constantly evolving technologies. The Air Force is also aligning education and training programs with our operational approach to cyberspace to properly develop our cyberspace professionals. In December 2010, we graduated our first cadre of cyberspace operators. Additionally, efforts to enhance the cyber-related investigative and forensic capabilities resident in the Air Force are forging a solid foundation for Service and joint cooperation. For example, Air Force Space Command transitioned the Defense Cyber Crime Center back to the Air Force Office of Special Investigations to help strengthen the ties.

The Air Force has strengthened its efforts in the support mission area by continuing work on the Single Air Force Network migration, which increases situational awareness of Air Force networks while securely improving information sharing and transport capabilities. Examples of this support are reflected in several investments in this budget. The Air Force continues to support its capability for live, virtual, and constructive simulation and training. Based on the Fort Hood follow-on review, enhancements were made to the Installation Emergency Management system to ensure a standardized, robust emergency notification system.

For the defense mission area, the Air Force invested in additional network defenders to increase protection of information vital to Joint Force operations. The Air Force continues to invest in network defense tools and other advanced technologies to monitor and secure classified and unclassified networks.

In the offensive mission area, the Air Force seeks to field appropriate and sanctioned capabilities supporting assigned missions. The Air Force established formal training programs for both initial and mission qualification to provide trained forces to U.S. Cyber Command when tasked. Additionally, as the lead support agency to U.S. Cyber Command, the Air Force is responsible for the construction and installed infrastructure for the new U.S. Cyber Command Integrated Cyber Center at Fort Meade, MD.

Command and Control

Command and Control (C2) of our forces has never been more vital or more difficult than in the 21st century. Supporting the National Security Strategy requires commanders to integrate operations in multiple theaters, at multiple levels, and across the full range of military activity. Secure strategic and nuclear C2 remains an Air Force priority. The Air Force must sustain, modify, and enhance current command and control systems, and develop deployable, scalable, and modular systems that are interoperable with joint, interagency, and coalition partners.

In fiscal year 2011, we will improve assured communication links for U.S. Strategic Command's Distributed Command and Control Node and U.S. Northern Command's National Capital Region-Integrated Air Defense System. The Air Force has also done the following: expanded the training pipelines for Joint Terminal Attack

Controllers (JTACs); began fielding advanced video downlinks, and airborne radio and datalink gateways to improve the connectivity of air support operations centers and JTACs; and modernized the 1970s-era technology of the E–3 airborne C2 node with the Block 40/45 program. In addition, the Air Force created pipeline training in support of the warfighting elements of the Commander, Air Force Forces theater staff.

In fiscal year 2012, the Air Force requests $6.3 billion for full spectrum C2 sustainment, replacement, and development efforts. Of note, $19.1 million is requested to bolster the Air and Space Operations Center's (AOC) C2 capability and interoperability with programmed Joint systems to execute the Integrated Air and Missile Defense mission. Secure and reliable strategic level communications are improved with a $53.2 million request for modernization to Senior Leader Command and Control Communication Systems for senior leader support aircraft and the E–4 National Airborne Operations Center. Support to combatant commanders is also enhanced with almost $60 million in fiscal year 2012 for improved airborne and mobile C2 systems. The Air Force maintained our commitment to the Joint development of the Three-Dimensional Expeditionary Long-Range Radar. Three-Dimensional Expeditionary Long-Range Radar will be the future long-range, mobile ground-based sensor for detecting, identifying, tracking, and reporting aircraft and missiles in defended airspace. Additionally, the United States secured a cooperative development position in the NATO Airborne Warning and Control System avionics and navigation modernization program.

Special Operations

Geographic Combatant Commanders and U.S. Special Operations Command rely heavily on Air Force Special Operations (AFSOC) capabilities to support missions worldwide. As the DOD continues to develop capabilities effective against irregular and hybrid threats, increased Air Force Special Operations close air support, foreign internal defense, and ISR capabilities will be required.

In fiscal year 2011, the Air Force will continue procurement of five CV–22s and MC–130Js for the recapitalization of AFSOC's MC–130E/P and AC–130H aircraft. The fiscal year 2012 budget request includes an investment of $503.7 million toward recapitalization of AFSOC's MC–130H/W fleet, with an additional investment of $26 million across the FYDP to align MC–130J program funding with OSD cost estimates. Additional investments were made to enhance CV–22 mission capability with upgraded cockpit data recording and Communication Navigation System/Air Traffic Management modifications. Finally, a low-cost engine wiring modification allowed the Air Force to realize a $9.6 million efficiency and reduce MC–130J spare engine inventories.

Personnel Recovery

Personnel recovery (PR) remains a vital core function in support of every contingency operation. The increased utilization of military and civilian personnel in support of OCO has significantly increased the demand for Air Force rescue forces beyond the conventional combat search and rescue mission. Air Force PR forces are fully engaged in Afghanistan, Iraq and the Horn of Africa, accomplishing lifesaving medical and casualty evacuation missions, while also supporting domestic civil land and maritime search and rescue, humanitarian assistance/disaster relief (HA/DR) and mass casualty evacuation missions.

In fiscal year 2011, the Air Force will continue to recapitalize HC–130N/P aircraft and procure H–60 Blackhawk helicopters under the operations loss replacement (OLR) program to restore the fleet to 112 HH–60G aircraft. The fiscal year 2012 request funds four HH–60G OLR aircraft, and provides a $2 billion investment for procurement of 54 HH–60 replacement aircraft across the FYDP. We will also accelerate the procurement of our HC–130J rescue/tanker aircraft by procuring 3 aircraft in fiscal year 2012 to replace the 1960s-era HC–130P fleet on a one-for-one basis, up to 37 aircraft. Finally, the fiscal year 2012 budget funds $73 million for the Guardian Angel program which will standardize and modernize mission essential equipment for an additional five pararescue teams.

Building Partnerships

Developing mutually beneficial partnerships with militaries around the world is vital for the Air Force. Successful partnerships ensure interoperability, integration and interdependence between coalition forces while providing our partner nations the capability and capacity to resolve their own national security challenges. Today's engagements require airmen to perform their duties effectively and achieve influence in culturally-complex environments around the globe.

The Air Force continues to emphasize extensive language skills and regional knowledge in its growing cadre of Regional Affairs Strategists. These personnel pos-

sess a regionally-focused advanced academic degree and language proficiency. They work with partner nations as attachès and Security Cooperation Officers. Political-Military Affairs Strategists and best-fit officers also fill positions requiring in-depth understanding of the interagency processes key to building partnerships. The Air Force has also increased the culture and language content of selected pre-deployment training courses and recently inaugurated a new language learning program—the Language Enabled Airman Program. This program provides an opportunity to create a cadre of language-capable airmen who are deliberately developed for requirements, leverages the capability attained in foreign language accession programs, and provides a systemic opportunity for these airmen to maintain these skills throughout their careers. Our fiscal year 2012 budget request includes funding to expand foreign language instruction for officer commissioning programs as well.

The Air Force continues to engage our international partners across the spectrum of operations. The fielding of the F–35, Joint Strike Fighter, will further our partnerships with more established allies, while the 3 C–17s procured for the 12-nation Strategic Airlift Capability are fully operational and currently meeting the airlift requirements of our European allies. We are funding new initiatives which support longer term Building Partnerships Capacity (BPC) efforts. For instance, $65.7 million was budgeted toward the procurement of 15 Light Mobility Aircraft (LiMA) to assist partner nations in building their airlift capability in fiscal year 2011. These aircraft are scheduled to be fielded and achieve initial operating capability (IOC) in the second quarter of fiscal year 2012. We are also requesting $159 million in fiscal year 2012 to procure the first 9 of 15 Light Attack/Armed Reconnaissance (LAAR) aircraft. These LAAR aircraft will be used to train a cadre of pilots who will subsequently export their BPC aviation skills to international partners who may operate the same or similar platforms. To ensure the proper capability is provided to build partner capacity by Contingency Response Forces, LiMA and LAAR personnel, we funded the formal establishment of an Air Advisor Academy in fiscal year 2011 to expand our current efforts that include training air advisors heading to Iraq and Afghanistan and training air advisors for engagements globally. English language proficiency is a prerequisite to nearly all of the education and training that the Services provide to our partner nations. To meet increasing partner demand for English language training, the fiscal year 2012 Air Force program expands the capacity at the Defense Language Institute English Language Center.

Agile Combat Support

Underpinning the work of all Air Force Core Functions are the capabilities included in agile combat support (ACS). ACS is the ability to create, protect, and sustain air and space forces across the full spectrum of military operations and spans a diverse set of Air Force functional capabilities. The fiscal year 2012 budget request of $33.8 billion for ACS accounts for efforts affecting our entire Air Force—from the development and training of our airmen to regaining acquisition excellence.

Airmen and Families

The Air Force is proud of its commitment to supporting its airmen and families. The nearly 2 decades of sustained combat operations has imposed extraordinary demands on them and underscores the need to remain focused on sustaining quality of life and supporting programs as a top priority. To help address the demands, in 2010 the Air Force executed the Year of the Air Force Family and highlighted support programs focused on three outcomes:

- Fostering a Strong Air Force Community;
- Strengthening an Airman's Sense of Belonging; and
- Improving Airman and Family Resiliency.

The Year of the Air Force family deepened leadership's understanding of current support services and capabilities and what needs to be done in the future to maintain and improve outcomes in the three primary focus areas.

First, the Air Force will maintain an enduring emphasis on airmen and families by actively engaging the entire Air Force Community: Total Force airmen, Department of the Air Force civilians, single and married personnel, primary and extended family members, retirees, and on- and off-base community partners. The Air Force will maintain an atmosphere that is supportive, team-oriented, and inclusive, but diverse enough to meet the current and emerging needs of the entire Air Force Community. Policy and process priorities have been translated into actions and tasks that will be accomplished over the next few years, perpetuating the Air Force's commitment to strengthening our ties to one another, improving our operational abilities and ensuring our Air Force Community is best positioned to meet future commitments and requirements.

Second, we continue to strengthen our Air Force Community by expanding child care through different programs such as the Extended Duty Program, Home Community Care, Missile Care, and the new Supplemental Child Care initiative to provide flexibility in meeting child care needs. In fiscal year 2011, the Air Force will continue to demonstrate our commitment to military child education, funding full time School Liaison Officers (SLO) Air Force-wide. SLOs and our new Air Force Exceptional Family Member Program Coordinators will work in close collaboration to address educational and other assistance for families with special needs. The Air Force fiscal year 2012 budget request includes $4 million to assist with respite child care for military family members with special needs children.

Third, the budget reflects a $4.4 million increase to our Air Force Mortuary Affairs program, supporting travel for family members from home of record to Dover Port Mortuary to receive and honor fallen loved ones. Increases also reflect our commitment to maintaining the Port Mortuary's Center for the Families of the Fallen, used as the reception facility and host site for visiting family members at Dover Air Force Base, DE.

Airman dining facilities remain an important commitment of the Air Force as we plan to increase funding for dining facilities at basic military training and technical training bases by $14.9 million in fiscal year 2012. In fiscal year 2011, we launched the Food Transformation Initiative (FTI) to address airmen's concerns with dining facility closings, lack of healthy food options, and insufficient hours of operation. FTI is designed to enhance food quality, variety and availability while maintaining home base and warfighting capabilities.

The Air Force continues to expand our efforts to improve resiliency of airmen and their families before, during, and after deployments and has significantly expanded capabilities to ensure support and reintegration of our Total Force. In continuing its efforts to improve the resiliency of airmen and their families, the Air Force moved forward with several initiatives in 2010.

We established a new Resiliency Division at the Air Force level to take the lead and develop an overarching Air Force Resiliency Roadmap. The Deployment Transition Center (DTC) was established at Ramstein Air Base, Germany on July 1, 2010. The DTC and Chaplain Corps Care for the Caregiver programs provide valuable decompression, reintegration and resiliency training for those exposed to significant danger and stress in combat zones. To support these efforts, the Air Force fiscal year 2012 budget request includes $8 million for the Air Force Resiliency Program for research, curriculum development, materials and intervention training for the DTC. We will continue to develop our Airman Resiliency Program by identifying needs, researching best practices, partnering with internal and external organizations, and developing targeted and tiered training that is integrated into an airman's career to allow a building block approach that leads to life-long resiliency that benefits both airmen and their families. We are also requesting an increase in the Chaplain Recruitment program by $1.5 million in fiscal year 2012 to better provide for religious accommodation and support of airmen. This includes chaplain-led MarriageCare Retreats, that help heal and save marriages, and deployment reintegration programs expanded to meet the needs of redeploying airmen.

The Air Force is highly committed to the Wounded Warrior Program that ensures access to medical and rehabilitation treatments for the ill and wounded. The Air Force Warrior and Survivor Care Division is dedicated to building a culture of understanding and concern for wounded, ill, and injured airmen. The Air Force has hired 33 Recovery Care Coordinators and a Program Manager to support 31 locations across the Air Force. Recovery Care Coordinators serve as the focal point for non-clinical case management, development of comprehensive recovery plans and creation of timelines for personal and career accomplishments. Additionally, the Air Force has implemented new personnel policies regarding retention, retraining, promotions, assignments and evaluation of Wounded Warriors. In fiscal year 2012, the Air Force is requesting $2.8 million for additional case workers and program managers to provide non-clinical case management services to meet the growing demands of the Wounded Warrior population.

Healthcare Initiatives and Costs

As key team members of the Federal and Military Health System (MHS), the Air Force Medical Service (AFMS) is seeking innovative solutions to deliver world class care while slowing the rising costs of healthcare. For example, the AFMS is taking the lead in building the largest patient centered medical home capability in the DOD over the next 12 months. This includes the Family Health Initiative, designed to improve continuity of care and healthier outcomes. Additional emphasis is being placed on delivering better care by streamlining our hospital surgical operations and improving the experience of care. Current efforts have demonstrated recapture of

services in key market areas with the overall results of reduced cost, increased currency of our surgeons, and improved patient satisfaction. In addition, the AFMS is transitioning from healthcare delivery to delivering health. Through patient-centered care, improved teamwork with our patients, and leveraging partnerships with DOD, VA and civilian institutions, Air Force medicine is shaping the future of healthcare.

Our strategy to control DOD healthcare costs is the right approach to manage the benefit while improving quality and satisfaction. Adjustments to the benefit such as raising TRICARE enrollment fees for working retirees, phasing out enrollment for some high-cost health plans, paying community hospital Medicare rates, and incentivizing the use of the most effective outlets for prescriptions is prudent. There will be limited impact (prescription only) on active duty family members. By implementing these important measures, we will be able to positively address the rising costs of healthcare and improve the health of our population.

Suicides

Air Force suicide rates have been on the rise since 2007, although primary risk factors for suicide among airmen remain the same. The most commonly identified stressors and risk factors have remained the same over the last 10 years: relationships, financial problems and legal problems. Although deployments can stress airmen and their families, deployment does not seem to be an individual risk factor for airmen—many airmen who have committed suicide have never deployed. The Air Force is providing additional support to our most at-risk airmen by providing additional frontline supervisor suicide prevention training to all supervisors in career fields with elevated suicide rates. In addition, mental health providers are based in primary care clinics across the Air Force to counsel patients who may not otherwise seek care in a mental health clinic because of the perceived stigma. The Air Force has significantly expanded counseling services in addition to those available through the chaplains or the mental health clinic.

Other helpful programs that provide non-medical counseling include Military Family Life Consultants, which can see individuals or couples, and Military OneSource, which provides sessions for active duty for up to 12 off-base sessions.

Fort Hood

In the wake of the Fort Hood shooting, the Secretary of Defense directed the Air Force to conduct a follow-on review to identify ways to better protect airmen and families. Our review yielded 118 findings and 151 recommendations. The key revelation of the study is that we must do a better job of preventing and responding to violence. Specifically, we must improve our ability to identify indicators of potential violence and share that information with those who are best positioned to prevent a violent outcome. This will require improved understanding, education, processes and training, as well as more integrated processes at both the installation and interagency levels. To undertake these efforts, the fiscal year 2012 budget request includes $37 million across the FYDP. We anticipate that our resource requirements will increase as we refine the implementation of our recommendations. We are confident that the resources Congress provides, coupled with our sustained effort, will help the Air Force reduce the likelihood of tragedies like Fort Hood and position us to respond more effectively should prevention fail.

Information Protection

The Air Force will enhance its capabilities to assess and mitigate risks to national security information across the enterprise. It will advance efforts to identify risks that reduce the surety of research, development, and acquisition and operations or enable potential opponents to illicitly increase their technological capabilities. These efforts will enable commanders to effectively execute intelligence-led, risk based protection across the Air Force.

Science and Technology

Air Force warfighting capabilities have a proud heritage of being born from the very best science and technology (S&T) our Nation can produce. The creation of the Air Force is closely intertwined with the development of advances in S&T. In 2010, the Air Force presented the .Technology Horizons Study. to serve as a roadmap for guiding Air Force science and technology investments during the next 20 years. Despite current fiscal constraints, the Air Force is increasing its investment in basic research by $18 million and in Advanced Technology Development by $76 million, while continuing fiscal year 2011-level investment in Applied Research.

Acquisition Excellence

The Air Force continues to strive for acquisition excellence by increasing the rigor and transparency of its processes and by stabilizing requirements and funding. As one of our top five Air Force priorities, we have taken a multi-faceted approach to recapturing acquisition excellence to include:

- Rebuilding the acquisition workforce;
- Delivering a fully implemented Acquisition Improvement Plan (AIP) to guide and shape current and future efforts;
- Creating a foundation for a robust Continuous Process Improvement (CPI) function within acquisition; and
- Implementing approximately 75 efficiency initiatives that range in scope and impact throughout the acquisition enterprise.

Continued improvements support moving resources from "tail to tooth" to fully support the Air Force's direct mission activities. Efficiency savings in overhead, support and other less mission-essential areas will increase funding available for our critical mission functions. The Air Force, as a good steward of taxpayer resources, is committed to delivering products and services that perform as promised—on time, within budget, and in compliance with all laws, policies, and regulations.

An example of the successful implementation of recapturing acquisition excellence is the consolidation of fiscal year 2008 OCO, fiscal year 2009 OCO and base-year funding, fiscal year 2010 base-year funding, and Foreign Military Sales C–130J contracts into one negotiation. By taking advantage of economies of scale, the Air Force realized a savings and was able to procure two additional C–130Js. This effort reduced the number of aircraft the Air Force needs to buy in the out years to meet its requirement.

Installations and Operational Energy

The Air Force views energy efficiency as a mission enabler that can increase combat effectiveness, expand reach and minimize operational risks. The Air Force is integrating energy considerations across the Air Force enterprise with a three-pronged approach: reduce demand, increase supply, and culture change. We can identify efficiencies that increase our capabilities and reduce our costs, while also increasing and diversifying our energy supply to improve our energy security and our ability to meet our critical operational requirements. Finally, by creating a culture that makes energy a consideration in everything we do, and that values energy as a limited mission-critical resource, we ensure enduring and far-reaching utilization improvements and savings.

As part of our institutional effort to utilize energy to maximize mission effectiveness, the Air Force is requesting over $550 million for energy initiatives in fiscal year 2012. Initiatives include investments in reliable alternative energy resources, enhancing energy efficiency, and reducing environmental impacts and life cycle costs. In addition, the Air Force is continuing to take steps to reduce mission risk by increasing critical infrastructure resiliency to ensure reliable energy availability at Air Force installations.

We have reduced energy use at facilities by nearly 15 percent since 2003, and expect to achieve nearly a 30 percent reduction by 2015. In addition, we have instituted a number of fuel saving initiatives and reduced the amount of fuel our aircraft have consumed by over 46 million gallons since 2006, despite increased operational requirements associated with ongoing operations. The Air Force is continuing to explore opportunities to reduce demand for aviation fuel. For example, the 618th Tanker Airlift Control Center is optimizing flying routes by working clearances to allow flights to transit through previously denied airspace. We can save the Air Force an estimated 2.6 million gallons of fuel per year by optimizing our flight routes and clearances. Some of the initiatives we will pursue to achieve fuel efficiencies are:

- Providing aircrews in-flight guidance on the optimum airspeed and altitude based on current flight conditions;
- Expanding the use of simulators to conduct training;
- Implementing a program, already an industry standard, that cleans components allowing the engine to run cooler saving fuel and prolonging engine life; and
- Refining fuel and cargo policies to reduce carrying costs and potentially the number of missions required to support the combatant commanders.

We are also increasing the energy supplies we can use to meet our mission. We have certified over 99 percent of our aircraft fleet for unrestricted operational use of a synthetic aviation fuel blend. This fuel can be produced domestically, and we are looking to industry to help us meet our needs. We are in the process of certifying

our fleet to use biofuel blends as well. These alternatives provide our fleet with additional flexibility and enable our freedom of action. The Air Force is also looking at alternative sources for energy at our facilities. In the upcoming years, we will quadruple on-base solar energy production and dramatically increase the amount of wind energy consumed. These clean sources of energy will serve to enhance our energy security.

The Air Force is working cooperatively with the Army and the Marines to reduce fuel requirements at forward operating bases by decreasing energy demand, utilizing efficient power distribution and increasing alternative supplies. These bases require generators, typically running on diesel, that require fuel to be brought in by convoy. We are working to improve the energy efficiency of our Basic Expeditionary Airfield Resources assets, commonly called BEAR, in the expeditionary environment. One of the Air Force's efforts is focused on reducing the energy demand for expeditionary shelters by 50 percent, while using photovoltaic tent flys to generate a minimum of three kilowatts per shelter. We are also working with industry to design a portable, expandable microgrid for our remote airfields. The system will integrate solar, wind and other renewable sources of energy into the existing BEAR power grid, reducing the system's reliance on traditional, carbon-based fuel by as much as 25 percent. It will be able to withstand the harsh conditions in which our military operates. More importantly, it will help reduce the inherent wartime dangers that come with delivering the fuel by convoy.

We have made significant and positive progress in reducing our consumption, increasing the energy available to the operational Air Force and changing the culture within the Air Force to ensure energy is a consideration in everything we do. Energy availability and security impact all Air Force missions, operations and organizations. The Air Force will increase warfighting capabilities, and efficiency, and help the Nation reduce its dependence on imported oil by continuing to ensure energy availability and re-engineering our business processes to become more efficient.

Reducing Excess Physical Plant and Infrastructure

The fiscal year 2012 budget request includes a $300 million demolition and $100 million consolidation investment to reduce long-term fixed costs through the consolidation and demolition of unneeded facilities and infrastructure. In line with the June 10, 2010 presidential memorandum, the Air Force intends to reduce energy use and curtail unnecessary sustainment activities by eliminating physical plant that is no longer needed.

MILCON

The Air Force's fiscal year 2012 $1.4 billion MILCON request provides funding for our most critical requirements including new construction aligned with weapon system deliveries and the Combatant Command priorities. This includes projects supporting beddowns and upgrades for F–22, F–35, HC–130J, EC–130H, RPA and B–52, as well as projects supporting our mission support facilities most in need of recapitalization. The Air Force MILCON program supports the U.S. Strategic Command Headquarters replacement facility in three increments beginning in fiscal year 2012, the new U.S. Cyber Command Headquarters in fiscal year 2013, an additional phase of the Blatchford Preston Dormitory Complex at Al Udeid, Qatar, and an air freight terminal on Guam.

Additionally, the budget request sustains our effort to provide quality housing for airmen and funds $254 million in improvements to meet DOD performance standards to provide 90 percent of our permanent party dorm rooms in good or fair (Q–1 or Q–2) condition. The Air Force investment strategy is to fund improvements in all Q–3 and Q–4 dorms, referred to as Tier 1 dorms in the 2008 Dorm Master Plan, by 2017.

The Air Force recognizes the critical role MILCON holds in successful mission execution and is taking action to increase MILCON funding in the near years of the FYDP—the Air Force proposes to increase MILCON in fiscal year 2012, fiscal year 2013, and fiscal year 2014 by a combined $1.8 billion over the fiscal year 2011 PB submission.

Finally, in an effort to ensure the most critical mission and infrastructure projects are funded first, the Air Force used asset management and efficient facility operations processes to evaluate MILCON requirements. In essence, the Air Force is considering how these projects and programs help reduce our out-year investment needs as part of our overall cost control strategy.

Logistics

WSS is a vital element in sustaining Air Force readiness. The Air Force faced a $7 billion increase in WSS requirements across the FYDP at the beginning of the fiscal year 2012 budget cycle, largely due to increasing numbers of weapon systems,

such as C–17, F–22, and MQ–1/9 aircraft that use contractor logistics support. We recognized that we cannot sustain that kind of growth in requirements, so we implemented a WSS end-to-end assessment to identify efficiencies with respect to supply chain management, centralized asset management, and depot performance.

We were able to reduce WSS investment from $7 billion to $4 billion through efficiencies in depot and supply chain processes identified in the assessment. While we will still experience growth, this $3 billion FYDP offset represents important savings that the Air Force applied elsewhere. Prior to the WSS end-to-end assessment, the sustainment funds requested in fiscal year 2012 would have supported 80 percent of the WSS requirement. Following the assessment, and the resulting reduction in growth, the same amount of funds requested will actually support 84 percent of the fiscal year 2012 WSS requirement.

While the peacetime flying hour program is fully funded, reprogramming may be necessary to cover increased fuel costs due to the volatility of fuel prices. Over the longer term, enactment of the DOD's legislative proposal for the Refined Petroleum Products Marginal Expense Transfer Account would reduce disruptions to operations and investment programs by providing the flexibility to meet fuel price fluctuations.

The Air Force is successfully fielding a pilot of the first increment of the Expeditionary Combat Support System (ECSS). We will conduct an independent cost estimate as part of, and in conjunction with, the ongoing Critical Change Review to assess the cost effectiveness of proceeding with additional ECSS releases that support retail and wholesale supply and depot maintenance activities. The Air Force will continue to maintain legacy logistics support systems while determining the best course of action for developing information technology tools to enhance the visibility and management of supplies and equipment.

Financial Improvements

The Chief Financial Officers' Act provides direction for achieving a clean audit through leadership commitment, modernized government financial management systems, and strengthened financial reporting. Sound financial management helps to ensure the maximum combat capability for each taxpayer dollar. The Air Force is committed to achieving the legislative requirement for a clean audit by 2017. While 2017 is a challenging deadline for a military organization as large and diverse as the Air Force, the strong engagement of Air Force leadership, additional financial resources provided in recent years, and focus on fielding effective financial systems will help achieve it. We are focusing our efforts on the information most relevant to decisionmakers, and the Air Force Financial Improvement Plan is closely aligned with the DOD strategy to achieve a clean audit.

Strategic Basing

In 2009, the Air Force established a standardized, repeatable, and transparent Strategic Basing Process. Guided by the Strategic Basing Executive Steering Group and coordinated through the lead major commands, over 115 basing actions have been accomplished ensuring that mission and combatant commander requirements are linked to installation attributes that identify those locations that are best suited to support any given mission. This process supports IOC, aircraft delivery, personnel movement, and other mission requirements. Recent improvements in the process have formalized actions to expedite simple, specialized or particularly time-sensitive basing initiatives, to support more timely decisions.

During 2011, the Air Force will utilize the Strategic Basing Process to support basing decisions for the MQ–1/9, LiMA, LAAR, and KC–X.

CONCLUSION

In developing our fiscal year 2012 budget request, we looked at ways to maximize combat capability out of each taxpayer dollar by identifying waste, implementing efficiencies, pursuing continuous process improvement initiatives and making smart investments. Recognizing the need to shift resources from "tail to tooth," the Air Force identified efficiencies across the enterprise that will enable investments in enhancements to increase our warfighting capabilities. This includes the continued pursuit of cost-effective systems that leverage existing capabilities and maximize interoperability and integration of legacy and future systems.

Our ability to project Global Vigilance, Reach, and Power is constrained by the increasing costs to design and build platforms in a particularly challenging budget environment. Our fiscal year 2012 budget request reflects the difficult choices that will allow the Air Force to provide the necessary capability, capacity, and versatility required to prevail in today's wars, prevent and deter conflict, prepare to defeat ad-

versaries and succeed across the range of potential military operations—all the while preserving and enhancing the All-Volunteer Force.

We are confident in our airmen. They are the best in the world, and we rely on them to meet any challenge, overcome any obstacle and defeat any enemy as long as they are given adequate resources. We are committed to excellence and we will deliver with your help. We ask that you support the Air Force budget request of $119 billion for fiscal year 2012.

Chairman LEVIN. Thank you, Mr. Secretary.

General Schwartz?

STATEMENT OF GEN. NORTON A. SCHWARTZ, USAF, CHIEF OF STAFF OF THE AIR FORCE

General SCHWARTZ. Mr. Chairman, Senator McCain, members of the committee, I am privileged to be here today with Secretary Donley representing the men and women of the U.S. Air Force.

Our airmen continue to inspire us with their dedication and their service and define us with their many accomplishments. Quietly and proudly serving alongside their Army, Marine, Navy, and Coast Guard teammates, airmen every day act on behalf of the American people as stewards of the Nation's trust and defenders of her security.

This budget request, fully appreciating the Nation's extraordinary fiscal condition, supports our airmen in their continuing efforts to structure the force for maximum versatility across the spectrum of operations for today's requirements and for future challenges.

Because of intense budgetary pressures, I echo Secretary Donley's concern about operating under a continuing resolution. Without a 2011 appropriations bill, we will have to further reduce flying hours, cancel training and exercise opportunities, delay or cancel weapon system sustainment and depot maintenance activities, and disrupt a multitude of other day-to-day operations.

Current reductions to the President's budget request not only create inefficiencies that basically reverse the efficiency measures that the Secretary of Defense has directed, they adversely affect readiness as well. We appreciate your efforts to pass an appropriations bill to provide for these critical needs of our uniformed men and women.

Consistent with the National Security Strategy and the Quadrennial Defense Review, our national military objectives are to counter violent extremism, deter and defeat aggression, strengthen international and regional security, and shape the future force.

Airmen now are committed to the task of leveraging air and space power with all of its inherent versatility and presenting to the President and the national leadership a range of strategic options to meet these objectives, calibrated as our Nation continues to grapple with substantial deficits and related national debt.

To counter violent extremism, airmen continue to make vital contributions to our Nation's strategic objective of disrupting, dismantling, and defeating al Qaeda and its affiliates in Afghanistan and elsewhere, thereby inhibiting their return to former sanctuaries.

More than 37,000 airmen, about 6 percent of the force, are forward deployed worldwide. Of this group, nearly 30,000 are continually rotating to directly contribute to operations in the CENTCOM area of responsibility (AOR), including 10,000 airmen in Afghani-

stan, providing close air support to U.S. and coalition ground forces, airlifting or refueling, personnel rescue, aero-medical evacuation from hostile battle space, leadership of provincial reconstruction teams, and training and exercise opportunities to develop partner air forces.

An additional 57,000 total force airmen, or about 11 percent of the force, are forward stationed overseas, providing capabilities in direct support of combatant commander requirements.

From their home stations in the United States, over 200,000 airmen, 43 percent of the force, provide daily support to worldwide operations, from standing nuclear alert to commanding and controlling our satellites, to analyzing ISR data, and much, much more.

To deter and defeat aggression, we maintain vigilance across the entire spectrum of conflict and will employ multi-role systems with capabilities that can flex to fulfill different warfighting requirements. At the upper end of the spectrum, we continue to provide two of our Nation's three arms of nuclear deterrence, with steadfast excellence, precision, and reliability.

Across the remainder of the operational spectrum, we will continue to leverage air and space power that are vital to our Nation's ability to sustain a robust conventional deterrent. This requires the ability to rapidly project power through the global commons and in the globally interconnected domains of air, space, and cyber space.

Therefore, in addition to leveraging air power, we will also magnify our efforts to reinforce our cadre of space and cyber professionals. We will continue to ensure precision navigation and timing, secure satellite communications, timeliness of warning, and global environmental sensing for our joint teammates, while we enhance our space situational awareness that is vital to attributing space-borne threats and protecting our systems and capabilities.

We will also continue to support the whole-of-Nation effort to team with international partners in strengthening space architecture resiliency, establishing and reinforcing norms for space and cyber activity, and ultimately developing a broader range of options to ensure our Nation's access to and freedom of action in both domains.

To strengthen international and regional security, the Air Force will translate air power's inherent ability to traverse vast distances with unmatched speed, ensuring the U.S. Forces are globally available, yet through that inherent versatility can be tailored in scale to be regionally focused.

Through a whole-of-Nation approach and with mutually supporting strategies toward this objective, the Air Force and the joint team will underwrite defense, diplomatic, and developmental efforts to help address the root causes of radicalism and aggression and not just the violent manifestations thereof. For instance, nearly 300 airmen are deployed as members of the Iraq Training and Advisory Mission-Air Force, supporting the development of counterpart capabilities in more than 425 specialties.

Similarly, the airmen supporting the Combined Air Power Transition Force not only advise and train Afghanistan airmen, they help to set the conditions for a viable and self-sustaining Afghan army air force to meet a range of security requirements. Ultimately, these and coordinated efforts to build international partner

capabilities can help to prevent lower-intensity problems from escalating into full-scale crises.

Finally, to shape the future force, we will work to ensure readiness, training, and equipage while contending with serious budgetary pressures. Our systems and capabilities must be ever more adaptable to be employed across the full range of operations, while agile command and control capabilities ensure interoperability with our joint and coalition partners.

Flexible air, space, and cyber capabilities require resilient airmen. They are the lifeblood of our Air Force, to whom we owe our fullest commitment, and particularly our wounded warriors and their families.

During this time of sustained and frequent deployments, we will bolster our capacity to provide assistance to our airmen in both managing the obvious and the less obvious challenges of returning home from war. Since July 1, 2010, we have made progress in this regard with the establishment of the Deployment Transition Center at Ramstein Air Base in Germany, where nearly 1,200 personnel attended programs to decompress and begin a healthy reintegration into family and unit of assignment.

We intend to continue this progress. As deployment tempos remain high, we will further strengthen our efforts to develop the core components of the Air Force resiliency program and its ongoing assessment of the fitness of the force. This will inform our efforts as we continue to improve the quality of our airmen and family services and support from child education to base fitness centers to transition assistance programs.

In closing, sir, I would like to reaffirm my personal support for the efforts to better control the cost of DOD healthcare. I respect and I celebrate the service and sacrifice of our retirees. They are and always will be honored members of the Air Force family, but I do believe the current DOD proposals are both modest and responsible.

The Secretary and I are watching the crisis in Japan very closely. The Department of State has authorized the voluntary departure of family members and dependents of U.S. officials who wish to leave northeast Japan.

To date, airmen and their families are not at risk on our bases. We are working closely with the U.S. Pacific Command to ensure that they have the resources they need when they need them and will support the voluntary departure of U.S. family members to the fullest extent.

Mr. Chairman, committee members, the Air Force remains steadfastly committed to global vigilance, reach, and power for America. Thank you for your continued support of the Air Force, for our airmen, and certainly for their families.

I look forward to your questions, sir.

Chairman LEVIN. Thank you very much, General.

Let us try a 7-minute round for the first round of questioning. Secretary or General, what is the support which we are providing to the Japanese now, and what are the plans for the next few weeks?

Secretary DONLEY. Mr. Chairman, there are about 30,000 Air Force personnel and dependents in Japan. About half of those are

on the main island between the two locations you mentioned, Yokota and Misawa, in the far north.

We are bringing to bear all the capabilities that we have in Japan. We have moved capability from Kadena up to Yokota and elsewhere to support ongoing humanitarian relief and disaster assistance.

We are using C–17s and other assets to help move search and rescue capabilities from the United States to Japan. We have used both helicopter and fixed-wing airlift capabilities to move food and water, equipment, and key personnel around the main island, all in support of the local requirements as defined by the Japanese officials.

We have also provided ISR coverage through Global Hawk missions, which have helped to define the scope of the problem for our Japanese allies. Of course, we are also taking the preparatory and prudent steps to make sure that we have in place all the capabilities and accoutrements that go with radiation-related defensive measures.

The decontamination teams and capabilities are in place, if needed. The dosimeters are being distributed to forces when that is appropriate. Medical backup is being lifted into the island. So I think we are prepared for future contingencies as they might develop.

There is a continuous reading of the health situation on an ongoing basis at both Misawa and Yokota. As General Schwartz indicated, there is no threat to our personnel there, although radiation readings across Japan are spiking temporarily, based on the local conditions at the nuclear reactors involved and also the prevailing weather. There are little spikes up and down, depending on where you are, but no immediate threats.

Chairman LEVIN. Have any of those spikes been noticed at our three facilities?

General SCHWARTZ. Mr. Chairman, no, sir, they have not.

Chairman LEVIN. Okay. On the JSF delays, the testing program for the Air Force variant, the F–35A, has been proceeding ahead of schedule, and yet the 5-year defense plan cuts out 47 production aircraft compared to last year.

The Marine Corps version has had problems. They were cut as well. The Navy version was reduced by only two aircraft. So why is the Air Force making such a large reduction in the plans to buy F–35As, given the fact that the testing program is proceeding even better than expected?

General SCHWARTZ. Sir, there are a couple aspects to this. One is the way the program was sequenced. It happened that the C models, the Navy version of the aircraft, were toward the back end of the procurement cycle within the 5-year defense plan. So, there were fewer reductions simply because of the sequencing.

As you suggested, the airplane is testing well, despite the fact that we did have a generator anomaly recently that caused a temporary grounding of the fleet. This is the kind of discovery that occurs in test. But the major cause for the reduction simply was a factor of producibility and the ability of the factory to put out aircraft and not to take too much risk on fulfilling the delivery requirements.

Chairman LEVIN. On the engine issue, press reports indicate that the development costs for the F–135 engine have increased by about $1 billion since last year. That is the so-called first engine.

The Pratt & Whitney program manager has been quoted as saying that one-third of those costs are related to shortfalls in meeting specifications, two-thirds related to improvements beyond specification. So we have about a $300 million to $400 million cost overrun on that engine that is not related to improvements beyond the specifications.

What is going on? Why are we accepting those kind of cost overruns in this engine?

General SCHWARTZ. Sir, there are development issues that arise that one must deal with. I have to say that I wouldn't expect the situation with the proposed second engine to be a lot different.

The bottom line is that the F–135 engine is based on the F–119, which is currently in the F–22 aircraft. I have confidence that these developmental issues will be overcome. As I have indicated in the past, my personal conviction is that one engine is sufficient for the F–35 program.

Chairman LEVIN. I understand that. But I am talking about the cost overrun in that one engine, and why is that acceptable? Why do we not have a fixed cost at this time on an engine where these problems, at least the $300 million to $400 million of this additional billion, are not a result of any new specifications but meeting the existing specification? Is that acceptable to you?

General SCHWARTZ. It is not. I don't offer an excuse for it, Mr. Chairman.

We are moving into an era of more and more fixed-price contracts. The KC–46 is a case in point, and we understand your intent.

Chairman LEVIN. Okay. Thank you. My time is up.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

General Schwartz, last week General Clapper and General Burgess testified before this committee, and when asked, they said that if events in Libya continued as the way they were, that Gaddafi would prevail.

Given their view and the assessment of the situation on the ground today, do you agree with that?

General SCHWARTZ. Sir, my own view is that he has certain advantages; interior lines and the capacity to bring forces to bear. That is a clear advantage of those resources in Libya, which are better supplied and better equipped.

Senator MCCAIN. In recent days, they have achieved significant successes. I think that is fairly obvious, wouldn't you say?

General SCHWARTZ. They have reestablished control over larger areas in Libya. Yes, that is correct.

Senator MCCAIN. One of the ways of achieving this is through coordination of both air assets, land assets, and sea assets. Is that a correct assessment?

General SCHWARTZ. I don't have particular insight into the level of synchronization amongst their assets.

Senator MCCAIN. But factors have been control of the sea and the air?

General SCHWARTZ. Senator McCain, they have been operating in the air. That is certainly the case.

Senator MCCAIN. What is your assessment of the capability of their air assets? In other words, how many combat aircraft do they have, and how many combat helicopters do they have?

General SCHWARTZ. They have multiple tens of combat aircraft and certainly I would say in the low hundreds of helicopter rotary-wing aircraft.

Senator MCCAIN. Of those that we have seen operational, there is a relatively small number.

General SCHWARTZ. They have been flying in the neighborhood of tens of sorties a day.

Senator MCCAIN. Do you agree with General Odierno's assessment and others that we could install a no-fly zone over Libya in a matter of a few days?

General SCHWARTZ. I think that is overly optimistic, Senator McCain. But it is clear that we could establish a no-fly zone if that was the mission that was assigned.

Senator MCCAIN. How long would that take, in your view?

General SCHWARTZ. I think it would take upwards of a week to do that.

Senator MCCAIN. We would be using assets that are now in the region? I am talking about Air Force assets.

General SCHWARTZ. Sir, it would undoubtedly require resources in Europe, as well as those that are based in the United States. I would like to say, however, that, for me, the question is not can we do it, but should we? If so, how?

Senator MCCAIN. If there was a declaration of a no-fly zone, it would be a motivating factor to the Libyan pilots not to fly. Would you agree with that?

General SCHWARTZ. If the President assigns the mission to maintain a no-fly zone, clearly that would have an influence on the thinking of Libyan pilots.

Senator MCCAIN. Is it your assessment that the situation has deteriorated to the point where it probably would require more than just a no-fly zone to reverse the momentum that the Gaddafi forces have obtained?

General SCHWARTZ. Sir, that is exactly my point. The question is, is a no-fly zone the last step, or is it the first step?

Senator MCCAIN. What is your assessment of the battlefield situation at this point to reverse the momentum?

General SCHWARTZ. A no-fly zone, sir, would not be sufficient.

Senator MCCAIN. Thank you. As opposed to a couple of weeks ago, when probably it would have been.

Also, isn't it true that we do have significant capabilities to jam the communications that the Gaddafi forces have?

General SCHWARTZ. We have some capability in that regard for military communications.

Senator MCCAIN. I thank you.

In order to impose a no-fly zone and perhaps other impositions on the enemy, it would require assets from the United States as well?

General SCHWARTZ. It would, sir.

Senator MCCAIN. It would not require assets taken from Afghanistan or Iraq?

General SCHWARTZ. I would not agree with that necessarily. Again, it depends on the mission that is assigned. But there are limited ISR assets, for example. As you are well aware, we have devoted virtually everything we have to the CENTCOM AOR. There might well be some implications there.

With regard to lift, there is a limited amount of lift. There is some being allocated to the Japanese mission, some being allocated to CENTCOM, and in Libya, there would be some trade-offs involved, sir.

Senator MCCAIN. With regards to Iraq, the Iraqi Government has made it clear that they would like to develop an air force that would at least have the capability to defend the skies over Iraq. Isn't that true?

General SCHWARTZ. They have indicated as much, sir. However, they have made choices not to put the resources behind that aspiration.

Senator MCCAIN. I see. If they put the resources behind it, could they do it by themselves?

General SCHWARTZ. We believe that with appropriate training and so on, they could provide for their own air sovereignty. Yes, sir.

Senator MCCAIN. Their own air sovereignty. But training, could they do that by themselves?

General SCHWARTZ. Sir, we have a training mission in Iraq, and part of the effort would be to qualify the Iraqi pilots.

Senator MCCAIN. I guess my point is if all of the U.S. Forces are withdrawn from Iraq, I think it would, at least in the words of General Austin before this committee, be very difficult for them to stand up an air capability. Do you agree with that?

General SCHWARTZ. Presumably, there will be a training mission after combat forces exit Iraq, sir.

Senator MCCAIN. That would be necessary?

General SCHWARTZ. I believe it would.

Senator MCCAIN. Thank you.

Thank you very much, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain.

Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Thanks, Mr. Secretary and General. Good to see you again.

I want to pick up at the outset of my time on some of the questions Senator McCain asked about Libya because it is a matter of such urgency.

It was just a week ago that General Clapper, the Director of National Intelligence, responded to a question I asked him, essentially saying that over time, assuming there were no new factors on the ground and no outside assistance, that Gaddafi's forces would prevail over the opposition forces simply because they were so much better equipped, and have better logistics, command and control, and the like.

I know he took some abuse for that statement, but it is clear now that in merely the passage of a week, which was quicker than I assumed General Clapper meant, and maybe quicker than he meant,

the Gaddafi forces now have moved very rapidly and are approaching Benghazi, which was the stronghold of the opposition.

The New York Times reports today what it calls, "a striking shift in tone from the administration," produced by the prospect of a deadly siege of the rebel stronghold of Benghazi."

This is a newspaper report, but also a suggestion that the administration may now be negotiating around a resolution introduced by Lebanon, France, and the United Kingdom in the Security Council to not just give authority to impose a no-fly zone, but to authorize aerial bombing of Libyan tanks and heavy artillery to try to halt the advance of Gaddafi's forces.

This is also from the newspaper this morning. It says that administration officials, after heated internal debate, have now decided that a no-fly zone would be, "too little, too late."

I wanted to ask you, from the Air Force point of view, if asked to participate—and I will get to whether we do it with some allies in a moment—in the aerial bombing of Libyan tanks and heavy artillery to try to halt the advance of Gaddafi's forces on Benghazi, how soon that could be carried out if authorized, and how it would compare as a mission to imposing a no-fly zone both in terms of its feasibility, the risk, et cetera.

General SCHWARTZ. First of all, a mission as you describe it, were it to be assigned, would require preparation of the battle space. That is, sanitizing ground-to-air threats to the various aircraft. That clearly would require both electronic and kinetic action against air defense systems.

With respect to interdicting ground targets, that is certainly within our capability to do so with precision. In non-urban areas, that certainly is a capability that we have. We can do it in urban areas, but clearly with the concerns about collateral damage and so on.

Senator LIEBERMAN. Right.

General SCHWARTZ. I think the key thing here is, we, as the uniformed military, are planning. We are working to provide the civilian leadership with options, and ultimately, the President will decide what he wants us to do.

Senator LIEBERMAN. Understood.

General, Secretary Clinton said yesterday that a turning point of the administration's consideration of what its options were and what it might do with regard to Gaddafi's advancing forces was the Arab League resolution over the weekend calling for a no-fly zone.

I know, and you know better than I, that some of our allies in the Arab world have impressive air assets and capabilities. Have we begun at all to discuss with our Arab allies the possibility of them working with us in either of these options—the no-fly zone or some other use of air power—against Gaddafi in Libya?

General SCHWARTZ. Senator, I have not done that. That would be within the realm of CENTCOM and U.S. Africa Command. So I cannot give you a definitive indication whether that has occurred. But I agree with you that there are nations within the Arab League with capable air forces that, under the right circumstances, might be brought to bear.

Senator LIEBERMAN. I appreciate those answers very much.

I am going to go to a very different kind of question, which may be relevant to what we are talking about, and that is one that I have been interested in, which is the Joint Surveillance Target Attack Radar System (JSTARS) program.

General, in earlier testimony before this committee, you stated that your Ground Moving Target Indicator analysis of alternatives (AOA) would be used beginning for fiscal year 2013 to guide Air Force investment in ISR weapon systems like JSTARS, which have this remarkable capability to chart what is happening on the ground and then advise our troops.

You also stated that the report would be ready at least in interim form by this spring, and I wanted to get a progress report from you on how that is doing.

General SCHWARTZ. Sir, the AOA is on track. Preliminary information is coming up from Air Combat Command, where the people are working on it. It will be in final form in the fall.

Senator LIEBERMAN. So you would say it is pretty much on schedule? Okay. I appreciate it.

I just would add by way of advocacy, from what we have heard, JSTARS continues to be doing well in supporting our troops in Southwest Asia and has been called into action in recent months in other trouble spots around the world. Does that sound right?

General SCHWARTZ. Ground Target Moving Indicator capability is an important part of our surveillance repertoire.

Senator LIEBERMAN. Right.

General SCHWARTZ. The real question is how do we go forward? You can depend on us to maintain the current JSTARS capability until and if we decide to migrate to another capability.

Senator LIEBERMAN. Thank you. My time is up. Thank you both very much.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman. I appreciate it.

General Schwartz, you indicated that when the chairman was questioning the overruns, that there is no excuse for the overruns, the $300 million. But what are you doing about it?

I mean it is great not to have an excuse, but what actually is happening? Is there any type of recourse? What is the conversation? Where do we go?

Either one.

Secretary DONLEY. I think Admiral Venlet has outlined this in his testimony a little bit. I would defer to that, if we can get you a more specific answer for the record?

Senator BROWN. Okay. Yes.

[The information referred to follows:]

$893 million was added to the F135 program to complete System Development and Demonstration (SDD) as a result of the Technical Baseline Review (TBR). The TBR recommended adding $131 million for cost growth of previously planned content, $342 million for risk reduction measures, $341 million for the manpower and engines necessary to extend the flight test schedule by 2 years, and $79 million for management reserve. The TBR did not recommend changing the propulsion specification; therefore there is no funding for improvements beyond the specification.

Cost growth refers to increases in the cost of work previously agreed to by the contractor, generally due to suboptimal performance. Risk reduction measures refer to items that were previously removed from the program but are now being put

back in to ensure the development program will complete on time with minimal risk.

Secretary DONLEY. The Joint Program Office is managing this program.

Senator BROWN. I am just reflecting on the comments that General Schwartz made that there has been no excuse. You were just talking about it and saying you didn't ask the chairman to refer to another report. So I would like to kind of know what is being done about it.

General SCHWARTZ. Clearly, the folks that are managing this program are focused on that to make sure that the contractor delivers what the contract requires. It is my understanding this is not a fixed-price contract. So there is some room there for developmental issues and a cost share between the Government and the contractor.

The key point here is that we, as customers, need to be demanding. We need to write the right kind of contracts. We need to make sure that the terms are enforceable, and that certainly is our conviction as an Air Force.

Senator BROWN. In light of the recent delays in the JSF program, not to mention the cost overruns in the F–135 engine program, we have seen positive results from competition in the Navy with some of the projects that they are working on, and it does work. I hear it regularly. I was just at the Army breakfast this morning, and they were talking about competition, and et cetera, et cetera.

Do you have any comments on the competition when you have one engine that is being overrun with costs and delay, and you have another one that is ahead of schedule and under budget? Do you have any comments on that at all?

General SCHWARTZ. I am not sure that I would agree that the other engine is under cost and so on.

Senator BROWN. But what about the concept of competition?

General SCHWARTZ. The concept of competition certainly is valid, as the KC–46 outcome demonstrates. But I think I would make the one case, sir, that the issue is current or near-term cost versus future soft savings. In the situation we find ourselves, while competition may, in fact, have benefits down the road, the question is what can we afford to do now?

Senator BROWN. Okay. The Air National Guard (ANG) and Air Force Reserve have played an integral part of the war effort. The Air Force Reserve mans 14 percent of the total Air Force, but only constitutes 6 percent of the total Air Force personnel budget. Obviously, these figures represent significant cost savings and really a good bang for your buck.

With the Reserve components being such an effective and cost-efficient component, can you comment on the types of roles and responsibilities that will be expected among the ANG and Reserve over the next 3 years?

General SCHWARTZ. There is virtually no mission or very few missions where the Reserve component does not contribute in our Air Force. From kinetic missions, fighter, airlift, space, and cyber, there isn't a mission where our Reserve components don't contribute. We certainly value that contribution.

Senator BROWN. On the C–5Ms, I am just curious as to your thoughts on the performance thus far, in light of the ongoing Reliability Enhancement and Re-engine Program (RERP). Since the Air Force is likely to have a number of C–5As in service for the next 30-plus years, does it make sense that that inventory in the ANG and Air Force Reserves should also be included in the modernization effort?

Secretary DONLEY. Sir, I think the Guard and Reserve are included in the modernization of the C–5M. It has performed very well, and it is going to be part of our inventory going forward. It has provided a lot more operational flexibility and reliability to what is inherently an older airframe. So the C–5M has been a successful program for us.

Senator BROWN. I am not sure if you are aware, I am going to be the ranking member of Airland Subcommittee with Senator Lieberman, and I am looking forward to working on a lot of these issues. I appreciate your time.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator Brown.

Senator Akaka.

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

Mr. Secretary and General Schwartz, thank you so much for your service to our country. Under your leadership, the Air Force has secured the Nation's nuclear arsenal and restored public confidence.

I know the Air Force's operational tempo has been high, and I want to thank the men and women of the Air Force, and their families as well, for their sacrifice.

General Schwartz, deployed airmen performing the search and rescue mission play a critical role in saving lives. They completed over 9,700 personnel recovery sorties in 2010 alone, and their expertise makes the goal of the golden hour medical evacuation a reality.

Can you talk about the casualty evacuation mission and how the rescue assets are holding up to the harsh environment we face?

General SCHWARTZ. Senator, our combat rescue community is one of those communities in greatest demand that has essentially a 1-to-1 tempo, time at home to time deployed. They are, in fact, contributing to the Secretary of Defense's mandate for recovery of our wounded within that golden hour.

They are a very capable force, and clearly, this is a core mission for the Air Force. That is personnel recovery operations in denied areas. That is our special expertise. To have the right kind of medical capability onboard to stabilize patients and to get them back to higher-level care.

We are in the midst of replacing combat losses. Of note, we had 19 HH–60 aircraft in 2010 that sustained battle damage. We are replacing, through the operational loss replacement program, some aircraft which had been total losses. We are looking forward to the HH–60 recapitalization program to move to a successor platform for the rescue mission.

Senator AKAKA. We thank you so much. Certainly, the program has saved many lives.

General Schwartz, the Navy recently completed a critical design review for a maritime surveillance RPA and a realized cost and

schedule savings in research and development (R&D) by leveraging the thousands of hours flown by the Global Hawk. Do you foresee future opportunities for joint acquisitions, operations, maintenance, or training in the RPA arena to find efficiencies?

General SCHWARTZ. We certainly do, sir. Global Hawk and the Navy equivalent program, Broad Area Maritime Surveillance (BAMS), is just a case in point, and not the only one, where the fundamental question is why should we have two different depots? Why should we have two different training pipelines or even, for that matter, based at different locations?

In fact, we will probably base both BAMS and Global Hawk at Sigonella in the European theater, as an example of our putting these things together. Certainly, we shouldn't have two different ground stations.

Gary Roughead and I are committed in that area and others, in part as a result of our effort on air-sea battle, to make sure that where we have these synergies, we maximize them. BAMS and Global Hawk is just a very good example.

Senator AKAKA. Thank you.

Secretary Donley, DOD spends about $16 billion a year for fuel, with the Air Force as the largest military consumer. The C–17 was recently certified to use biofuels. Can you discuss any preliminary results and any plans for biofuel usage in other aircraft?

Secretary DONLEY. The Air Force has had a comprehensive program for the last several years to make sure that we certify engines on all our Air Force platforms for alternative fuel blends, whether it be from Fischer-Tropsch processes or from biofuel processes. So, we have been stepping through that certification program.

The issues in front of us, I think, now more relate to the national marketplace and who will be the producers and what will be the supply chain that feeds alternative fuels as a cost-effective alternative, which we can pursue in the mid-teens. So I think that is the primary challenge in front of us.

We are, as you suggested, the largest consumer of fuel in DOD. From exceptional efforts in fuel management and in changes in operations, we have been able to reduce our demand over the last several years by about 2 percent.

So the number of gallons used has gone down, but the cost has continued to go up. This is a continuing challenge. We also have a number of efforts underway at the installation level as well, in addition to aviation fuels, to get more renewable energy into our bases.

Senator AKAKA. Secretary Donley, 35 percent of the fiscal year 2012 budget request will be dedicated to quality of life projects, including dorms, training facilities, and child development centers. My question is what are the top three family issues that you are trying to resolve with the budget request?

Secretary DONLEY. Sir, as you suggest, we have a number of programs underway. We have used the Year of the Air Force Family, which really is over the last 15 months or so, to help refine our programmatic focus going forward.

We have started to not just support sustaining programs, such as you have mentioned—the dormitory modernization program, the

child development centers, manning the child development centers, and getting the hours of operations right—but we have started to fine-tune where we put the limited, marginal dollar to help with family issues.

One example is our Exceptional Family Member Program, where we have airmen and families with exceptional needs and also focusing on school liaison support, which is so vital to airmen and their families, providing for education for their kids. Those are a couple of areas that we are focusing additional attention on.

Senator AKAKA. Thank you very much for your responses.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator Akaka.

Senator Ayotte.

Senator AYOTTE. Thank you, Mr. Chairman.

Secretary Donley, General Schwartz, it is an honor to be here with you. I have a particular affinity for the Air Force, given that I am married to an A–10 pilot. So it is really an honor. Thank you both for your distinguished service to our country.

I wanted to mention up front that I also had the privilege of attending the Army breakfast this morning and then hearing both of your comments about where we stand right now with the continuing resolution, that I would like to say that I hope that leadership within the Senate and also in the House brings forward funding for the rest of the year for a defense appropriations.

We are at a time of war. I heard loud and clear what you had to say today. I know that members of this committee are very concerned about this as well. But please know that we want a full-year defense appropriation for the rest of fiscal year 2011 to come forward.

Thank you for bringing those comments forward to let people know what the consequences are of having these short-term resolutions when we are at war.

Understanding that it was a long and arduous process with lessons learned along the way, I would like to congratulate the Air Force on recently completing the tanker competition. The fact that the European Aeronautic Defence and Space (EADS) company has decided not to contest your decision I think is a testament to the quality of the process that you followed during this bidding round. So thank you, and that was a very good thing that they decided not to contest what had happened.

In your posture statement, General, you rightly state that the new air refueling tanker remains the top acquisition and recapitalization priority for the Air Force. The current fleet of Eisenhower-era KC–135s are averaged over 48 years old, and they are long overdue for replacement.

Without refuelers, you can't run your fighters. You can't run the rest of them. So it is so integral to the Air Force.

General SCHWARTZ. Or a no-fly zone.

Senator AYOTTE. Exactly. Some of the key missions that we need to accomplish.

I am aware that you are now in the process of the early stages of the strategic basing process that will determine where the KC–46A will be stationed. I wanted to ask you about that. I am sure you are aware we have the Pease ANG that is a very vital part of

the KC–135 mission and has a very close proximity to air fueling tracks and also has run those missions very cost effectively.

I wanted to ask you, I know that you haven't announced the criteria yet, but will that criteria be merit based and on proximity to refueling air tracks? How do you anticipate that process coming forward and what will the timing be for announcing those criteria?

Secretary DONLEY. We will start to look at those criteria later this year. I will say this is a multi-year process, and I think General Schwartz and I have been very clear from the beginning that we don't want to get too far out in front.

This is a 179-aircraft program. It will take over a decade to play out. We do not want to commit too far in advance to future basing and tie the hands of our successors or the operational commanders who will benefit from this capability later.

Our plan is to look at the first bed-down issues later this year, and we will do those on a couple of year increments at a time, slowly building up the basing decisions. Obviously, we will want to take advantage of the capability of the aircraft and understand how it differs and will perform differently than the KC–135s. We will also look to Air Force operational needs and also the needs of the regional combatant commanders and how they define those requirements.

So there are a number of tanker bases that are interested in being the first on the block, if I may put it that way. We understand that. We will work through this process very deliberately, as we have in previous bed-down decisions.

Senator AYOTTE. I appreciate that, and you know we are very proud of the work that Pease is doing. I hope that you will consider, of course, that what we want is a transparent, merit-based process. I think that is what everyone would hope in how you make your decisions.

I hope that you will consider, and I assume you would just based on cost effectiveness, the proximity to air refueling tracks.

Thank you.

Secretary DONLEY. Just to respond again, this is a multi-year process. There are 179 aircraft for this KC–46 program, plus we will probably have roughly 200 more tankers to be modernized in the mid- to late '20s and beyond. So this is a long-term proposition.

The point I would like to leave with you is that even as we make the first decisions about where the first airplanes will go, it is not a reflection on the value that we put on the refueling mission at the locations in which they are now serving. It is a little bit like the F–35 decisions we made last year, where we announced just the first few bases. But our intent is to buy over 1,700 JSFs. Eventually, we will get those fighters bedded down at fighter bases around the country. The same with the refueling capability, I think.

So if you are not the very first, please don't take that as some context of some negative ranking of some sort. This is going to take a while to field this capability across our Air Force.

Senator AYOTTE. Thank you. I do appreciate it. I know that the process will be open, and it will be merit based. I think that is all that we can hope for in how you make your decision. I appreciate that.

Senator Brown and I are sponsoring a bill. It involves giving the authorities in Afghanistan an opportunity to terminate contracting funds as soon as possible whenever we learn that the contractor is collaborating with the enemy or, in other words, working to undermine our mission there.

One of the issues that came up is that CENTCOM has asked at least twice for additional contracting officers for Afghanistan to be able to perform oversight over those contracts, which is going to be key, with our legislation, to give you the tools you need to make sure the money gets in the right hands. I wondered what the status was of the Air Force officers because, as I understand it, those contracting officers are a very important piece of that oversight.

General SCHWARTZ. Ma'am, we are providing roughly 70 percent of the joint contracting capability. So we have a major piece of this.

One of the two flag officers in CENTCOM is an Air Force brigadier. So we have a stake in this. Our people understand the mission, and we are truly all in at 70 percent of the workload.

Senator AYOTTE. Thank you, General. I appreciate that.

If there is feedback that you have and tools that we could provide you to make sure that you have the ability to terminate funds to contractors where the money shouldn't go, so it doesn't get in the hands of our enemy, I know that I am very interested and Senator Brown is, as I am sure others are, in working with you to make sure that you have the tools that you need.

Secretary DONLEY. We would be happy to provide comments on that legislation.

[The information referred to follows:]

We have reviewed the proposed legislation S.341.IS, titled "No Contracting with the Enemy Act of 2011." The proposed legislation prohibits the awarding of Federal contracts to enemies of the United States and provides that any Federal contract with an enemy of the United States shall be null and void and may be immediately terminated or rescinded. The Air Force agrees that we should not award contracts to enemies of the United States.

The Federal Acquisition Regulation (FAR) provides uniform policies and procedures for acquisitions by executive agencies of the Federal Government. FAR Part 49 covers termination of contracts and provides the contracting officer policies and procedures relating to termination of contracts.

Another safeguard was incorporated in the Department of Defense FAR Supplement in January 2009. DFARS 252.209–7001 states "In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense." The Air Force will continue to award contracts in accordance with the FAR and its' supplements.

Senator AYOTTE. Thank you. My time is up. I just wanted to thank you both for your distinguished service to our country.

Chairman LEVIN. Thank you, Senator Ayotte.

Senator Nelson.

Senator NELSON. Thank you, Mr. Chairman.

Let me add my appreciation for your service, and all the men and women wearing the Air Force blue, supporting all the efforts around the world.

This is to both of you, Secretary Donley and General Schwartz. For a number of years now, the need for a U.S. Strategic Command (STRATCOM) new headquarters has been understood and has become more apparent as time has gone by with the deterioration of

the building, I think, but also with the inadequacy of the building for the current mission of STRATCOM.

The deterioration is well known, but what I would like to do today is focus on how a new headquarters will facilitate the changing nature of the mission of STRATCOM in today's complex world, consisting not only of traditional military operations, but also with cyber, and with space.

Secretary Donley, I know you were just there recently, as we got together, please consider this area and explain why you think it is necessary. Then, General Schwartz, maybe you could give us more of the detail on what the new command operation will be and why a new facility is necessary for that?

Secretary Donley?

Secretary DONLEY. Sir, the new STRATCOM headquarters is one of our largest and most important military construction (MILCON) projects. The committee has seen that material before, and we continue to stand behind the need to get on with that work. The recent flooding that we had at the STRATCOM headquarters has only reinforced that need.

We have had the discussions, as you suggest, with both General Chilton and now General Kehler, about the changing nature of the requirements at that headquarters. One of the things that had evolved at Offutt Air Force Base (AFB) was that the headquarters was designed for a very different period, decades ago.

We are focused on the nuclear mission, of course. But in the intervening years the capability to support the space mission and now to support the cyber mission assigned to STRATCOM has evolved ad hoc in various buildings and locations on site, and the new headquarters will give us the opportunity to build and integrate some new capabilities that we have not had there before.

I know STRATCOM is looking forward to this opportunity. There are additional resources that will be required for the fitting out of the facility later. It is not inconsequential. It will require lots of information technology (IT), as you understand.

Senator NELSON. General Schwartz?

General SCHWARTZ. I would just reinforce that STRATCOM has become increasingly an IT, cyber-intensive mission, and the building simply was not designed for that. It was designed in an analog age. We, as an Air Force, certainly are committed over several years with substantial MILCON in the hundreds of millions of dollars in order to see that through.

Senator NELSON. Thank you.

A major argument for the new tanker that has been described is the 1960s vintage KC–135 airframes are wearing out. A lot of our ISR capability is on that same airframe, including RC–135s, which are operated by the 55th Wing at Offutt AFB.

Are the RC–135 airframes showing the same kinds of issues as the KC–135s?

General SCHWARTZ. Senator, in general, no. They tend to operate in a somewhat more benign environment and with weight distribution that produces less fatigue on the airframe compared to the air refueling mission.

But they are still older assets, and ultimately, we will have to recapitalize those machines. Although that is not in the near-term

horizon for us, we will have to look at that seriously. Perhaps the KC–46 airframe will be a candidate for that, as the 707 was. But that is a choice to be made somewhat down the road.

Senator NELSON. While it is not a current issue that has to be decided at the moment, it is something that the Air Force is considering in the longer term, recognizing that we don't want to get to that date without a plan in place. Is that accurate?

General SCHWARTZ. That is certainly the case, sir.

Senator NELSON. The next generation tanker contract has been awarded, and I congratulate you on that, do you have any estimated timeline, a strategic vision for how the ANG units that have KC–135s might be rolled into the fielding plan?

I heard what you said to Senator Ayotte. But I am wondering, as it relates to National Guard units, is there a plan for fielding that you are considering?

Secretary DONLEY. Sir, as we go through this process very deliberately, we will work the Guard and Reserve capabilities into this and the overseas capabilities required as well. As we have done and we will continue to do on the JSF, for example. Our initial decisions on the JSF included the Guard, and I would expect we would take a similar approach as we field the tanker.

Senator NELSON. Changing direction just a bit here, I think everybody is familiar with the Government Accountability Office (GAO) report that was just issued earlier this month on March 1. It details the opportunities to reduce potential duplication in Government programs, and of course, GAO continues to look for those areas of duplication.

It reported the findings it made to Congress ever since 2005, that there is negative duplication of efforts among the Services in the efficient use of ISR capabilities. In the fiscal year 2012 budget request, the Army has requested $1 billion to buy 36 MQ–1 RPAs, and they plan to operate 133 of these aircraft by 2015. The Air Force has requested $1.4 billion to purchase 48 MQ–9 RPAs as part of its program, that will spend $7.4 billion on 396 MQ–9s over that same period.

They are very similar aircraft; they are medium altitude, long duration, and remotely piloted. Is the Air Force working jointly with the Army, trying to avoid unnecessary duplication and costs that come from unnecessary duplication, research, development, and in the planning stages?

General SCHWARTZ. Senator, absolutely. I think the key point here is that this has been a growth industry. The Army and the Air Force apply these assets in somewhat different ways. Their Predator equivalents tend to be organic brigade combat teams. Ours, on the other hand, are more theater-level assets and are applied through the process in terms of tethered operations, that are line of sight. We clearly operate our birds from positions here in the continental United States.

It is a different application and a different approach to processing the data stream and so on. The bottom line is there is plenty of work to do here, as is reflected by the demand on these assets, that we went from 32 to 48 and now to 65 Combat Air Patrols (CAP). I think DOD clearly has a focus on not allowing pockets of

capability to develop that are not accessible for combatant commander use.

But, like with the Navy, we have a commitment with the Army to try to minimize the expense, standardize the ground stations, and so on and so forth.

Senator NELSON. The standardization where standardization can work should be an economic efficiency as well. But, obviously, we want to have the diverse capabilities that are required by the aircraft, and we need to accomplish that as well.

So I hope as these programs continue and the use of this airframe develops even greater that we will continue to work together to make sure that we don't have unnecessary duplication and have coordination wherever it works.

Thank you, Mr. Chairman.

Thank you, gentlemen.

Chairman LEVIN. Thank you, Senator Nelson.

Senator Sessions.

Senator SESSIONS. Thank you, Mr. Chairman.

We thank both of you for your service to your country. I have gotten to know both of you, respect you, and know how hard you work to try to do the right thing for our country.

I would like to ask a few questions about the tanker competition, since the loser would have built that aircraft in my hometown of Mobile, AL. I don't think that disqualifies us in this body to ask questions. In fact, I think other Senators expect those of us who have an interest in it to raise those questions and make sure that everything is handled in an up-and-up way.

I would congratulate you on the fact that the bids came in low, that the Air Force got a lower cost. I won't go into detail, but I remain convinced that the criteria that were changed when this administration took office too much reduced the advantage the more capable aircraft would have.

In other words, you made it a price shootout, but if you buy an automobile, just because they have seats, tires, windshield wipers, and an accelerator doesn't mean they are the same. It is the same with aircraft. I am confident the Alabama aircraft would have been more capable. Besides that, now that the bid has been awarded, some people are anxious as to how it may be supervised in the future, and they want to see integrity in it.

Secretary Donley, isn't it a fact, when you have essentially a commercial aircraft and people give a firm fixed-price bid, that the Air Force expects them to produce on that bid? Unlike in a development situation where maybe extra money has to be paid because difficulties occur in development, this bid put the burden on both bidders to honor their bid, and if they have difficulties, it is their own problem, and they have to pay for it out of their money. If that principle is violated, it actually violates the integrity of the bid process.

Secretary DONLEY. Yes, we have a much stronger contract structure for this program, and that was one of the changes we made in the request for proposal (RFP), to move from cost-plus to fixed-price incentives across the program.

Senator SESSIONS. My question, though, was, isn't it now incumbent on the Air Force that you require this winner to fulfill the

competition, and if they are given change orders or other kinds of advantages in the months and years to come, it would violate the integrity of the contract that has been awarded?

Secretary DONLEY. We have had that discussion internally. The discussions with Boeing on the development program just started this week, but we have already discussed within the Air Force the need to not only execute the program as planned on a timely schedule and within the costs that have been allotted, but that we hold the contractor to the terms of the contract and the plan and the RFP as we have outlined it.

Make sure that we have a very tight control over any changes that are made in the Air Force, that we elevate that absolutely to the highest level and make that very, very, very difficult to change our plan for the way forward on this program.

Senator SESSIONS. General Schwartz, would you comment on that as to how you want to ensure that the winner complies with the terms of the bid?

General SCHWARTZ. This is by watching microscopically what occurs to make sure that at every level there is interaction to make sure that the offerer delivers what he promised.

As the Secretary suggested, the level of approval for engineering change orders is not going to be at the program office level. We haven't decided where it will be yet. It might be at our level. But the bottom line is we intend to maintain discipline on this like you expect.

Senator SESSIONS. Thank you very much. I appreciate that.

General Schwartz as the representative of the warfighter, the airmen who fly these planes, isn't there some tension between purely the lowest bid price and the quality and capability of the aircraft that the Air Force is looking for?

Don't we have to be sure in the future that when we bid these contracts that we also provide some mechanism that enhanced capabilities are given some credit so that you get the best buy, not just the lowest price?

General SCHWARTZ. Senator Sessions, I would argue that this was a best value approach.

Senator SESSIONS. Well, just talk about that general principle.

General SCHWARTZ. Sure. I think what we want is value, absolutely. I think we got that, sir. What we ended up with, we looked at the capacity of the machines to carry fuel, to offload and so on. We looked at their cost effectiveness over a period of years. We obviously looked at price as well.

But the bottom line was there was a synthesis of that, and in the end, there was a substantial difference, as you are aware. So, yes, value matters. But I think it is important that the Air Force have that opportunity to define how value is measured and to make sure that the offerers understand that explicitly so that we can avoid protests and so on.

Senator SESSIONS. I appreciate that.

I would just note, Mr. Chairman, that you and Senator McCain deserve credit after the ill-fated lease deal. I don't know how many billion dollars the Air Force will save as a result of this competition, but it is billions, and it was a fierce competition. Both people went as low as they could go.

Does anybody have an estimate of how much the United States benefited by having this competition?

Secretary DONLEY. No, sir, I don't think we have an exact number here. But if you provide a specific question here, we would be happy to try to answer it.

Senator SESSIONS. General Schwartz, you have any idea?

General SCHWARTZ. It is in the billions.

Senator SESSIONS. Well, I remember the first GAO report showed $7 billion. I remember saying that you refer to the $6 million man, but I could describe Senator McCain as a $7 billion man. But actually, it has gone beyond that, and I think the leadership of the committee in a bipartisan way moved this forward. I just do believe that an Alabama EADS aircraft on every objective criteria was at least somewhat better, in some areas significantly more capable than the other.

Can you tell us what the bid price was? We have heard general numbers, but I would like to know what you can tell us about that.

Secretary DONLEY. I am not in a position to do that. I can tell you the value of the engineering, manufacturing, and development contract, which was the contract that was signed, was $4.4 billion.

Senator SESSIONS. For how many aircraft?

Secretary DONLEY. Those are for the first four airplanes.

Senator SESSIONS. What do you expect per copy the aircraft will be, say, when the first tranche is completed?

Secretary DONLEY. I think it still depends on some options that are to be exercised. Let me get you a number for the record on that. The requirement is the first 18 aircraft by 2017.

[The information referred to follows:]

The Office of the Secretary of Defense and Air Force representatives have met with congressional defense committee staff on several occasions to provide source selection and proprietary information since the contract award, and are willing to brief you on the bids at your convenience.

Senator SESSIONS. Thank you for sharing these comments with us. I still want to know more about it and will be looking at it.

We just feel like when I was a U.S. attorney and had to be involved with some city and government bid contracts, and favored people would bid low. They would get the contract, and they would get change orders and make a lot of money. A lot of good and decent contractors quit even bidding, they told me they were not going to fool with them. They would be mistreated.

So, you have to maintain the integrity. You can't just let the person get a low bid and then run up the price in the years to come. Otherwise, you will undermine any ability to get the kind of competition that you need.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Sessions. Thank you for pointing out the value here of competition, which has clearly produced some real gains, and also the importance that this not be a buy-in.

Senator SESSIONS. Mr. Chairman, let us just say one thing that is put on the table. EADS is a European ally of ours. Europe is an ally in so many ways. They buy more military equipment from us than we buy from them. They were the only possible competitor to the Boeing aircraft. So to have competition, we had to have that.

Then for people to come in and say, "Well, they can't bid," when they were going to build the aircraft in the United States using American workers, to me, didn't reflect an understanding of the nature of this competition. So, I would just share that.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much.

Senator Udall.

Senator UDALL. Thank you, Mr. Chairman.

Good morning, gentlemen. Thank you for your service.

I did want to point out that in Colorado, we are very fortunate to have so many outstanding Air Force units and personnel, including the Air Force Academy.

General Schwartz, I know you are aware of some controversy about plans for a low-altitude navigation training corridor in southern Colorado. I just want to, for the record, say that I know we are going to be able to work through these issues together. To you, Mr. Secretary, as well.

Let me turn to computer and cyber networks. I am concerned about vulnerabilities there. I would want to acknowledge that the 24th Air Force was activated last October, and we have just graduated the first class of cyber space operators. I think in a few years, we will look back and say, "Boy, that was a historic event."

Like you, I want to make sure we have the right kind of recruiting pipeline that will bring young Americans into the military, and I understand some of those students aren't traditional Air Force recruits. Could you talk about cyber recruiting programs and how you are bringing bright young computer scientists into the cyber security world?

General SCHWARTZ. Sir, there are a couple of aspects to this. Certainly, as you indicated, we have 24th Air Force, which is our component of the U.S. Cyber Command, and they provide the expertise and the wherewithal to monitor our networks, to secure them, to maintain them as hard as we need to, and to respond to developments within the network, either manmade or otherwise.

We have transformed the training for the folks that do this work. It is more technical. It certainly is more digital, and it is bringing folks on that certainly understand these things better than my generation did. The first class out of Keesler is a case in point, and certainly that will continue.

I think the other aspect that is important here is that we need to provide venues how the most capable Americans can help us with this work. DOD does not lead in cyber. This is largely something where the commercial world is pushing the envelope.

So, the Secretary has made it possible for our National Guard and Reserve to recruit folks who are current in the discipline, who do this work on a daily basis, but that are willing to serve and share their expertise with the Service. So that is the other aspect of this, which is to bring professionals who are current in the industry onboard through the Reserve and the National Guard to also support our mission.

Senator UDALL. Mr. Secretary, do you have anything to add?

Secretary DONLEY. Specifically, we have been building Reserve component units in the Silicon Valley area and in the Northwest.

I would like to go back just to foot-stomp the very important point you made not only about the standup of 24th Air Force last year, but the creation of new career fields for these disciplines, which collapsed several functional specialties in a way that provides for the long-term continuity of this workforce into the future.

I would say we are also working with outside groups like the Air Force Association, which has sponsored cyber patriot programs focused on youngsters in high schools. Certainly, it is that generation that is, in a sense, also leading the way in terms of cultural and technological changes, the abilities to multi-task, et cetera. But, we are seeding the pipeline with some very important capability for the country going forward.

Senator UDALL. Somebody said recently, "digital, baby, digital," and that is what I hear both of you saying.

Let me turn to space situational awareness. We have vulnerabilities. We have significant new capacities, and these capacities have taken on real importance for our warfighters and our security.

We are home in Colorado to Air Force Space Command, and I want to make sure we defend those assets. I understand that the funding for improved space situational awareness, space control, and counter-space is approximately 27 percent lower than last year. If I could, I would direct three succinct questions to you.

Does that reduction reflect a decrease in focus on space situational awareness? How will the activities that you are funding in fiscal year 2012 affect the vulnerability of our space assets? Perhaps most importantly, I know, to you both and many of the rest of us, should we expect service disruptions to troops on the ground?

Secretary DONLEY. A couple of points, sir. The funding change that you notice in the fiscal year 2012 budget is the result of one programmatic adjustment, a large programmatic change that we made.

The Space-Based Surveillance System, which was launched just last year, had a second bird coming behind it. We decided to terminate that. We did not think the cost was worth the benefit in that case. But we have a requirement to come back and develop alternatives for a way forward with respect to that specific program.

At the policy level, I would like to take this opportunity to reinforce the importance of the space domain, both as reflected in the National Security Space Strategy, which has just come out recently, and in the Air Force's response to that work. Space situational awareness and space protection work, which has been done by both Air Force Space Command and the National Reconnaissance Office, are really new missions for the space domain, areas of our work here that we did not have to worry about 10, 20, or 30 years ago.

We have always had communications, weather, ISR assets, and missile warning. These kinds of missions have always been part of the space domain. But space situational awareness and space protection are of growing importance and represent new work for us.

So there is a lot of emphasis. There are resources going to this, and it is getting a lot of attention in the Air Force.

Senator UDALL. The Air Force is clearly undergoing some significant changes. I want to salute you both for your leadership in

meeting those head on. Change can be both rewarding and challenging, and count on me to be there with you as we meet what I see are many, many opportunities to enhance our security and protect the warfighter.

Thanks again for your service. Thank you.

Chairman LEVIN. Thank you, Senator Udall.

Senator Chambliss.

Senator CHAMBLISS. Thanks, Mr. Chairman.

Gentlemen, let me echo the sentiments of my colleagues in thanking you for your leadership of the U.S. Air Force.

General Schwartz, I think you pretty well responded in sufficient detail to Senator Lieberman on the JSTARS issue. But I take it from your comment, when you say that irrespective of what the AOA study comes out, that you are going to maintain the current JSTARS platform going forward. Which I am taking your comment to assume that on the reengining issue, which I have dialogued with both of you about over the last several years, is going to continue to be maintained as it is currently funded and will be funded in the future.

General SCHWARTZ. Sir, as we made the commitment, we certainly will fulfill the guidance we have from DOD on the four ship sets. As you are well aware, there is an appropriations issue in this respect in 2011, and hopefully, that is addressed in the coming weeks.

Senator CHAMBLISS. Right. To both of you, Senator Levin mentioned this issue of weapon sustainment in his opening remarks, and I want to echo his concerns here. We are flying airplanes more than we ever anticipated. We fly them, whether it is a tactical aircraft, transport, or whatever, and we are fast wearing those airplanes out.

We have three excellent depots in the Air Force that are providing the kind of maintenance we need to have done on those airplanes. But frankly, because of the workload demands coming from the customer, we have a backlog at every depot right now.

I notice that you are only funded currently at 84 percent of your requirement. At first glance, this doesn't seem to be a step in the direction of getting ourselves healthy in this arena. Because we have these backlogs, why are we not funded at 100 percent of the requirement?

Secretary DONLEY. Sir, we cannot afford to put the resources against what would be 100 percent of the requirement. Just in the last budget cycle, for example, just to stay even with growing demand, the initial estimate was that it would cost us an extra $7 billion across the FYDP to fund a continuation of capability at 80 or 82 percent, roughly.

It is not just the older aircraft that are challenging us in this respect. We are also taking ownership of new aircraft for which we are relying on lots of contractor support. So these will be new deliveries of C–17s, new deliveries of F–22s, the MQ–1s and 9s that are coming on board, and the MC–12, for example. But all of these are heavily reliant on contractor support, and the cost of supporting those incoming aircraft has gone north very quickly.

We are very interested in restoring materiel readiness to the fleet. There is no question that we have challenges there, and we

are concerned about them. But we also need to push the logistics and support community to make sure we are getting the best value that we can.

We need to work through the issues of overtime. We need to work through the issues of supply chain in the depots so that we get more efficient in this work and we drive harder bargains with our contractors as well. But there is no question that we need to get materiel sustainment north of where it is today.

Senator CHAMBLISS. You mentioned that supply chain issue. Of course, we made a change in that chain and incorporated the Defense Logistics Agency (DLA) to provide the parts, which sounds like a good idea. But very honestly, we know we have had some significant problems there.

If folks can't have the part in hand when they are ready to put that part on the airplane, then our folks wind up sitting around, waiting on delivery of the parts. Where are we with respect to improving that transition to DLA?

General SCHWARTZ. Admiral Thompson and I have had that conversation eyeball-to-eyeball.

Senator CHAMBLISS. Good.

General SCHWARTZ. We are relying on him to allow us to do the organic work that needs to be done. Just as you suggest, Senator, if the part is not in the bin when it is needed, it results in change work, which is more expensive. So I have expressed my expectation to him on exactly what is required.

Senator CHAMBLISS. I hope you will stay in touch with us on that. From a policy standpoint, however we need to be engaged, we stand ready to do so.

Secretary Donley, in a recent hearing, Lieutenant General Shackelford indicated that the Air Force is leaning toward a competition for the Common Vertical Lift Support Platform helicopter acquisition program. Can you confirm that there will be a competition and that any competition will be fair and allow commercial, off-the-shelf, nondevelopmental products to be considered? Will overall acquisition and life-cycle cost also factor prominently in the Air Force's decision?

Secretary DONLEY. Sir, the Chief and I are going to get the acquisition strategy on vertical lift later this month. I am absolutely sure that competition will be involved in that.

As you are probably aware, we are working the recapitalization of the rescue fleet, the recapitalization of the helicopter fleet that supports the missile fields, and also handfuls of other vertical lift requirements in the Air Force that are now fulfilled by the very old and venerable UH–1 Huey. So we are trying to work those requirements in combination to get the most capability, the most value out of the mix, and the most efficiency that we can in this competition.

Senator CHAMBLISS. We just talked about the competition in the tanker and the results that were achieved there. So I hope we will make sure that competition is exactly comparable to that.

General Schwartz, you talked a little bit in response to Senator McCain about the no-fly zone issue in Libya. We know that they have a very capable surface-to-air missile (SAM) capability, probably about as good as anybody in that part of the region, maybe with the exception of Egypt.

If we did have to, if the President makes a decision, Secretary Gates says, "Guys, we are going to enforce a no-fly zone over Libya," what kind of assets and what platforms would you put in there to enforce that no-fly zone?

General SCHWARTZ. It would entail numerous assets, certainly fighter aircraft, F–16, and F–15, and both air-to-ground and anti-radiation capabilities.

Senator CHAMBLISS. How are you going to send an F–15 and an F–16 in there with the SAM capability they have and expect them to fly in a safe and secure manner?

General SCHWARTZ. Sir, I understand. Let me roll this out. Certainly, that is the fighter portion of the fleet. You are going to have RC–135s. You are going to have surveillance kinds of capabilities that would be used to surveil both the integrated air defense system and other areas as tasked.

You will have tankers to support the short-legged platforms. You would have Compass Call and other capabilities that can jam communications and affect the effectiveness of the integrated air defense and so on. You would have, undoubtedly, some bomber aircraft that would give you long dwell over specified target areas.

So this would be a total force application of our air and space capabilities.

Senator CHAMBLISS. General, isn't this exactly what the F–22 was designed to do and has the capability of doing?

General SCHWARTZ. No doubt that it would be useful, and I would have the expectation that at least in the early days, it certainly would be used.

Senator CHAMBLISS. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Chambliss.

Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman.

Thanks to both of you for being here today and the great work that you are doing for our country.

In your prepared statement, Secretary Donley and General Schwartz, you indicated that the Air Force's high operations tempo has significantly impacted the overall readiness for the full spectrum of military operations, due to, among other things, the limited supply of combat air forces and the high-demand aviation units. This has caused lower deploy-to-dwell ratios for the high-demand skills.

Can you provide some thoughts on how to rectify the steady decline in reported readiness indicators, particularly among career fields that are so stressed?

General SCHWARTZ. Ma'am, we have transitioned people from within our Air Force, from lower-stressed career fields to higher-stressed career fields. ISR is the best example.

Four thousand faces and spaces have migrated into that high-demand area from other parts of our Air Force. So, we have retooled and adjusted ourselves internally to try to size the talent pools for the demand signals that we face. That is the major strategy.

The truth is that we cannot afford to grow as an Air Force. Our personnel ceiling is at about 332,000 Active Duty. It is 106,000 Guard. It is about 70,000 Air Force Reserve. Within that pool, we

have to apply our manpower to the missions that we have undertaken, and we are doing that.

Senator HAGAN. Secretary Donley, any comments?

Secretary DONLEY. As the Chief suggested, we have reapplied manpower in some areas. We are still stressed in explosive ordinance disposal. We are stressed in contracting. We are stressed in joint tactical air controllers and other specialized fields.

We have increased authorizations, but these are actually some of the most skilled airmen that we have, for which the pipeline is very long. We continue to work those issues, and we have also applied reenlistment bonuses where we can to help induce airmen to stay in with that mission.

Senator HAGAN. General Schwartz, you mentioned the ISR. In the prepared statements, you indicated that the Air Force continued to rapidly increase its ISR capability and the capacity to support the military operations.

Combat air patrols play a critical role in the current warfight, as you mentioned, and I understand that for fiscal year 2012, the budget request fully supports the ISR capacity needs, sustains the maximum production, and achieves 65 RPA combat air patrols in the CENTCOM theater by the end of 2013.

What additional efforts are being done in the interim to mitigate this shortfall? How is the Air Force and the Joint Chiefs of Staff working with CENTCOM to ensure the timely and effective distribution of the resources?

General SCHWARTZ. Ma'am, the 65 CAPs, for the time being, are concentrated on the CENTCOM AOR. But clearly, when the missions subside there, they will be used more broadly by the other combatant commanders who have legitimate requirements, but have been out-prioritized, obviously, by the missions in CENTCOM.

I think a key aspect here is, and it was suggested in an earlier question, the Air Force isn't the only provider of ISR capability. There are capabilities in the other Services. The joint team needs to have access to them as well. In the case of Afghanistan, that is seven shadow platoons from the Army, for example. So there is an effort across the team to provide all the ISR capability that we possibly can.

As you can imagine, we have needs for Japan surveillance. We have requirements for surveillance in the Mediterranean. Obviously, the missions in Iraq and Afghanistan. So our youngsters are putting out at the moment.

Senator HAGAN. As you mentioned the situation in Japan, how can you ensure the safety of the pilots?

General SCHWARTZ. We have a surveillance process underway, and of the 34 aircraft that have operated in and around the areas of concern, we have confirmed that they were not contaminated. We have equipped our people with the detection capability to warn of contamination.

We are monitoring the installations carefully, certainly Misawa, Yokota, and Kadena, but elsewhere in the Pacific, because the plume has the potential of moving elsewhere, depending on weather and so on. So the bottom line is there are protocols. We know what they are, and we are implementing them properly.

Senator HAGAN. Thank you.

The well-being of our airmen and their families is fundamental to the mission effectiveness of our Air Force. It is important that these programs strengthen the Air Force community and enhance resiliency.

I think some of the questions might have addressed this, but can you provide some insights regarding some of the innovative and efficient ways that the Air Force is looking to provide and sustain programs that will support the airmen and their families? We are all, obviously, always concerned about the families and the sacrifices that they also are making.

General SCHWARTZ. The Secretary mentioned a couple of the major themes. Clearly, military family housing is one area that we have had considerable success with respect to privatized housing and so on.

A second one is education. Perhaps the most important family issue is the quality of education for our youngsters. If we want to have thriving installations, we need to make sure that the schools that serve those installations are places where our families want to send their youngsters. We have worked hard to establish school liaison capability to make sure that our needs are understood by boards of education, by superintendents, and so on.

Another area the Secretary mentioned is the exceptional family member. We were not doing as well as we should have. For an exceptional family that relocates from Virginia to Texas, it is a stressful time because they have certain support structure here. The issue is what is available in Wichita Falls, in Texas?

We weren't providing the backstop for that. We are now. We are helping our exceptional families with connecting with the support services that are at their future destination by coordinators at each base.

Finally, child care. That is the fourth major theme. In the next 2 years, we will meet the demand for child care at our installations.

Senator HAGAN. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Hagan.

Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman.

Secretary Donley and General Schwartz, thank you for being here before us.

I would just pick up on the comment you made about child care. In my former life as Governor in New Hampshire, I worked a lot on early childhood education and the importance of quality child care. We looked at the military as the model for the private sector because you all have been real leaders in recognizing how important the early years in a child's life are. So thank you very much for that commitment.

I am sorry to have missed much of the discussion. I had another hearing. So I will try not to repeat what has been said by my colleagues, except for one issue. I do want to reiterate what my colleagues Senator Ayotte and Senator Nelson raised with respect to the basing of the KC–46A.

I know that I echo what you have heard from others about how pleased we all are that the decision on procurement has finally

been made and the importance of the deliberation and transparency of that process and the thoroughness. I very much appreciate that and look forward to working with you on a similar transparent and thorough process as you make the decision on where to base these planes.

You won't be surprised to hear that, as a Senator representing New Hampshire, I think Pease National Guard Base is one of the places that you should look at very carefully, and we look forward to working with you on that. I know that they will score very well on any objective criteria. So we look forward to that.

There is a lot of work in R&D and innovation that goes into new systems for the military, new planes, and any of the initiatives that you have. New Hampshire has a very important defense industry that has done a lot of that innovation.

I wonder if you could speak to how comfortable you are that in the current budget situation that we are facing in this country, that the R&D that needs to happen in order to provide the innovation that the Air Force is going to be relying on is going to continue to happen despite this tight budget situation?

Secretary DONLEY. This is a very important issue for us, Senator. The Secretary of Defense has reinforced it by ensuring that we spend about 3 percent of our top line on R&D going forward. He has put focus on fencing resources to make sure we do not, in the vernacular, eat our seed corn going forward.

Just last year, we completed a broad review in the Air Force of our future R&D requirements, titled "Technology Horizons." It is something that the Air Force has done on a decade-by-decade timeline. We have just been through this process to help identify promising technologies that we think will bridge various aspects of our work going forward so, therefore, they represent good investments.

Certainly, the IT pieces of what we have been working on and the development of the cyber community over the last 5 to 10 years are critical to much of that work. The materials, engines, and propulsion systems that are more efficient and capable also are coming along well. Also, directed energy work, which has long been of interest in the Air Force, continues to progress as well.

There are a variety of areas here. We recognize the importance of making sure that we continue to develop the technological edge that sets our Air Force apart.

Senator SHAHEEN. Can you talk a little bit more about what have been the most helpful tools in leveraging some of those new technologies? For example, one of the things we are considering right now in the Senate is the Small Business Innovation Research Program, of which DOD spends probably the biggest piece in encouraging small businesses to develop new technologies in areas that you have an interest in.

So are there initiatives like that you feel are particularly important? Or have you developed other mechanisms internally that help drive this technological development?

Secretary DONLEY. We do watch carefully to make sure small businesses, especially with unique and new capabilities, have a way of entering our market, if you will, our R&D process. So this is something that does get attention.

Senator SHAHEEN. Thank you.

Finally, as we talk about R&D and new technologies, one area, obviously, that we are all very concerned about right now is energy. When the Secretary of the Navy was here last week, he talked about some of the new energy advances they are doing to reduce their energy consumption.

I wonder if you could speak to what you are doing in the Air Force and also how you are cooperating with other branches of the military so that you are taking advantage of the progress that each of you are making?

Secretary DONLEY. There is a Deputy Under Secretary at the DOD level that helps to coordinate work across the Services in this respect. She is doing some excellent work in getting us focused, especially on operational energy and support of the warfight, and how we can be more efficient down range in moving critical energy assets around the theater.

But more broadly, as one of your colleagues had mentioned earlier, we are the largest user of energy in DOD, and aviation fuel dominates that. We have been able to internally reduce demand for energy for aviation fuel by 2 percent over the last couple of years. It has leveled off. But our challenges with the prices have continued to outpace our reductions.

Nonetheless, going forward, fuel efficiencies is a significant part of our planned efficiencies over the next 5 years. Air Mobility Command is leading that work. We think there are further adjustments that we can make in flight planning and bringing on commercial best practices. So we think there is more work that can and should be done.

A couple of other things. We have been working methodically to certify all the engines in the Air Force inventory to operate on fuel blends, if you will, from alternative sources of energy, including biofuels. But I would note that as far as we have come in getting those engines certified, I think the challenge in front of us really is, who will be the producers and suppliers in bulk quantities of those new innovative fuels?

Which ones will we choose generally as the best practice or the best of many alternatives for aviation fuel going forward? Who will produce that, and when will that production capability come up to a level where we can start tapping it at an economical rate?

We are very anxious to get about that work, but it is a DOD-wide issue, and it is also an issue with the Department of Energy and others, including the U.S. aviation industry.

Senator SHAHEEN. It is really a national challenge. Thank you very much.

Chairman LEVIN. Thank you, Senator Shaheen.

Senator Begich.

Senator BEGICH. Thank you very much.

I will actually follow up on that. I know, Mr. Chairman, you have been generous with requests that I made. I know, as time progresses here, we might come to the conclusion that it seems every meeting we have had there are some elements of energy that we are talking about.

It seems like we should probably have a more robust discussion about energy needs because you hit it on the head. It is supply that

is critical. Of course, from Alaska, we would argue that gas-to-liquid is a great opportunity in the future of clean-burning fuel and for aviation fuel there is a huge opportunity.

As I just read, yesterday or the day before, just in DOD, the fuel budget is now $1 billion over because of the high cost or, in some cases, the inability to get the volumes you need. Therefore, you pay a higher price for it.

So I look forward to that because we have to be serious about a long-term energy plan that has a diversified energy resource from a national security perspective as its first priority. Second is economic security.

But I am sure you don't want to see fuel in our lines coming from Iran, which we do have, or fuel coming from countries that may not have the most stable governments, as we are now experiencing $100 per barrel. Or waiting for the Saudis to tell us what price they will give us based on the volume they will produce, which is dangerous for us security-wise and economically.

I look forward to an opportunity to bring in the person that is coordinating the new position, which is a great new position, to coordinate and discuss those issues. So I will hold that, but I just want to follow up on what was asked there.

The no-fly zone discussion that occurred; this is a budget hearing. Obviously, there is public policy there. I understand that. But there is cost. There is cost in real dollars that have to come from somewhere, right?

The aviation issue alone, the fuel cost to fund such a thing or the allocation of resources from scarce resources or limited resources that we are utilizing now have a push-and-pull effect in Afghanistan, Iraq, and elsewhere. Is that a fair statement?

General SCHWARTZ. Depending on the mission assigned and its scope and scale, it could have an effect on either assets currently in theater or those that are bound for the theater.

Senator BEGICH. But even if it is minimal, there is a cost that will be required out of your budget that we don't have budgeted today.

General SCHWARTZ. No question.

Senator BEGICH. So somewhere, someone has to write a check?

General SCHWARTZ. Right.

Senator BEGICH. Okay. Sometimes we get a little excited about ideas, but we forget that there is a check that has to be written by somebody. We are experiencing that now with the Afghanistan war, and the Iraq war. They require lots of money, lots of lives, and a lot of issues here that in the front end, we are now realizing there is a cost.

As we consider these issues, we have to also consider that piece of it. Because if we tell you here is a new policy, you are going to have to move some assets around. I just want to make sure I am not misstating that, that there is cost, no matter what level of an idea might or might not materialize.

General SCHWARTZ. What we do is not free.

Senator BEGICH. Okay. You summarized it very well.

Let me go to a couple just quick questions. One is about total force integration. In Alaska, Elmendorf-Richardson is working phenomenally and I consider it the model of joint base operations.

That is not necessarily the case everywhere, but I think we really have a great model. You know it well, being up there.

The Active Duty and the Reserve, they work hand-in-hand. But I have to say there are some issues. There is a disconnect. I want to give you just a quick analysis or comment and then maybe ask some questions.

There is kind of a disconnect between the policies and the resourcing of the initiative. Reserve components have to request military personnel appropriations (MPAs) for mandates to meet anything above and beyond regular requirements. Under the total force integration, these initiatives, on many occasions, are above normal requirements. But yet getting the MPA allocation is extremely difficult.

I am going to give you an example. The 477th Fighter Group in Alaska was scheduled to deploy in support of theater security cooperation agreement. Reservists plan months ahead, and get everything geared up. It is not something they can just flip tomorrow and do. They get things all lined up. Then, 10 days before, they were told, "Sorry, we don't have the MPA."

So then, as you can imagine, they start ratcheting down. Then, a few days before, they are told, "Nope, now we have it."

I think that is unacceptable, especially with reservists who have a different scenario in what they have to get prepared for to get ready to be on the front lines. Are you aware of this? What steps, if you are aware of it, are you taking to help resolve this issue, especially with the reservists that I think are coming under incredible pressure? This is just one example.

General SCHWARTZ. Sir, this is a manifestation of the fact that the supplementals are contracting. In this case, it was a theater security cooperation mission, it was not related to CENTCOM operations, and so it had a lower priority. Ultimately, we found MPA resources to make it go.

But you are right. There was this uncertainty about whether that was going to be the case. I think it is important to understand that as the supplementals subside or the OCO accounts subside, there is going to be less MPA available, and we are going to do less with less. We are going to have to recognize that for this decade, people have gotten used to being on long-term Active Duty. We are going to have less of that.

We are going to have to be very surgical about where we use MPA. For example, the surge that we now have underway in Japan, and if we do something for Libya, we will naturally allocate what MPA we have to those missions. So, others who might have planned to have a training mission or something along those lines will be displaced.

Senator, I think the key thing here is that we understand completely, particularly on these associated missions, that MPA is how the Reserves function. At the same time, I think we need to reset our thinking a little bit about how readily available MPA will be.

Senator BEGICH. If I can hold you there, and my time is up, but I just have one comment after this. What I am hearing is you recognize this kind of back and forth or ricochet is something that has to be addressed around the Reserves, recognizing the new economics or budgeting that we are in, as well as other missions that are

pressuring against it. You recognize that is something we have to deal with?

General SCHWARTZ. It is a management obligation.

Senator BEGICH. Okay. Last thing, I would not want to let Senator Shaheen walk away with the tanker concept alone.

I know in the RFP there was like nine locations identified. We would hope that you would do your due diligence, and there is no better place that can touch so many places in this world than Alaska.

As many in the Air Force know, it touches everywhere. We have members now in Japan serving the needs that are there, which we are very grateful of our troops to be doing that, but also around the world. We would not want to be excluded from any due diligence process that the Air Force and DOD would do.

Senator SHAHEEN. We have a longer runway.

Senator BEGICH. They have a long runway. We keep our airports open no matter when it snows. I will leave it at that. [Laughter.]

Thank you, Mr. Chairman.

Chairman LEVIN. It is the advantages of competition we talked about before. [Laughter.]

General SCHWARTZ. It is wonderful to be popular.

Senator BEGICH. Thank you.

Chairman LEVIN. I just have a few more questions for a second round. We have had a recent lawsuit filed in Federal court alleging that DOD failed to protect its personnel from being raped and sexually assaulted.

Two of the plaintiffs were from the Air Force, and I am wondering if you can give us an assessment of the Air Force's Sexual Assault Prevention and Response Program. Is it having any impact that you can see? Secretary Donley, let me start with you.

Secretary DONLEY. Sir, as you are probably aware, we have a slight increase in our sexual assaults reported for fiscal year 2010. This is of concern to us.

We have known for a long period of time that sexual assaults are among the least reported crimes in the United States and in the military as well. This is of management concern in our Air Force because for the most part, it reflects airman-on-airman violence, which is absolutely anathema to our core values and completely inconsistent with the respect that we expect airmen to reflect in their daily business with others. So we recognize this is an issue.

We did commission last year an independent review by the Gallup organization, and you will be getting the results of this fairly soon, in which we asked them to survey across our Air Force what the prevalence and the incidence of sexual assaults probably is, based on a scientific survey. It is, as the criminologists and psychologists have told us for years, higher than is reported.

You will see data there indicating that in the last year, as much as 3 percent of the female population and 0.5 percent of the male population believes that they have been victims of sexual assaults of one sort or another. This is a serious issue for us.

We are reinvigorating our oversight, our management of this, and it is a very important issue for us going forward. We are increasing frontline training on this subject, and we are seized with the need to get a better handle on this.

Chairman LEVIN. General Schwartz, do you want to add anything to that?

General SCHWARTZ. Sir, I would only say that it is a crime. We don't beat up on our spouses. We don't beat up on our kids, and we don't assault each other. That is the message that we have sent out.

Chairman LEVIN. On the acquisition personnel issue that I made reference to before, the Air Force has made reforming its acquisition process a high priority. One of the elements is the hiring of more acquisition professionals, including personnel that are technically qualified to oversee programs.

What is the current status of the efforts to meet the goal, which was identified in 2009?

Secretary DONLEY. Sir, my recollection off the top of my head—we will correct this for the record if I am off base here—but I believe we have hired about 8,000 people into the acquisition workforce over the last couple of years.

We have focused in our acquisition improvement plan that General Schwartz and I put in place at the end of 2008, early 2009. The focus of that was strengthening the workforce. So we think this is a very important priority, to get the right people in, get the right skills in, in both the financial management side and the systems engineering side that support a strong acquisition management.

We have been very focused on that.

Chairman LEVIN. Would you get us for the record the details on that? What was the goal in 2009, and where are you in meeting that goal?

Secretary DONLEY. We will.

[The information referred to follows:]

The Air Force is committed to maintaining our efforts to recapture acquisition excellence that we started October 2008, carried forward in the Air Force Acquisition Improvement Plan (AIP) dated 4 May 2009, and programmed in the fiscal year 2010 PB and fiscal year 2011 PB. One of the cornerstones of Acquisition Excellence and the AIP was to revitalize our acquisition workforce to ensure that it is appropriately sized to perform essential, inherently governmental functions and is flexible enough to meet continuously evolving demands. The AIP established a goal to increase and fund military and civilian personnel authorizations as required, and to increase the manning priority for civilian and military acquisition authorizations, supporting our Acquisition Human Capital Strategic Plan goal to increase the size of the acquisition workforce to levels commensurate with workload.

Consistent with Department of Defense terminology, our acquisition workforce is defined as those personnel who encumber an acquisition coded position (in accordance with the Defense Acquisition Workforce Improvement Act). Bottom-line, we have increased our acquisition workforce by 8,478 personnel as described below:

Starting Position: Personnel on board 30 Sep 08—Military 8,762/Civilian 16,080/Total 24,842

Ending Position: Personnel on board 31 Mar 11—Military 9,065/Civilian 24,255/Total 33,320

As a result of the fiscal environment shifting in the Federal Government and within the Department of Defense, we are assessing the impact of a straight-lined civilian workforce at the fiscal year 2010 levels with exceptions for modest growth in strategically important areas—including Air Force planned Defense Acquisition Workforce Development Fund (DAWDF) hiring of just under 1,500 positions. The Air Force is performing a zero-based review of our entire workforce to strategically implement these new civilian constraints. While the planned DAWDF hiring is assured, we are looking at the broader impact to our acquisition workforce in the context of this review.

Chairman LEVIN. Thank you.

Finally, General Schwartz, let me ask you about the Don't Ask, Don't Tell (DADT) issue. Where are you in terms of the implementation of the policy? Have you seen any problems in the repeal of DADT?

General SCHWARTZ. Sir, we have begun the internal training process. There were three tiers: the first are so-called experts, the attorneys, the clergy, medics, and so on; the second tier being the leadership; and the third tier being the broader airmen population. We have trained about 2,100 individuals so far, and that process will accelerate.

We will complete the first two tiers here in a matter of a couple of months. We will certainly strive to move through the larger body of airmen as quickly as we can.

We have made it clear that what this is about is treating each other with dignity and respect, that some of us in the Super Bowl were Pittsburgh fans and some of us were Green Bay fans, and that is the way it is amongst airmen, but it doesn't affect how we do our jobs. Likewise, we are not about changing what people believe, but we are about maintaining Air Force standards, and that is what we are communicating.

Chairman LEVIN. Do you think you are going to be able to successfully implement that policy change?

General SCHWARTZ. We will advise the chairman and the Secretary when that training is complete. They will certify, as you are aware, and we will move on, yes, sir.

Chairman LEVIN. Are you confident that is going to be able to be done without any major problem?

General SCHWARTZ. We have some one-offs, Senator. We can talk about that, if you would like, off-line.

Chairman LEVIN. Sure.

General SCHWARTZ. But generally speaking, we will deliver on this.

Chairman LEVIN. Thank you both.

It has been a very good hearing, and we appreciate everything you do for the Nation and for the men and women that you serve with, and your families, we thank them especially.

We will stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR MARK BEGICH

MILITARY PERSONNEL APPROPRIATION MAN-DAYS

1. Senator BEGICH. Secretary Donley and General Schwartz, the classic associate between the 477th Fighter Group (FG) and 3rd Wing at Joint Base Elmendorf-Richardson is phenomenal. They work hand-in-hand to meet contingency and steady state mission requirements. However, there is no formal process for allocating man-days to the 477th FG so they can fulfill their requirements under the Total Force Integration initiative. A process is needed to appropriately manage the money, contingency, and steady state requirements, and most importantly the people in associate units. For instance, the 477th FG was scheduled to deploy in support of a theater security package (TSP) in January. The reservists planned for months to prepare by taking leave from their jobs, finding babysitters, and making other necessary preparations. Ten days before their scheduled deployment date they were told there were no resources to support the deployment. A few days before the deployment they were told they would, in fact, deploy in support of the mission. It is unacceptable to manage people and missions this way. TSPs are a known U.S. Pacific Command (PACOM) biannual requirement. This is just one example of how the

lack of process creates unnecessary challenges for Active Duty and Reserve component personnel in fulfilling taskings. A functionally integrated unit, the 3rd Wing relies on their Reserve component counterpart to meet demands. In fact, because of the contribution by the 477th FG, the 3rd Wing plans to decrease Active Duty billets by 75 positions. Therefore, it is imperative to implement a process for allocation of man-days based on requirements. For steady state requirements this should be done well in advance of the year of execution. Are you aware of the challenges associate units face due to the lack of a formal requirements-based process for allocating military personnel appropriation (MPA) man-days?

Secretary DONLEY and General SCHWARTZ. We share your concerns about ensuring resources are available to access Air Reserve Forces in support of our most critical missions, and that requirements-based decisions are made in a timely manner. The Air Force transitioned to a requirement-based process for budgeting MPA man-days during the fiscal year 2012 Program Objective Memorandum (POM) exercise in 2010. During the budget exercise, Major Commands identified their MPA man-day requirements including any Total Force Enterprise units within their commands. Requirements were then evaluated based on Air Force Planning and Programming Guidance priorities, and vetted through the Air Force Corporate Structure for funding. This process identifies requirements and establishes funding levels for MPA man-days 2 years prior to execution of the man-days as part of the overall budget request.

The recent 477th FG shortfall was a result of the fact that supplemental funding is shrinking, and the theater security mission they were supporting was not related to Central Command (CENTCOM) operations and therefore could not be funded with overseas contingency operations (OCO) funds. Given the importance of this mission, the Air Force reprioritized steady state man-day requirements funded through the baseline MPA to support this deployment.

2. Senator BEGICH. Secretary Donley and General Schwartz, what are you doing to address this issue?

Secretary DONLEY and General SCHWARTZ. As supplemental funding subsides, there will be fewer MPA funds available. We need to reset our thinking about how readily available MPA will be in the future. We are working with the Major Commands, Air National Guard, and Reserve commanders to communicate to the Force the decreased level of MPA funding and its impact on our citizen airmen. We are going to have to be very surgical about where and when we use MPA man-days.

Even with our recently established requirements-based process for programming and allocating MPA man-days, we have to maintain the flexibility to respond to real-world events. We continuously monitor execution and changing demands to ensure MPA resources are applied to the most critical missions. For example, with the surge that we now have underway in Japan and Libya, we are allocating what MPA man-days we have to support these missions. This will likely require a reprioritization of MPA resources.

3. Senator BEGICH. Secretary Donley and General Schwartz, how are you ensuring major commands, like Air Combat Command and in the case of Alaska-Pacific Air Force, understand and support associate unit need for MPA man-days to meet both steady state and contingency requirements?

Secretary DONLEY and General SCHWARTZ. The fiscal year 2013 Air Force Planning and Programming Guidance issued to the Major Commands identifies Total Force Enterprise requirements as the second highest priority for the allocation and use of steady state MPA man-days after non-OCO Aerospace Expeditionary Force deployments. In our recently established requirements-based process, the Air Force evaluates the Major Commands' requests for steady-state MPA man-days based primarily on Air Force Planning and Programming Guidance priorities.

4. Senator BEGICH. Secretary Donley and General Schwartz, if the plan is to proceed with a requirements-based process, when will it be implemented?

Secretary DONLEY and General SCHWARTZ. The Air Force implemented the requirements-based process for the MPA man-days during the fiscal year 2012 POM build which began in fiscal year 2010. Commands will have the final allocation by the end of June 2011. We intend to continue this process as we build future budgets.

5. Senator BEGICH. Secretary Donley and General Schwartz, what specific actions need to be taken to implement the process and what is the timeline for completion?

Secretary DONLEY and General SCHWARTZ. The Air Force has fully implemented our requirements-based process to prioritize and allocate the MPA man-day funding

during the building of our fiscal year 2012 POM in 2010. The resulting MPA disbursements will be distributed to the Major Commands by the end of June 2011.

We are applying the same process for identifying and prioritizing MPA man-days during the fiscal year 2013 POM build.

SPACE PROGRAMS

6. Senator BEGICH. Secretary Donley and General Schwartz, how has the new National Space Policy, released in June 2010, and the National Security Space Strategy, released in January 2011, influenced Air Force space posture or investment plans; specifically utilization of commercial space ports like Kodiak Launch Complex (KLC) in Alaska?

Secretary DONLEY and General SCHWARTZ. In accordance with the 2010 National Space Policy, the Air Force supports the purchase and use of commercial space capabilities and services to the maximum practical extent when such capabilities and services are available in the marketplace and meet U.S. Government requirements. The Air Force is cooperating with National Aeronautics and Space Administration (NASA) and the National Reconnaissance Office (NRO) to jointly develop a national launch infrastructure modernization plan in support of the National Space Policy. As currently envisioned, this plan will address state spaceports and make particular note of the KLC with its demonstrated capability to support national security launch and test requirements.

The next Air Force launch from the KLC is the Operationally Responsive Space TacSat-4 mission. For all future launches, the Air Force will determine which spaceport to utilize based on required orbital profile, mission, and cost effectiveness. The KLC is part of the National Space Access capability and one of the spaceports considered for launch. While the Air Force recognizes the value of the KLC, we do not currently have launches planned from the KLC after TacSat-4 because upcoming missions do not require highly-inclined orbits.

7. Senator BEGICH. Secretary Donley and General Schwartz, the Department of Defense (DOD) and the National Oceanic and Atmospheric Administration (NOAA) parted ways in last year's decision to restructure the joint National Polar-orbiting Operational Environmental Satellite System (NPOESS) program. The Air Force is now responsible for acquiring its satellites for a morning orbit, and NOAA is responsible for acquiring their own separate system for an afternoon orbit. These satellites are extremely important in Alaska. NOAA is facing an anomaly this year that most likely will hurt their ability to move forward with a new satellite. Do you have any concerns with their ability to meet weather and environmental requirements?

Secretary DONLEY and General SCHWARTZ. The Air Force has no reason to assert that the NOAA/NASA cannot meet their weather and environmental requirements. The Air Force supports the President's budget request for the NOAA/NASA program.

8. Senator BEGICH. Secretary Donley and General Schwartz, do you have any concerns with the military's ability to meet those requirements?

Secretary DONLEY and General SCHWARTZ. The DOD component of the NPOESS restructure is called the Defense Weather Satellite System (DWSS). The program has made significant progress to date and all trends indicate that it will meet future milestones. The Air Force does not have any concerns with the military's ability to meet weather and environmental requirements for the Executive Office of the President (EOP)-directed early morning orbit.

9. Senator BEGICH. Secretary Donley and General Schwartz, has the relationship between DOD and NOAA/NASA improved since this restructuring?

Secretary DONLEY and General SCHWARTZ. The Air Force is building an excellent relationship with the NOAA and NASA between our staff and product teams. DOD, NOAA, and NASA continue to cooperate on finalizing the transition of non-DOD content from the NPOESS contract to NASA contracts and defining the technical baseline for the satellite ground system.

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN

FUEL COST AND CONSUMPTION

10. Senator MANCHIN. Secretary Donley, you have testified that the Air Force is committed to reduce its fuel consumption and the cost of the fuel it buys. Please

tell me about the Air Force experience with coal-to-liquid (CTL) fuel and about how those experiences may ultimately affect the availability of this fuel in the U.S. market.

Secretary DONLEY. The Air Force is currently certifying its aircraft and associated vehicles, equipment and infrastructure for unrestricted operational use of two 50/50 alternative fuel blends: JP–8 and synthetic fuel produced via the Fischer-Tropsch (FT) process; and JP–8 and biofuel produced via "hydroprocessed renewable jet" (HRJ) process. FT fuel can be produced from coal, natural gas or biomass.

Since certifying the B–52 to use the synthetic fuel blend in August 2007, the Air Force has certified over 99 percent of its fleet for unrestricted operational use of a 50/50 synthetic fuel blend. Certification activities are expected to be completed for the synthetic fuel blend by the end of 2011 completion. To date, no performance or safety-of-flight anomalies have been determined.

The Air Force fuel demand, by itself, is most likely too small to create a market; however, as the Air Force will be a consumer, and not a producer, of synthetic fuel blends, the Air Force will ultimately be dependent on commercial suppliers for fuel production and availability. The Air Force will be prepared to use CTL fuel blends if industry can produce sufficient quantities of CTL fuel at a cost competitive price, while being compliant with all applicable Federal laws and mandates.

11. Senator MANCHIN. Secretary Donley, if the United States could produce CTL fuel, would you buy it?

Secretary DONLEY. For DOD, the Defense Logistics Agency is the mandated agency chartered with the purchase of bulk liquid fuels. The Air Force does not determine the source of its fuel supply and is only concerned that the fuel has the desired performance, environmental and safety specifications. By going through the test and certification process, the Air Force is positioning itself to integrate cost competitive, environmentally friendly, domestically produced alternative fuel blends by 2016. The Air Force will not be a producer of fuel, but will use what the market competitively offers and provides the best stewardship of taxpayer dollars.

Currently, over 99 percent of the Air Force fleet is certified for unrestricted operational use of a 50/50 synthetic fuel blend, where the synthetic component is produced via the Fischer-Tropsch (FT) process. FT synthetic fuel can be produced from coal, natural gas or biomass.

The alternative aviation fuel certification process increases the types of fuel Air Force aircraft can use. Once the commercial market is ready, the Air Force will be positioned to use those fuels, as long as they meet the technical, environmental and economic requirements. Having the ability to use nontraditional aviation fuels provides the Air Force with an improved energy security posture and increased protection from the fiscal uncertainties that result from market fluctuations.

C–5 FLEET

12. Senator MANCHIN. General Schwartz, what is the current status of our modernization program for C–5s?

General SCHWARTZ. C–5 modernization consists of two programs, the Avionics Modernization Program (AMP) and the Reliability Enhancement and Re-engining Program (RERP). We will install the AMP modification on all C–5s retained in the Air Force inventory. To date, 75 of 80 C–5s have received the AMP modification. The last C–5 AMP modification is planned for completion in March 2012. Additionally, AMP is a prerequisite for RERP. A total of 52 C–5s will receive the RERP modification. Once modified, they will be redesignated as the "C 5M." As of April 19, 2011, five C–5Ms have been delivered to the Air Force. The last of the remaining 47 modified aircraft will be delivered by the third quarter of fiscal year 2016.

13. Senator MANCHIN. General Schwartz, how does the Air Force envision the C–5 mission in future years?

General SCHWARTZ. We do not anticipate a significant change in the operational execution of the C–5 mission. The C–5 provides a unique capability to move large amounts of outsized and oversized cargo very quickly over strategic distances. The only significant change we see for the C–5 is in the actual fleet size. Mobility Capabilities Requirement Study 2016 (MCRS–16) established the strategic airlift requirement at 32.7 Million Ton Miles per Day (MTM/D) to meet National Military Strategy goals. The current strategic fleet of C–17s and C–5s provides our Nation with excess airlift capability. As a result of this excess capacity and our desire to effectively manage taxpayer resources, the Air Force would like to retire up to 32 C–5A aircraft by fiscal year 2014. However, we are prohibited by National Defense Au-

thorization Act (NDAA) language to decrease our strategic airlift fleet below 316 without relief from Congress. We urge the Congress' favorable consideration of our fiscal year 2012 legislative request. Without this relief, the Air Force will be forced to maintain a strategic airlift fleet in excess of our stated requirement resulting in the diversion of scarce resources. The Air Force would like the authority to manage the strategic fleet to meet our National Military Strategy in the most cost effective manner.

14. Senator MANCHIN. General Schwartz, will the C–5 fleet be used for supply or reset missions in Afghanistan, or will we need to contract with the Russians for additional capability?

General SCHWARTZ. The Air Force will continue to use the C–5 fleet for both supply and reset missions in Afghanistan. However, civil carriers provide additional flexibility to the strategic airlift fleet. The Air Force continually monitors operations to ensure both efficiency and effectiveness. At times, utilizing commercial carriers can be more advantageous and /or economical when used to augment the strategic airlift fleet.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

FUNDING FOR THE MODERNIZATION OF THE NUCLEAR WEAPONS COMPLEX

15. Senator MCCAIN. Secretary Donley and General Schwartz, I appreciate the comments in your prepared remarks emphasizing the continued strengthening of the nuclear enterprise as the #1 Air Force priority. However, I am significantly concerned by the fact that both the House and Senate Appropriations Committees did not meet the President's full fiscal year 2011 request for the National Nuclear Security Administration (NNSA) in either version of the full year continuing resolution (CR). Despite the commitment made during debate of the New Strategic Arms Reduction Treaty (START) for the long-term modernization of the nuclear weapons complex, this failure to recognize the National security importance of NNSA funding is very troubling. Do you share similar concerns?

Secretary DONLEY and General SCHWARTZ. Our efforts to strengthen the Air Force nuclear enterprise are important for national security and require a partnership with the National Nuclear Security Administration (NNSA). Funding delays or shortfalls for either organization could lead to program delays and added costs. In fiscal year 2011, we are relying on NNSA to complete the ongoing life extension study for the B61 and to initiate a life extension concept study for the W78 intercontinental ballistic missile warhead. These efforts will be at risk if NNSA's funding in fiscal year 2011 is less than requested.

16. Senator MCCAIN. Secretary Donley and General Schwartz, do you agree that sustained support for the modernization of the nuclear weapons complex is a national security priority?

Secretary DONLEY and General SCHWARTZ. Yes. DOD recognizes maintaining an adequate stockpile of safe, secure, reliable nuclear warheads requires a strong partnership with the Department of Energy. The DOD has demonstrated its commitment to the nuclear weapons complex by transferring $5.7 billion to the National Nuclear Security Administration in the fiscal year 2011 budget process and a further $2.5 billion in the fiscal year 2012 budget process. This transfer supports critical nuclear weapons programs and infrastructure modernization in fiscal year 2011 through fiscal year 2016.

AERIAL REFUELING TANKER COMPETITION

17. Senator MCCAIN. Secretary Donley, what lessons-learned from previous efforts to award a tanker contract did the Air Force leverage to structure and conduct a competition here to withstand a high-profile bid protest?

Secretary DONLEY. The Air Force process for this tanker competition was driven by clearly stated requirements defined by the warfighter, more objective evaluation criteria and a fixed-price contract structure that would deliver the Air Force a capable aircraft at the most competitive price for our taxpayer's dollars. The Air Force is now in the process of officially documenting the lessons learned from the previous efforts and how those lessons were successfully applied to this competition. We anticipate this to be complete in Fall 2011 and would be happy to share these results with the committee at that time.

18. Senator MCCAIN. Secretary Donley, what lessons-learned does the Air Force intend to apply to similar future procurements?

Secretary DONLEY. The Air Force is drafting a final lessons learned paper from the KC–X procurement. Once completed and released, the Air Force will share these insights with the defense committees and will implement those lessons-learned on all applicable future procurements.

19. Senator MCCAIN. Secretary Donley, do you have a sense of how much the taxpayer might save by buying these tankers under full-and-open competition and a fixed-price development contract (as is the case now with the program) compared to a sole-source lease, using a cost-reimbursable development contract (as was originally proposed in 2002)?

Secretary DONLEY. There are many factors that make comparing costs from the varied structures of the proposed tanker lease in 2002, the KC–45 competition in 2008 and the current KC–46 competition in 2010–2011 very difficult. However, it is safe to say that the Department has reaped a substantial savings for the taxpayer by buying these tankers under the current full-and-open competition and fixed-price development contract.

The Office of the Secretary of Defense (OSD) and Air Force representatives have met with congressional defense committee staff on several occasions to provide source selection and proprietary information since the contract award, and are willing to brief you on the bids and resulting cost savings from past competitions, at your convenience.

20. Senator MCCAIN. Secretary Donley, now that we have a winner, with a reportedly aggressive bid price, how will the Air Force ensure that the tankers come in at that price?

Secretary DONLEY. While the tanker source selection resulted in an aggressive competition, the Department's Independent Cost Estimate (ICE) and Air Force's Service Cost Position were both in line with Boeing's proposed prices.

The 372 mandatory requirements were clearly defined and approved by the Air Mobility Command Commander. These warfighter requirements were closely coordinated upfront with the acquisition program office—this was done to eliminate the need for post-award Engineering Change Proposals (ECPs). The development contract and options for production are fixed-price, which encourages requirements stability and is reflective of our belief that the requirements for the KC–46A are well defined and stable.

KC–46 program execution will be carefully watched by the Air Force and the DOD leadership to make certain The Boeing Company delivers what it promised during the source selection. The Air Force program office has established a new Program Control unit to specifically manage a stable program baseline and a Joint Configuration Change Board with Boeing to rigorously review and control baseline changes. As an added measure to ensure the tankers come in at the negotiated price, the Secretary of the Air Force directed a policy that requires the Service Acquisition Executive to approve level 1 changes impacting the KC–46 program cost, schedule or performance baseline.

21. Senator MCCAIN. Secretary Donley, you're on a tight timeline. How concerned are you about the overlap between production and development, that is, the concurrency, that's built into this program?

Secretary DONLEY. Last year, DOD announced a well-conceived source selection strategy to determine whether or not the proposals demonstrated the ability of an offeror to deliver all 372 mandatory requirements, with the first 18 aircraft delivered within 78 months after contract award. Both offerors' proposals were thoroughly evaluated by a team of acquisition, maintenance and operational experts. Boeing's schedule, as proposed, was considered awardable with a low-to-moderate risk schedule and development approach.

Furthermore, because Boeing is contractually bound to deliver 18 operational aircraft within 78 months after contract award, and because the Air Force has negotiated fixed prices for all production aircraft, Boeing has a significant financial incentive to execute the baseline schedule. Should Boeing need to make changes to the aircraft configuration to be compliant with the system specification after production begins, the KC–46 Engineering and Manufacturing Development contract requires Boeing to modify the production aircraft to be compliant with the final aircraft configuration, at no additional cost to the Air Force.

The Air Force is now focused on ensuring The Boeing Company executes to the KC–46 program cost, schedule, and performance baseline negotiated in the fixed-price contract. The Air Force program office has established a new Program Control

team to specifically manage a stable program baseline, and a Joint Configuration Change Board, with Boeing, to rigorously review and control baseline changes. As an added measure, to ensure the tankers come in at the negotiated price, the Secretary of the Air Force directed a policy that requires the Service Acquisition Executive to approve all level 1 changes impacting the KC–46 program cost, schedule, or performance baseline.

22. Senator MCCAIN. Secretary Donley, the Pentagon's recent experience with concurrent development in, for example, the F–35 Joint Strike Fighter (JSF) and the Future Combat System (FCS) programs, has been awful. Why did the Air Force choose that approach here and why should we not be concerned about the risk of delays and possible retrofits with the development of Boeing's tanker?

Secretary DONLEY. Boeing's schedule, as proposed, was deemed to have met the 372 mandatory requirements and was considered awardable with a low-to-moderate risk schedule and development approach.

Because Boeing is contractually bound to deliver 18 operational aircraft within 78 months after contract award, and because the Air Force has negotiated fixed prices for all production aircraft, Boeing has a significant financial incentive to execute the baseline schedule. Should Boeing need to make changes to the aircraft configuration to be compliant with the system specification after production begins, the KC–46 Engineering and Manufacturing Development contract requires Boeing to modify the production aircraft to be compliant with the final aircraft configuration, at no additional cost to the Air Force.

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23. Senator MCCAIN. Secretary Donley, given how long it took to get us to this point, and the age of the KC–135 and KC–10 fleets, when do you expect to start the KC–Y and KC–Z procurements?

Secretary DONLEY. As noted in the Aircraft Procurement Plan—fiscal years 2012–2041, "The Air Force has begun recapitalizing the tanker fleet with plans to develop and procure 124 KC–46A tankers by 2021. The KC–46A fleet will reach 179 aircraft in 2027." Given the age of the KC–135 aircraft at that time (2027) and the anticipated demand, the Air Force would address plans to replace the remaining KC–135 inventory with follow-on air refueling platforms. The current plan is to align the KC–Y with the final procurement of the KC–46A. Further study will need to occur to refine the total number and composition of the tanker fleet.

24. Senator MCCAIN. Secretary Donley, I understand that, as a result of the contract award, Boeing will sign a fixed-price contract valued at over $3.5 billion to develop and deliver 18 aircraft by 2017. To be clear, exactly what does "over $3.5 billion" mean for the tanker development contract?

Secretary DONLEY. The publically released target price of the Engineering and Manufacturing Development (EMD) contract is $4.4 billion. The EMD contract requires design, development, test, verification, certification, and delivery of four tanker aircraft. The EMD contract also requires pre-operational support; development, management and conduct of type 1 training; and provision of operations, maintenance, installation, and training data, as required. Eighteen operational aircraft will be available to the warfighter 78 months after contract award.

25. Senator MCCAIN. Secretary Donley, I understand that the configuration of Boeing's tanker will involve putting a digital 787 cockpit into an analog 767 aircraft and a modified KC–10 boom to meet the gallon-per-minute offload requirement. What else can you tell us about the configuration of Boeing's aircraft at this point and what does the design entail in terms of risk reduction on the platform or on the mission systems?

Secretary DONLEY. All configuration differences between the U.S. Air Force KC–46 and the baseline Boeing 767–200/KC–767 were evaluated as being in the category of low to moderate risk. All are considered well within the design capability of the commercial/military large aircraft industries. Some of the more significant changes, in addition to the ones mentioned in the question, include:

Increased wing strength and landing gear (both from existing designs)
Digital flight deck with large displays (both from existing designs)
Auxiliary fuselage fuel tanks (from existing similar designs)
Cargo floor and door (from existing designs)
Aeromedical and passenger features (leveraged from existing military systems)
Infrared defensive system (leveraged from existing military systems)
Radio Frequency situational awareness system
Electro-Magnetic Pulse hardening
Night Vision Imaging System and covert operations compatibility
Flight deck armor protection
Chemical/biological weapons compatibility
Flash blindness compatibility
Laser eye protection compatibility
Alert operation features
Military voice and data communications
Tanker unique flight management functionality

26. Senator MCCAIN. Secretary Donley, has any work begun under the contract?

Secretary DONLEY. Yes. The KC–46 Engineering and Manufacturing Development contract was awarded on February 24, 2011. As of March 17, 2011, the Air Force has obligated approximately $392 million of fiscal year 2010 and fiscal year 2011 funding to incrementally fund Boeing's execution of the contract for design, development, test, verification, certification, and delivery of the first four tanker aircraft.

BUYING SATELLITES UNDER MULTIYEAR CONTRACTS

27. Senator MCCAIN. Secretary Donley and General Schwartz, I am gratified by the OSD's decision not to approve the Air Force's proposal to execute a multiyear contract in connection with the Advanced Extremely High-Frequency (AEHF) satellite program. As you know, to help ensure that DOD realizes the substantial savings it expects from using a multiyear contract in a given case, multiyear contracting opportunities should be Reserved for only the most stable and best performing programs. That is a requirement reflected in law. The AEHF program, which has chronically overrun in cost and schedule and has, to this day, failed to deliver promised capability, is not such a program. I understand that OSD will, nonetheless, help you think about a more appropriate, conservative block-buy approach that would make more sense for this program and for military satellite programs in general that, while continuing to only promise the delivery of much needed capability, are impinging on those resources that have been appropriated for the Air Force to buy satellites. We will help OSD think that through. What principles do you feel should guide a responsible block buy strategy for highly risky, very expensive, and as yet unproven military satellite programs?

Secretary DONLEY and General SCHWARTZ. The principles that should govern a decision for satellite block buys are stable requirements, a stable design, completed development, and readiness for steady state production. This is what is currently envisioned in the fiscal year 2012 President's budget request for the Advanced Extremely High Frequency (AEHF) satellite program.

AIR FORCE SPACE ACQUISITION PROPOSAL

28. Senator MCCAIN. Secretary Donley, I appreciate the stated goals of the Air Force's newly announced Evolutionary Acquisition for Space Efficiency (EASE) initiative for procuring satellite systems. However, I continue to be concerned with the overall track record of cost overruns and schedule delays for space systems. One of the selling points of EASE, which calls for, among other things, the use of block buys for military satellites, is the potential for savings. How does the Air Force intend to conclusively determine that expected savings have been realized?

Secretary DONLEY. The Air Force is confident that the AEHF program has established stable requirements and a stable design, has completed development, and is ready for steady state production. Given this confidence, the Air Force is prepared to negotiate a fixed-price incentive fee contract for the AEHF–5 and –6 block buy included in the fiscal year 2012 President's budget. The estimated savings for the AEHF block buy in fiscal year 2012 is greater than ten percent but is contingent on contract negotiations. These savings are measured against the traditional approach to acquiring satellites; therefore, the Air Force will achieve these savings at AEHF contract award in fiscal year 2012. At that time, cost of the awarded contract

can be contrasted with the Cost Assessment and Program Evaluation estimate of the purchase under the prior status quo approach, yielding a measure of savings. Savings realized through block buys are intended to be reinvested in research and development for technology enhancement to advance mission area capabilities.

JOINT STRIKE FIGHTER OPERATING AND SUPPORT COSTS

29. Senator MCCAIN. General Schwartz, as you know, last year U.S. Naval Air Systems Command (NAVAIR) effectively determined that the Marine Corps and the Navy's versions of the JSF may end up being too expensive to operate. Specifically, it found that, with each flight-hour possibly costing about $31,000 in 2029, compared with about $19,000 per flight hour for current F/A–18 Hornets and AV–8B Harriers, the operating cost associated with the Navy's versions of the JSF may be considerably higher than the costs to operate the legacy aircraft they are intended to replace. Has the Air Force reviewed and independently validated NAVAIR's analysis; and, if so, do you agree with its finding on the expected operating costs of the JSF?

General SCHWARTZ. The Air Force has reviewed NAVAIR analysis and determined that the operating costs for all three of the JSF variants are higher than originally estimated. The OSD Cost Assessment and Program Evaluation (CAPE) also conducted an Operations and Sustainment cost estimate for JSF and their estimate is consistent with the previous Air Force and Navy cost estimates.

30. Senator MCCAIN. General Schwartz, what does that mean for the viability of the Air Force's JSF program and what kind of mix we can expect in terms of the Air Force's future strike fighter force?

General SCHWARTZ. The Air Force, along with our F–35 sister Services and international partners, recognizes that life cycle sustainment costs for the F–35 program must remain affordable to the warfighter. The Air Force is continuously engaged with the Program Office and the prime contractor, Lockheed Martin, to investigate opportunities to reduce overall operations and sustainment costs, in order to capture the most affordable solution with the greatest capability. Additionally, the F–35 Program Office has several efforts underway to review methods to reduce sustainment costs, including:

- A Sustainment Cost Benefit Analysis (CBA) that will compare service organic logistics capability against the Program of Record (POR) contractor-provided supply chain management construct.
- A Carrier Strike Group focused sustainment wargame.
- A "deep dive" of the Autonomic Logistics Information System (ALIS) capabilities and challenges.

The Air Force will gradually replace our F–16 and A–10 fleet with F–35As as we transition to a fifth generation fleet of tactical fighters. We will be required to maintain a mix of legacy and fifth generation tactical assets as we procure a more capable fighter force structure.

31. Senator MCCAIN. General Schwartz, to what extent is NAVAIR's assessment (and the Air Force's validation of that assessment) reflected in the Air Force's current budget proposal?

General SCHWARTZ. The Air Force's fiscal year 2012 budget proposal is in line with the NAVAIR assessment and is consistent with the OSD guidance to fund the program to the OSD Cost Assessment and Program Evaluation estimate.

F–35 LIGHTENING II JOINT STRIKE FIGHTER

32. Senator MCCAIN. General Schwartz, over the last few weeks, the media has been reporting that the Air Force may extend by more than 2 years the date by which it intends to deploy a squadron with initial operating capability (IOC). With the Air Force having stated as recently as last month that the F–35 will reach its IOC by mid-2013, we may now be looking at no earlier than 2015. I understand that to mitigate most cost effectively any potential gap in tactical fighter capability, a fleet viability board is performing structural evaluation tests on its F–16s to see if they can fly longer than planned. By when will that board conclude its work?

General SCHWARTZ. First, for clarification, the Fleet Viability Board does not perform structural tests, but rather is an independent assessment body evaluating fleet technical health, availability, and cost of continued ownership. The Board recently concluded its assessment on the older pre-Block fleet (Blocks 25/30/32), and while

the final results are still pending, initial results indicate that the aircraft will reach their certified service life of 8,000 equivalent flight hours.

The Board is in the process of performing an assessment of the newer post-Block fleet (Blocks 40/42/50/52), which should be final this fall. Additionally, the Program Office contracted with Lockheed Martin to perform a full scale durability test (FSDT) on a Block 50 aircraft with results anticipated in 2016. The fiscal year 2012 President's budget adds $15 million to begin Research, Development, Test and Evaluation for structural modification and avionics modernization as part of the Block 40/50 service life extension. The FSDT, along with strong engineering data, will inform future decisions regarding the service life of these aircraft.

33. Senator MCCAIN. General Schwartz, what are the preliminary findings of the board?

General SCHWARTZ. The older F–16 pre-Block fleet (Blocks 25/30/32), used primarily for test, training, or operationally within the Guard and Reserve, has sufficient structural service life remaining to meet the current retirement plans. However, the Board assessment concluded that, if needed, the F 16 pre-Block fleet can extend its service life and be made more capable, but will require significant, associated investment cost and reduced aircraft availability.

The Board assessment of the newer F–16 post-Block fleet (Blocks 40/42/50/52) is ongoing. Additionally, we are proceeding with a full scale durability test, and its resultant service life extension plan, in an effort to operate these aircraft longer than originally scheduled. Due to substantial design differences from older pre-Block aircraft, this durability test will be specific to the newer post-Block fleet.

RQ–4 GLOBAL HAWK

34. Senator MCCAIN. Secretary Donley and General Schwartz, I understand that you are planning to reduce the number of Global Hawk unmanned aerial vehicles (UAV) from 22 to 11. By how much will that reduction in the number of Global Hawk aircraft the Air Force intends to buy increase the cost of each Global Hawk vehicle?

Secretary DONLEY and General SCHWARTZ. The December 2010 Selected Acquisition Report (SAR) reflected Average Procurement Unit Cost (APUC) growth from $90.8 million to $111.6 million (+22.9 percent) and Program Acquisition Unit Cost (PAUC) growth from $150.1 million to $171 million (+14 percent). The subsequent draft program office cost estimate revealed a critical APUC breach from $90.8 million to $113.9 million (+25.4 percent) and significant PAUC breach from $150.1 million to $173.3 million (+15.5 percent).

Cost growth was driven by program quantity/schedule changes, engineering and requirements changes, support changes, and general cost growth.

35. Senator MCCAIN. Secretary Donley and General Schwartz, will that increase in cost trigger any of the cost-growth thresholds under the Nunn-McCurdy law? If so, please explain.

Secretary DONLEY and General SCHWARTZ. Yes. The Secretary of the Air Force notified Congress of a critical unit cost breach of over 25 percent in APUC and over 15 percent in PAUC on 6 April 2011. The December 2010 Selected Acquisition Report (SAR) reflected APUC growth from $90.8 million to $111.6 million (+22.9 percent) and PAUC growth from $150.1 million to $171 million (+14 percent). The subsequent draft program office cost estimate revealed a critical APUC breach from $90.8 million to $113.9 million (+25.4 percent) and significant PAUC breach from $150.1 million to $173.3 million (+15.5 percent).

Cost growth was driven by program quantity/schedule changes, engineering and requirements changes, support changes, and general cost growth.

SECRETARY GATES' AIR FORCE ACADEMY SPEECH

36. Senator MCCAIN. Secretary Donley and General Schwartz, in his speech at the Air Force Academy on March 4th, Secretary Gates expressed the fear that once he departs and once U.S. forces drawdown in Iraq and Afghanistan, there are those who look forward to getting back to what he called "real Air Force normal." Do you agree with Secretary Gates' views about the future of conflict and likely implications for the Air Force in the competition for limited defense dollars?

Secretary DONLEY and General SCHWARTZ. We are committed to providing the most capable Air Force in the world, while continuing to be good stewards of our National resources. This involves not only the analysis of current and future

threats, but balancing requirements, risks, and limited resources to meet those threats. We must also maintain the ability to provide first class support to our personnel and the infrastructure required to operate in today's global environment. As always, we are committed to working with our sister Services and the Secretary of Defense to build budgets that reflect the delicate balance between current operations and future requirements within assigned obligation authority.

37. Senator MCCAIN. Secretary Donley and General Schwartz, what do you see as the Air Force's primary missions after Operation Enduring Freedom (OEF) is completed and the most important contingencies Air Force leaders should be preparing for in the future?

Secretary DONLEY and General SCHWARTZ. In a post-OEF world, the United States faces a complex and uncertain strategic landscape with a vast array of diverse and complex security challenges. Threats created by aggressive state and nonstate actors, as well as continuing counter-insurgency challenges and the proliferation of weapons of mass destruction, will continue to undermine global security and complicate efforts to sustain peace.

Other powerful trends will add complexity to the security landscape. A rising China with potential aims of creating its own Pacific region sphere of influence, increasing demand for resources, rapid urbanization of littoral regions, the emergence of new strains of disease, and cultural and demographic tensions are just some of the trends whose complex interplay may spark or exacerbate future contingencies that require Air Force, Joint Service, allied and partner nation involvement.

Air Force preparation for the future will seek to sustain advantages and provide combatant commanders with capabilities to defeat increasingly capable adversaries across the full spectrum of military conflict, while at the same time, maximizing combat effectiveness and efficiency from every taxpayer dollar entrusted to us. Pursuing a range of adaptable and efficient mission capabilities embedded within our 12 Air Force Core Functions will further the enduring advantages of Global Vigilance, Reach and Power, and adequately prepare the Air Force for an uncertain future.

38. Senator MCCAIN. Secretary Donley and General Schwartz, what changes, if any, in training, equipment, and force structure should the Air Force be making now to prepare for these likely contingencies?

Secretary DONLEY and General SCHWARTZ. The Air Force is committed to preparing for future contingencies through improvements to training, equipment and force structure while remaining ever mindful of our Nation's fiscal challenges. Air Force training initiatives must prepare airmen for future contingencies across the range of military operations, and continue to foster mutually beneficial partnerships around the world. Successful partnerships will ensure interoperability, integration, and interdependence between coalition forces and provide our partner nations the capability and capacity to solve their own national security issues. The Air Force will continue to promote cross-cultural competence as a critically important skill for all airmen, and further emphasize language skills and regional knowledge. The Air Force will also increase the culture and language content of pre-deployment training and promote new language learning programs. The most valuable Air Force asset is our people and we will make every effort to further prepare our professional, all-volunteer force.

The Air Force is committed to enhancing our capabilities to support the Joint force. We will ensure that we're providing the right capabilities with our long-range strike, fighter force, strategic airlift and Intelligence, Surveillance and Reconnaissance (ISR) platforms and ensure our space-based assets continue to deliver needed capabilities in the future. We will modernize where we can, but where modernization no longer is cost-effective, we will pursue recapitalization. As you know, one of our primary efforts includes retiring and recapitalizing legacy fighters and tankers and replacing them with F–35s and KC–46s. We will mitigate near-term fighter risk through aggressive management of F–35 production, legacy fleet review and sustainment, along with selected service life extension and modernization programs. We will continue to develop and invest in cyberspace capabilities and expertise to meet emerging mission needs, as well as expand collaboration with Joint, Interagency, academic, and international partners. We will continue to enhance ISR capabilities and increase Processing, Exploitation and Dissemination capacity to support combatant commander needs, as well as revise education and training programs to develop cyberspace professionals.

While the current environment requires the Air Force to accept reasonable levels of risk as we balance our capabilities to address emergent threats and challenges, we will continue to pursue cost-effective training, weapon systems and equipment

that leverage existing capabilities, incorporate innovative solutions, and maximize Joint interoperability and integration of legacy and future systems. The Air Force will continue to support assessments of the future joint operating environment, which will enable the Air Force to provide a balanced force with a relevant spectrum of capabilities, seamlessly integrated with our Joint and coalition partners, to meet national strategic objectives and the requirements of future contingency operations.

AIR FORCE END STRENGTH AND FORCE SHAPING

39. Senator McCAIN. General Schwartz, in 2007, the Air Force was implementing a goal of reducing the number of Active-Duty airmen to 316,000, a goal that Secretary Gates rescinded. Despite stability in end strength and even a 600-airman increase planned for in the fiscal year 2012 budget, the Air Force plans to reduce its numbers in certain officer military occupational specialties (MOS), conduct a reduction in force, and use other means to involuntarily separate hundreds of currently serving Air Force officers. Please explain why the Air Force is taking these personnel measures and what the scope and duration of the force shaping measures will be and what the ultimate result will be for the Air Force, particularly the officer corps.

General SCHWARTZ. The previous reduction of Active Duty airmen was associated with a reduction to authorized Air Force end strength to the 316,000 level. Since then, Air Force mission requirements have resulted in an increase in our authorization end strength to 332,800, as of fiscal year 2012. We appreciate your support of this higher end strength level and are committed to operating within authorized levels. It is for this reason the Secretary and I approved a Force Management Plan that will size and shape the force to our authorized end strength ceiling by the end of fiscal year 2012.

While our Air Force is fortunate to have so many dedicated airmen wanting to serve, a 16-year record high retention has caused our Active-Duty Force to exceed our authorized end strength level. As a result, starting in fiscal year 2010, we have implemented several measures to reduce officer and enlisted airmen. We have been successful in reaching our enlisted end strength, but remain approximately 2,300 officers over strength, as of the end of fiscal year 2010. Consequently, we made the difficult decision earlier this year to continue Force Management measures necessary to reach authorized levels by the end of fiscal year 2012.

In order to minimize the impact on our current force, we have reduced active duty accessions and extended those voluntary separation programs implemented in fiscal year 2010. Even with these actions, our over-strength situation has required use of involuntary programs to include rollback of enlisted dates of separation to help balance enlisted end strength. To balance officer end strength, we had to utilize officer retention boards, reduced officer promotion opportunities along with force shaping, reduction-in-force and selective early retirement boards in 2010 with separations and retirements in fiscal year 2011. We must conduct the same in 2011 through early 2012 to meet our authorized end strength by the end of fiscal year 2012.

At the same time, we are focused on shaping our force to ensure we have the critical skills and capabilities required now and over the next few years. To this end, we are cross-training officers and enlisted airmen from over-manned career fields into those with greater needs. We are also prudently using bonuses to target critical skill areas where we are undermanned and retention is low.

40. Senator McCAIN. General Schwartz, what legislative tools, if any, do you need to accomplish the force shaping goals you have in mind?

General SCHWARTZ. Congressional authorities are key to successfully sizing and shaping our force. We are using existing authorities to the maximum extent; however, renewed and expanded measures would enable us to be even more effective in shaping our force. Thank you for the NDAA for Fiscal Year 2011 renewed authority to allow prior enlisted officers, with 20 or more years of total service, to retire with eight versus ten years of commissioned service. We implemented this authority in our current Force Management strategy to help manage our end strength for fiscal year 2011 and may continue it, if our request for another extension is granted beyond September 2013.

In coordination with our sister Services, we worked closely with the OSD to request additional legislative authorities. As you may be aware, our authorities to shape our mid-grade officers by offering voluntary separation pay and conducting an involuntary reduction in force board expire in December 2012. We have successfully implemented these authorities over the past year, and have requested they be extended. For officers with more than 15, but less than 20 years of service, we are

requesting a Temporary Early Retirement Authority. Additionally, to incentivize officers to retire in skills excess to Air Force requirements, we request the authority to offer a voluntary retirement incentive pay. While we currently have the authority to selectively retire lieutenant colonels and colonels early, the existing authority is limited. Renewing the enhanced selective early retirement authority will allow the Air Force to manage our lieutenant colonels and colonels more precisely. We also request the flexibility to adjust the maximum years of active commissioned service for lieutenant colonels and colonels. For officers in the regular grade of lieutenant colonel, we request the authority to adjust the maximum years of service from 28 years to no less than 25 years. For officers in the regular grade of colonel, we request the authority to adjust the maximum years of service from 30 years to no less than 27 years.

Lastly, we are requesting an extension to the Career Flexibility to Enhance Retention beyond December 2012. This would allow us to continue to authorize servicemembers' inactive status while serving on active duty in order to meet personal or professional needs and then return to active duty at the end of the period of inactivation.

We requested all these legislative authorities through the OSD. Each of these authorities will provide all of the Services with additional tools to size and shape the Armed Forces to best meet current and future mission requirements.

EFFICIENCIES EFFORT AND REDUCTION IN NUMBER OF GENERAL OFFICERS

41. Senator MCCAIN. General Schwartz, the Secretary of Defense initiated an efficiency review several months ago that included the goal of reducing the grades and number of general and flag officers throughout the Services. What was your recommendation to the Secretary of Defense regarding Air Force general officers in this regard?

General SCHWARTZ. In accordance with the initial guidance received from the Secretary of Defense in August 2010, the Air Force did a thorough scrub of all of our internal general officer positions. The Air Force completed this review and initially identified 18 positions that could be eliminated from the general officer ranks based on changing operational requirements and internal restructuring. There is risk associated with each of these eliminations, but on a case by case basis, the Air Force can assume that risk and still accomplish our mission.

Subsequent to our input, the Secretary of Defense's Efficiencies Task Force identified four additional positions for reduction. These positions are the Secretary of the Air Force Legislative Liaison Deputy and the Judge Advocates General for Air Combat Command, Air Force Materiel Command and Air Mobility Command. The latter reductions take the number of Brigadier General positions in Judge Advocate General Corps from four to one. We have since provided justification for maintaining each of these positions including the need for a pathway to grow flag officers with experience in the legislative process, as well as, senior military attorneys who are experts in application of lethal force, transportation, and aviation and acquisition law specialties, respectively.

42. Senator MCCAIN. General Schwartz, would you prefer to see more reductions in joint billets that would be filled by Air Force general officers, or, rather, in institutional billets throughout the Air Force?

General SCHWARTZ. In addition to the 22 internal Air Force general officer billets, another 17 Joint positions were identified, for a total of 39 positions eliminated from our headspace. While we understand that many of these joint positions are tied to operations in Iraq and Afghanistan, a reduction of this size concerns us greatly. The Air Force values Joint participation and it is our desire to be strong contributors to the joint fight.

43. Senator MCCAIN. General Schwartz, what is your opinion about the appropriate number of Air Force general officers by grade?

General SCHWARTZ. See response to question #42.

AIR FORCE IMPLEMENTATION OF DON'T ASK, DON'T TELL POLICY REPEAL

44. Senator MCCAIN. General Schwartz, DOD has finalized its plans for training military personnel under the new policy that will allow individuals who are gay or lesbian to serve openly. Training of senior leaders has already begun. What is your assessment of the validity of the plan for the Air Force?

General SCHWARTZ. The DOD-developed training plan delivers a solid foundation of knowledge and guidance to our airmen. Policies were examined for required changes and these updated policies were incorporated into a training program that informs, while emphasizing leadership, professionalism, discipline, and respect. Leadership from Air Force commanders and senior leaders is the key to successful implementation. Our Air Force leaders are clearly articulating upcoming policy changes and preparing the force for repeal—consistent with standards of military readiness, effectiveness, unit cohesion, recruiting and retention. Within this context, and guided by our core values, I am confident the Air Force will successfully implement this policy change with the same professionalism we demonstrate in all of our daily endeavors.

45. Senator MCCAIN. General Schwartz, what criteria will you use when the Secretary of Defense solicits your view, as Chief of Staff, about the readiness of the Air Force for openly gay and lesbian airmen to serve?

General SCHWARTZ. Notably, the plan laid out by the OSD, does not require 100 percent of airmen to be educated and trained prior to certification. Instead, it ensures the execution of actions leading to certification is underpinned with a solid foundation consistent with standards of military readiness, effectiveness, unit cohesion, recruiting and retention. Within this context, I have tasked my senior leaders, commanders, chiefs, first sergeants, and supervisors, in addition to my experts, to be fully educated and trained prior to certification. Further, to assist us with recording training and tracking issues that could affect readiness and esprit-de-corps, I receive biweekly progress updates on policy development, training execution, and percent of the force trained. I also receive Major Command-level subjective feedback on training effectiveness, readiness, unit cohesion, recruiting and retention.

I plan to utilize the Major Command commander assessments, along with a minimum of 75 percent of the force trained, as my criteria for recommending certification to the Secretary of Defense and the Chairman of the Joint Chiefs of Staff.

46. Senator MCCAIN. General Schwartz, what steps are you taking to ensure that Air Force units and personnel who are currently deploying, or will be deployed when repeal takes place, and who are or will be experiencing the most austere, most demanding combat conditions are ready for this change?

General SCHWARTZ. For all airmen preparing to deploy, commanders will ensure they receive the appropriate training. For all airmen currently deployed to locations where training may have an adverse mission impact, commanders have the discretion to schedule training within 60 days of redeployment. Computer-based training is available for all those airmen that do not fall within the previous category, or they may elect to attend a sister Service training program.

SAVINGS AND EFFICIENCIES INITIATIVE

47. Senator MCCAIN. Secretary Donley, at Secretary Gates' direction to the Military Services to find $100 billion in efficiency savings between fiscal years 2012 and 2016, the Air Force has found $3.4 billion in efficiencies in 2012 and a total of $33.4 billion over the next 5 years. I understand that Secretary Gates is allowing the Air Force to reinvest that efficiency money to, for example, fund a next-generation bomber, upgrade the radar system for F–15 aircraft, develop simulators for the JSF, and improve the B–52s' computer infrastructure. Which elements of savings or efficiency that the Air Force has identified is the riskiest, in terms of not being achievable?

Secretary DONLEY. First, we have mitigated risk in our efficiency plans through a variety of strategies including ramping up expected efficiencies further out in the Future Years Defense Plan (FYDP) allowing additional time for planning and execution of the plans; selecting by-name owners of our initiatives to ensure responsibility remains at a personal level of accountability; and, by weaving efficiency planning and execution process into existing Air Force Corporate Structure to ensure efficiency plans are aligned with Air Force strategy and get reviewed on a regular basis. However, we are unable to eliminate risk completely due to a variety of factors.

The majority of risk we currently assess in our efficiencies comes from external sources and is generally a product of assumptions made in the planning process. Commodity prices, for example, represent great risk to energy efficiencies in both the aviation and facility areas. Rising fuel prices could completely eliminate all dollar savings from efficiencies. Our business process efficiencies are based on a projected level of demand for service. Real-world contingencies could significantly chal-

lenge those projections and drive additional manpower requirements to meet those needs in spite of the process efficiencies we were able to garner. The same contingencies would also use our equipment at greater rates than currently projected which would require adjustments to acquisition strategies and replacement profiles. We monitor risk on a monthly basis, and therefore the type of risk and amount associated with that risk varies as we actually execute the efficiency plans. Currently, the Air Force assesses risk in the following areas that translate to $1.2 billion across the FYDP in efficiency plan shortfalls, and an additional amount of approximately $1 billion based on actual cost of fuel:

- Installation Support/Communication Issues: Current restructure plans for installation support result in efficiency estimates that are less than originally anticipated. The Air Force is developing alternative approaches to mission support that will allow us to make up the difference.
- Logistics and Installation Efficiencies and MAF Fuel Efficiencies: We can take actions through smart investments and standard operating policies to reduce energy consumption, but we cannot control the price of energy. Recent increases in oil prices highlight the inherent risk in achieving financial savings based on fuel and energy efficiencies. We expect to reduce energy consumption and reduce gallons/energy consumed. However, as price of fuel varies, it will impact our ability to achieve financial savings.
- Weapon System Sustainment: Our aging platforms and equipment create upward pressure on costs—obsolescence is a continuing management challenge
- The DWSS: Decisions were made to enhance funding to this program in finalizing the fiscal year 2012 President's budget submission which impacts projected savings associated with this program across the FYDP. We are doing assessments within this program, our space portfolio, and broader acquisition efficiencies as a means to fill this efficiency target gap

The process for managing efficiencies has considered that fact of life issues are inevitable. The ability to fill gaps quickly when they arise is essential and is part of the ongoing management process. The Air Force will be proposing additional efficiencies to fill any shortfalls in executing fiscal year 2012 and in building the fiscal year 2013 budget.

48. Senator McCain. Secretary Donley, the Air Force's chief deputy management officer was recently quoted as saying that if the Service does not meet those efficiency goals, it could be pressed to remove money from areas it had not planned to cut, making the Air Force both less efficient and less capable. Do you agree with that assessment?

Secretary Donley. Yes, I agree. The Air Force gave careful consideration to the development of efficiency initiatives and the application of savings to support mission and force structure requirements. Continuing our longstanding commitment to fiscal responsibility and operational efficiency, the Air Force is committed to a deliberate process to enhance capabilities by reducing expenses allocated to overhead and support functions while shifting resources to the modernization and readiness programs. If we find any portion of the efficiencies cannot be achieved in execution, we will find and execute another form of efficiency to ensure we preserve the critical warfighting enhancements included in the fiscal year 2012 President's budget request.

49. Senator McCain. Secretary Donley, exactly how will you ensure that the Air Force actually holds those lines, so that money doesn't migrate back into those accounts where it intended to spend less?

Secretary Donley. The Air Force comptroller is assisting with the means to track actual expenditures and ensure resources are not migrated back into efficiency areas. Efficiency initiatives that cannot be readily reported through Air Force financial systems or other sources will be reported to the comptroller through senior leadership assigned to those respective priority areas. The Air Force Audit Agency will be assessing the adequacy of financial controls to assure accurate financial data on the results of efficiency initiatives beginning in fiscal year 2012.

The Air Force will use its existing corporate governance structure, the Air Force Board and Council, to regularly review status towards achieving identified efficiencies by measuring specific progress against the implementation plans. The Air Force Deputy Chief Management Officer is leading the Air Force Board, attended by flag officers/senior executives from across Headquarters Air Force and Major Commands, in monthly reviews of the execution status of efficiency efforts.

On a quarterly basis, the Air Force Council, co-chaired by the Under Secretary of the Air Force and the Vice Chief of Staff, will monitor plans and progress to ensure efficiency outcomes are being delivered and will also review readiness and performance data to ensure Air Force Efficiencies are not inadvertently impacting mission performance or the quality of life of airmen.

50. Senator MCCAIN. Secretary Donley, did the Air Force put together a "Plan of Action and Milestones" document, which would help ensure that the Air Force has identified and will eliminate and capture cost-savings for reinvestment? If so, please provide a copy.

Secretary DONLEY. The Air Force has established detailed implementation plans, which are the responsibility of senior leadership, to ensure results against programmed efficiencies. We are compiling and will track updates to plans through an Integrated Master Schedule. The Air Force can share the IMS which should be initially completed in May 2011, as well as individual plans (if desired). Please realize that some plans are more developed than others with ongoing updates as efficiency initiatives are implemented.

COMMON VERTICAL LIFT SUPPORT PLATFORM/COMBAT SEARCH AND RESCUE HELICOPTER REPLACEMENT

51. Senator MCCAIN. Secretary Donley, in this budget, the Air Force begins acquisition of a new support helicopter, the Common Vertical Lift Support Platform (CVLSP) to replace its UH–1 Hueys, principally at the missile fields. The Air Force has not announced an acquisition strategy, yet the budget includes money to acquire the first two helicopters. Please elaborate on what the Air Force intends to do here.

Secretary DONLEY. The Air Force plans to conduct a full and open competition for the CVLSP program and award a contract to initiate procurement in fiscal year 2012. We intend to purchase a Non-Developmental Item/Off-The-Shelf (NDI/OTS) aircraft that will allow us to meet the warfighter requirement for an initial operational capability in fiscal year 2015.

52. Senator MCCAIN. Secretary Donley, since there is no money for development or testing, but money for procurement, is it safe to say you intend to buy a helicopter the military already operates?

Secretary DONLEY. The Air Force intends to purchase a NDI/OTS aircraft to accelerate fielding to the warfighter. Minimal Research, Development, Test and Evaluation (RDT&E) funding is required for operational test and evaluation to validate aircraft performance against key performance parameters. To clarify, there is RDT&E funding for CVLSP in the fiscal year 2012 President's budget FYDP, specifically $4.0 million in fiscal year 2011, $5.365 million in fiscal year 2012, $7.44 million in fiscal year 2013, and $8.934 million in fiscal year 2014.

53. Senator MCCAIN. Secretary Donley, since we just took 10 years to buy a tanker, do you believe you can develop a requirement, run a competition, select a winner, and buy the first helicopters all in 1 year?

Secretary DONLEY. Yes. The Air Force intends to purchase a NDI/OTS aircraft, and we are confident we can conduct a source selection and award a contract on schedule.

54. Senator MCCAIN. Secretary Donley, won't buying off-the-shelf (as reflected by the absence of development or testing money sought for this program), limit the possible competitors?

Secretary DONLEY. Yes. The need to field a platform that meets the warfighter's requirements and target Initial Operational Capability of fiscal year 2015 will limit the potential common vertical lift support platform competitors to those that have already developed a helicopter that can meet the user's needs with little or no modifications, i.e. a non-developmental, off-the-shelf solution. However, market research and industry responses to requests for information indicate there are several potential competitors.

55. Senator MCCAIN. Secretary Donley, how will you know you're getting the right aircraft?

Secretary DONLEY. We will conduct a full and open competition that will evaluate the capabilities of each offeror's platform based on the warfighter's requirements.

56. Senator MCCAIN. Secretary Donley, you said in testimony before the House that the Air Force is looking to address the CVLSP requirement and the long-standing need to replace our combat search-and-rescue helicopters with a common aircraft. But the requirements for range, speed, and payload would seem to be rather different between moving a squad around a domestic missile field and penetrating enemy territory. How do you reconcile those missions into a single airframe, especially given the timeline this budget establishes for procurement?

Secretary DONLEY. The Air Force reviewed many options in the process of deciding on the acquisition strategy for the HH–60 Recapitalization and CVLSP programs, including the potential merits of combining the program requirements and/or source selections. After reviewing these options, we have decided to keep the acquisition programs separate.

PRESIDENTIAL AIRPLANE REPLACEMENT PROGRAM

57. Senator MCCAIN. Secretary Donley, we hear rumors or trial balloons about a replacement for the VC–25s that will serve as Air Force One. Where is that effort?

Secretary DONLEY. The two VC–25 (Boeing 747–200) Presidential support aircraft will be 30 years old in 2017, the planned service life stated in the original operational requirement. We have established a Presidential Aircraft Replacement (PAR) program team to conduct preliminary acquisition planning and develop life cycle cost estimates, alternative acquisition strategies, and risk reduction analyses in anticipation of direction to proceed with an acquisition program. In addition to the items mentioned above, live fire test and evaluation, noise abatement, and facilities planning studies are also underway.

58. Senator MCCAIN. Secretary Donley, when do you anticipate asking for funding for a replacement?

Secretary DONLEY. The Presidential Aircraft Recapitalization (PAR) Program (VC–25 replacement) is currently funded at $7–7.5 million annually to facilitate capability definition, acquisition strategy development, risk reduction, and facilities studies. The Air Force plans to request a funding increase in fiscal year 2016 and fiscal year 2017 to facilitate contract award and initial aircraft procurement in order to meet a fiscal year 2023 initial operating capability (IOC).

F–22 RAPTOR TOOLING PRESERVATION STRATEGY

59. Senator MCCAIN. General Schwartz, with Secretary Gates' having decided last year to have the Air Force stop buying more F–22 Raptor fighter aircraft, what is the Air Force's strategy for preserving unique tooling for that aircraft?

General SCHWARTZ. All government-owned F–22 tooling is being preserved by dismantling and storage in CONEX containers at Sierra Army Depot (SIAD). The first of these CONEX containers was shipped to SIAD on February 25, 2011. The last shipment will occur in December 2012. As part of the effort to dismantle and store F–22 tooling, production processes are being documented using video and written documents to support sustainment. The program office has an active program to review, manage, and dispose of production tooling it determines is unnecessary for sustainment.

60. Senator MCCAIN. General Schwartz, is it intended to accommodate possible restart of the program or is it sustainment-only?

General SCHWARTZ. The current F–22 shutdown strategy is sustainment-only. There is no provision for restart.

F–22 RAPTOR SUSTAINMENT STRATEGY

61. Senator MCCAIN. General Schwartz, what is the sustainment strategy for the F–22 program going forward and, in particular, to what extent will that strategy use competition (or the option of competition) to drive down costs?

General SCHWARTZ. The sustainment strategy going forward is to transition to a joint contractor/government support integration team. This transition will occur as the program implements the plan based on the findings of the 2009 F–22 Sustainment Business Case Analysis. The plan was approved by the Secretary of the Air Force in 2010 and is currently being implemented. The projected net savings are more than $1 billion over the life of the F–22. Additionally, the F–22 program office has ongoing efforts to assess opportunities to compete elements of F–22 sustainment work. Follow-On Agile Sustainment for the Raptor (FASTeR) is a 10-

year (2008 through 2017) Performance Based Logistics (PBL) business arrangement with Lockheed Martin Aeronautics. Annual FASTeR contract awards will implement the transition to a joint contractor/government support integration team.

AVIATION INDUSTRIAL BASE

62. Senator MCCAIN. Secretary Donley and General Schwartz, with the major design of the F–35 and for the new tanker (at least theoretically) done, today we have no new fighters under development in this country. We have no cargo aircraft under development. Aside from the KC–46, we have no tankers under development. I don't know the last time that was true. The F–22 and C–17 lines are getting ready to close, and the F–15 line is at very minimal rates. Maybe this is the natural consequence of the defense industry consolidations of the last decade. And maybe it's just cyclical. To what extent does this development concern you?

Secretary DONLEY and General SCHWARTZ. The Air Force is very concerned about the current and projected state of the domestic industrial base, particularly with respect to its capabilities to support emerging Air Force requirements across all three Air Force domains—air, space, and cyber. Our pursuit of the new long-range strike bomber program will alleviate some of those concerns. This program will help keep engineers and other professionals engaged in the design and production of stealth and other sophisticated technologies critical to America's military superiority. We recognize the current and projected fiscal environment will drive some very difficult budget choices. In that regard, it becomes even more critical for the Air Force to make data-driven investment decisions whether on research, engineering design and development, sustainment, or weapon systems upgrades. An example is the new long-range strike bomber program where the Air Force is going to make informed, tough capability tradeoffs to hold costs down so the Air Force can procure a sufficient and sustainable inventory over the long term.

The Air Force is working with the OSD as it leads a sector-by-sector, tier-by-tier review of the current network of the Department's suppliers. We expect this initial review, and subsequent updates, to provide all of DOD with a shared view of how the industrial base segments interface to support each of our capabilities. With this knowledge of the industrial base, the Air Force will be better informed so that our investment decisions can preserve the critical domestic industrial base capabilities needed for the range of Air Force missions.

63. Senator MCCAIN. Secretary Donley and General Schwartz, does the Air Force have a notion of what minimum capabilities or surge capacity it would like maintained in industry?

Secretary DONLEY and General SCHWARTZ. In terms of minimum capabilities, some sectors of the industrial base quickly come to mind, such as aerospace engineering and design capabilities, while the impact of other areas on Air Force capabilities may be more subtle. As reported in the Quadrennial Defense Review (QDR), DOD recognizes that a hands-off approach to the industrial base is no longer viable. However, we do not yet have the knowledge base needed to inform a more active approach to shaping the industrial base. Following the QDR, the Air Force initiated several industrial base studies, specifically to evaluate the aircraft and munitions industrial bases. We expect the results of those studies to be complete later this year. The Air Force is also working with the OSD to develop this knowledge through a sector by sector, tier by tier review of the industrial base. To fly, fight, and win in air, space, and cyberspace, the Air Force draws on the industrial base for a broad array of products and services that enable the Air Force to perform its Core Functions. The Air Force looks to maintain our technological edge, particularly in stealth and other capabilities that ensure military superiority. Looking ahead to future investments, such as the Common Vertical Lift Support Program, the KC–46A, and the new long-range strike bomber, the Air Force expects some of these to be provided solely through domestic industrial sources, some to be provided with the support of our allies, while the global commercial market will provide the balance. The Air Force expects the OSD-led review to help inform Air Force choices in this regard.

64. Senator MCCAIN. Secretary Donley and General Schwartz, do you have a plan for how to maintain that capacity?

Secretary DONLEY and General SCHWARTZ. The Air Force does not yet have the knowledge base needed to inform a more active approach to shaping or maintaining the industrial base. Each of the three Air Force domains—air, space, and cyber—has a discrete set of requirements which can be expressed in terms of industrial ca-

pacity. However, there are some common needs that cut across all three domains, such as the need for assured integrated circuits. As the Air Force works with the OSD to develop a knowledge-based approach to our industrial base network of suppliers and better understand how that network matches up to current and planned capabilities, we will improve our ability to make definitive plans for shaping industrial capacity. The Air Force intent is to take that developing knowledge of industrial base suppliers, view it through the lens of Air Force requirements, and develop focused efforts to maintain, in sufficient capacity, those domestic industrial capabilities essential for the range of Air Force missions and future investments, such as the Common Vertical Lift Support Program, the KC–46A, and the new long-range strike bomber.

AIR FORCE NEW BOMBER PROGRAM

65. Senator MCCAIN. Secretary Donley, at an April 6, 2009, news conference on recommendations he was making for the proposed 2010 defense budget, Secretary Gates announced, among other things, that he would recommend deferring the start of a new bomber program, since much of today's inventory will remain relevant through 2040. As DOD modernizes the existing bomber fleet to provide long-range strike capability, simultaneous investments in development for a follow-on bomber will be required. In your view, does Secretary Gates' decision last year on the new bomber require upgrading the current B–52, B-l, and B–2 fleets? If so, how is that reflected in your budget request?

Secretary DONLEY. Yes, we must continue to upgrade and sustain the B–52, B–1, and B–2 fleets as we simultaneously invest in the development of the new long-range strike bomber. Modernization of the current fleet is critical to keeping those platforms flyable, relevant, and fully integrated into Air Force and Joint operations. These upgrade programs ensure our legacy bomber fleet remains relevant through 2040 and, together with the new long-range strike bomber, continues to provide an integrated long-range strike capability.

The budget request in the fiscal year 2012 President's budget reflects over $4.14 billion in investment funds for these bomber upgrade programs. The Air Force is currently executing multiple sustainment and modernization upgrades to the bomber forces, to include upgrades or replacement of cockpit displays, tactical and strategic communications and data links, navigation and positioning systems, radar and advanced targeting pods, weapons integration, and defensive systems.

66. Senator MCCAIN. Secretary Donley, are there sufficient resources in the fiscal year 2011 budget to sustain the long-range strike aircraft fleet?

Secretary DONLEY. Yes, the B–52, B–1, and B–2 fleets are adequately funded in the fiscal year 2012 budget.

The Air Force will invest over $1.1 billion for B–52 bomber modernization over the current Fiscal Year Defense Plan and over $3.0 billion for operation and maintenance.

[In millions of dollars]

B–52 Fiscal Year 2012 President's Budget	Fiscal Year					Fiscal Year Defense Plan Total
	2012	2013	2014	2015	2016	
RDT&E	133.3	78.4	74.0	69.6	45.6	400.9
Procurement	108.4	156.2	198.6	135.4	115.2	713.8
O&M	562.1	513.7	621.8	655.0	670.4	3,023.0

The Air Force will invest over $719 million for B–1 bomber modernization over the current FYDP and over $3.0 billion for operation and maintenance.

[In millions of dollars]

B–1 Fiscal Year 2012 President's Budget	Fiscal Year					Fiscal Year Defense Plan Total
	2012	2013	2014	2015	2016	
RDT&E	33.0	3.8	0.1	0.1	0.1	37.1
Procurement	198.0	173.1	120.6	81.1	108.7	681.5
O&M	495.9	458.5	479.1	676.6	932.2	3,042.3

The Air Force will invest over $2.3 billion for B–2 bomber modernization over the current FYDP and almost $2.6 billion for operation and maintenance.

[In millions of dollars]

B–2 Fiscal Year 2012 President's Budget	Fiscal Year					Fiscal Year Defense Plan Total
	2012	2013	2014	2015	2016	
RDT&E	340.8	432.2	423.0	361.6	271.4	1,829.0
Procurement	113.7	110.1	101.3	79.5	75.3	479.8
O&M	448.3	498.1	546.7	538.3	544.8	2,576.1

In addition, the Air Force will invest over $3.7 billion for development of the new long-range strike bomber over the current FYDP.

[In millions of dollars]

LRS–B Fiscal Year 2012 President's Budget	Fiscal Year					Fiscal Year Defense Plan Total
	2012	2013	2014	2015	2016	
RDT&E	197.0	294.0	550.3	999.5	1,699.8	3,740.7

67. Senator McCAIN. Secretary Donley, where is the Air Force going to make these investments?

Secretary DONLEY. The Air Force will invest roughly $4.14 billion across the FYDP to sustain and modernize the long-range strike aircraft fleet.

The Air Force will invest over $1.11 billion in the B–52 bomber over the fiscal year 2012 President's budget (PB) FYDP. B–52 sustainment and modernization efforts include:

- Combat Network Communications Technology (CONECT) program provides integrated communication and mission management system with machine-to-machine, beyond-line-of-sight datalink interfaces for weapons retargeting; also adds new color displays with moving map and digital interphone
- B–52 Extremely High Frequency (EHF) integrates the Family of Advanced Beyond-Line-of-Sight Terminals (FAB–T) providing secure, survivable two-way strategic command and control communications and upgrades the B–52 environment control system
- Strategic Radar Replacement (SR2) integrates modern non-developmental radar, replacing the legacy APQ–166 radar to address systemic sustainment issues
- MIL–STD–1760 Internal Weapons Bay Upgrade provides internal J-series weapons capability (i.e., JDAM, JASSM, and MALD) through modification of Common Strategic Rotary Launchers and upgrade of stores management and offensive avionics software
- Replacement of the legacy B–52 Anti-skid system with modernized system improving safety and cockpit display

The Air Force will invest over $719 million in the B–1 bomber over the fiscal year 2012 PB FYDP. B–1 sustainment and modernization efforts include:

- Vertical Situation Displays Upgrade addresses sustainment issues with the current monochromatic pilot displays replacing them with color displays that provide primary flight information
- Central Integrated Test System addresses sustainment issues by replacing the onboard fault diagnostics computer used by aircrew and maintenance personnel
- Fully Integrated Data Link integrates line of sight and beyond line of sight Link-16 datalink communication, upgrades rear crew stations with color displays, automates retargeting capability, and provides Ethernet backbone for other aircraft modernizations
- Radar Maintainability and Improvement Program addresses sustainment issues by replacing two line replaceable units in the legacy B–1 radar
- Inertial Navigation System addresses sustainment issues by replacing the primary attitude control system consisting of three line replacement units
- Gyro Stabilization System addresses sustainment issues by replacing the secondary attitude control system consisting of four line replacement units

The Air Force will invest over $2.31 billion in the B–2 bomber over the fiscal year 2012 PB FYDP. B–2 sustainment and modernization efforts include:

• B–2 Extremely High Frequency Satellite Communication and Computer (EHF SATCOM) Increment 1 replaces the current flight management processors and data buses and adds increased digital storage capacity laying the foundation for all subsequent B–2 avionics upgrades
• B–2 EHF Increment 2 installs B–2 "low-observable" antennas and integrates the Family of Beyond-line-of-sight Terminal (FAB–T) to provide, secure, survivable strategic communication via AEHF SATCOM
• B–2 Defensive Management System Modernization (DMS–M) effort replaces the original DMS hardware to allow the B–2 to address modern, proliferating electronic threats
• B–2 Radar Modernization Program (RMP) moves the radar operating frequency to a band where DOD is primary user, by replacing the radar antenna with an active electronically scanned array (AESA)
• B–2 integration of the GBU–57 Massive Ordnance Penetrator (MOP)
• B–2 Alternate High Frequency Material (AHFM) program robotically applies magnetic radar absorbing material (MAGRAM) during B–2 aircraft planned depot maintenance. AHFM eliminates 3,000 feet of tape and caulk and is credited with reducing low observable maintenance man-hours per flight hours by 39 percent
• Continuing efforts to improve B–2 maintainability, including depot activation for selected avionics components, low cost aircraft and engine efforts, and low observable signature and supportability efforts

68. Senator McCAIN. General Schwartz, what sort of characteristics and requirements are the Air Force and the combatant commanders considering in a replacement aircraft for long-range strike?

General SCHWARTZ. The characteristics and requirements for the new long-range strike bomber will be refined over the next several years to balance capability requirements with costs. At this point, we envision the new bomber will be highly survivable, capable of manned or unmanned operations, and nuclear capable. It will be a central component in an overall family of systems of deep-strike and enabling capabilities. Secretary Donley and I have been directed to keep the new bomber program characteristics and requirements stable, manageable, and tradable to ensure overall program affordability.

69. Senator McCAIN. General Schwartz, in the face of the decision on the next-generation bomber, what concerns, if any, do you have about increasingly relying on the old B–52 platform to satisfy our long-range strike capability beyond the 2018 threshold?

General SCHWARTZ. Our primary concerns are with sustaining the B–52 and advancing its capabilities to fulfill the long-range strike role. Currently we are funding seven programs (communications, controls and displays, navigation, weapon delivery, target acquisition, airframe repair, etc.) with approximately $1.115 billion over the FYDP to achieve these goals. These investments will help ensure the continued relevance of the legacy fleet as we bring the new long-range strike bomber program along.

JOINT SURVEILLANCE TARGET ATTACK RADAR SYSTEM

70. Senator McCAIN. General Schwartz, the E–8 Joint Surveillance Target Attack Radar System (JSTARS) aircraft has flown over 63,000 combat hours and 6,000 combat missions over Iraq and Afghanistan. Have the JSTARS aircraft proven effective in these missions? Please explain.

General SCHWARTZ. The E–8 Joint Surveillance Target Attack Radar System (JSTARS) aircraft has consistently proven itself highly effective in direct support of ground combat operations in Iraq and Afghanistan. It is the primary theater provider of Ground Moving Target Indicator (GMTI) data. JSTARS supports both forensic and real time intelligence for joint and coalition activities. During 66,000 combat hours over Iraq and Afghanistan, JSTARS has collected more critical information on counter border activities, improvised explosive device networks, and troop over watch than any other GMTI system in theater. Additionally, JSTARS provides direct support, daily, to real time operations, on call requests, and troops in contact.

71. Senator McCAIN. General Schwartz, I understand new engines will enable JSTARS platforms to last at least another 30 years and that development flight testing will be completed in 2011. Given that the Air Force has already invested over $500 million to refurbish the JSTARS fleet, including development and non-

recurring engineering for the reengining program, wouldn't continuing the reengining program be cost-effective to the Air Force?

General SCHWARTZ. The Air Force will complete the Joint Surveillance Target Attack Radar System (JSTARS) re-engining System Development and Demonstration (SDD) phase. However, based on the fiscal year 2011 Defense Appropriation Act that eliminated funding for re-engining shipsets (#3 and #4) and rescinded funding for spare engines, the Air Force is ceasing actions to re-engine the operational fleet at this time. Regarding the cost-effectiveness, the Air Force will be unable to recoup the costs associated with the JT8D–219 program within the projected 30 years of life extension. The timeline for a payback is not economically prudent. This was captured in the May 2010 report to Congress, titled "Replacing Engines On the E–8C JSTARS Aircraft." The Air Force will leverage the re-engining investments based on the results of the May 2010 report to Congress and Air Combat Command's GMTI Analysis of Alternatives.

72. Senator MCCAIN. Secretary Donley, since some prior year funding for JSTARS reengining was reprogrammed by the Air Force or allowed to expire at the end of fiscal year 2009 and 2011 funds may not be approved by the appropriators, what do you intend to do to address the shortfall in funds in meeting the JSTARS requirement?

Secretary DONLEY. The requirement the Air Force is working to meet was laid out in the Sep 09 OSD for Acquisition, Technology, and Logistics (OSD/AT&L) Acquisition Decision Memorandum (ADM). This ADM directed the Air Force to "continue the Joint Surveillance Target Attack Radar system (JSTARS) re-engining System Design and Development phase, including the development, flight testing, and production of the initial increment of re-engining shipsets."

We believe this requirement can be met with the two shipsets we have already procured and the funds programmed into the JSTARS Research, Development, Test, and Evaluation and Procurement lines. We do not see a shortfall in funds to meet the intent of the OSD/AT&L ADM.

73. Senator MCCAIN. Secretary Donley, do you anticipate that some funds may need to be reprogrammed for JSTARS reengining this year? If yes, how much? If no, why not?

Secretary DONLEY. The Air Force does not anticipate reprogramming funds for Joint Surveillance Target Attack Radar System (JSTARS) re-engining this year because the program is fully funded to complete the activities mandated by the Sep 2009 OSD/AT&L Acquisition Decision Memorandum (ADM).

UNMANNED INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE AIRCRAFT

74. Senator MCCAIN. Secretary Donley, in your prepared statement you indicate that the Air Force continues to rapidly increase its ISR capability and capacity to support combat operations in Afghanistan and Iraq regions. What is DOD's total level of investment in ISR in the fiscal year 2011 budget?

Secretary DONLEY. I cannot speak to the entire DOD's level of investment, however, the Air Force's level of investment in ISR in the fiscal year 2011 budget is $14.351 billion. This total is inclusive of Air Force baseline funding ($12.912 billion) and Air Force OCO funding ($1.439 billion). This funding was requested in the Air Force National Intelligence Program, Air Force Military Intelligence Program, and Air Force "blue" total obligation authority (TOA) budget requests. Further breakout can be provided at the classified level.

75. Senator MCCAIN. General Schwartz, according to the fiscal years 2011–2040 Aircraft Investment Plan, the Air Force plans to increase the number of unmanned Predator and Reaper platforms from a capacity of 50 orbits in fiscal year 2011 to 65 orbits by fiscal year 2013. Does DOD's fiscal year 2011 budget request and the associated fiscal years 2011–2015 FYDP provide the requisite funding to implement the projected growth in unmanned aerial systems (UAS) and UAVs?

General SCHWARTZ. Yes, DOD's fiscal year 2011 budget request for fiscal years 2011 through 2015 includes the requisite funding and manpower to achieve 65 Combat Air Patrols (CAPs) of Unmanned Aerial Systems. The Air Force strategy continues MQ–9 Reaper aircraft procurement in addition to increased investments in the MQ–1 Predator as a part of a mixed fleet to achieve 65 CAPs by the end of fiscal year 2013.

76. Senator MCCAIN. General Schwartz, do you anticipate a greater need for additional UASs?

General SCHWARTZ. The simple answer is yes, we do anticipate a greater need for more Unmanned Aerial Systems (UAS). Let me explain;

The demand for ISR and strike from UAS is insatiable, but the need goes beyond the ISR or strike mission set. The Air Force is on-track to evolve to an Air Force where remotely piloted aircraft (RPA) are viable alternatives to a range of traditionally manned systems, and an Air Force that harnesses increasingly automated, modular and sustainable systems. This will result in a leaner, more adaptable, tailorable, and efficient force that offers unique combat capabilities for the Joint Force. These platforms can and will conduct a variety of missions, to include ISR, mobility, electronic attack/protection, and strike. However, broadening the mission set will pose numerous technical challenges.

To reach this end state, the Air Force would have to develop follow-on RPA systems for our existing MQ–1/Predator, MQ–9/Reaper and RQ–4/Global Hawk systems. These current systems are performing brilliantly in permissive environments, fulfilling the combatant commanders demands for coverage. We must develop new capabilities in order to expand the mission sets of our current platforms and provide the ability to operate in contested or denied airspace. This leap to new missions and improved survivability poses the greatest technical challenges. However, balancing expanded mission sets for remotely piloted platforms, with the continued need for manned platforms with similar mission sets within today's fiscal environment, is an even greater challenge.

We are considering how to pursue linear development of follow-on systems to replace the Reaper and Global Hawk. These MQ–M (medium) and MQ–L (large) programs seek to add increased loiter, refueling, and sensor capabilities and, for the MQ–M, improved strike capabilities. In order to achieve greater efficiencies and capabilities, and continue to operate in contested and denied airspace, we will need more capable systems. We are developing and testing the RQ–170—an RPA that will provide reconnaissance and surveillance in support of the Joint Forces Commander in less permissive environments. We are also working closely with our labs, Defense Advanced Research Projects Agency, and industry, to develop the technologies for enhanced stand-off capabilities such as high altitude, long endurance RPAs and to explore the potential for expendable systems linked to stand-off, loitering platforms.

To employ RPAs across the full spectrum of conflict and in all environments, the Air Force requires a greater range of options for unmanned aircraft systems. To that end, we anticipate, and are planning for RPAs that will replace the existing systems and add new systems that will meet operational requirements that we are currently unable to fulfill.

77. Senator MCCAIN. General Schwartz, what strategic role do you believe UAVs will have in meeting near-term ISR, strike, cargo, and other capabilities supporting the current wars and other potential irregular campaigns?

General SCHWARTZ. The most widely-tasked mission for RPA continues to be ISR. We expect this trend to continue across the range of military operations (ROMO) in the short term. The Air Force's plan calls for growth in Predator and Reaper CAPs from 50 in fiscal year 2011 to 65 by the end of fiscal year 2013. The Air Force will continue to work with DOD in assessing requirements and the need for more capacity in future plans.

Beyond ISR, RPAs have most visibly been employed in strike operations in support of ongoing conflicts, and we see this role continuing to expand in the near term. RPA strike capabilities have been well documented, and these aircraft have been used successfully on targets within permissive environments. The Air Force continues to investigate the use of RPAs in global precision strike missions across the ROMO.

While the Air Force has no plans to use RPAs in a cargo carrying role in the near term, we continue to investigate unmanned applications for air mobility. The Air Force's vision includes the development of a large-sized vehicle, the MQ–L, capable of assuming some of the airlift and air refueling workload after 2020. An additional RPA capability with strategic implications is the Airborne Infrared (ABIR) initiative. The Air Force is partnering with the Missile Defense Agency (MDA) in development and experimentation efforts leading to a demonstration of advanced sensors and targeting systems on MQ–9 Reaper RPA to meet ballistic missile defense early intercept and raid handling requirements.

Another role where RPAs are currently supporting ongoing operations is as an airborne communications node. Two Global Hawk RPAs have been modified as a Battlefield Airborne Communications Node (BACN) in support of a CENTCOM

Joint Urgent Operational Need (JUON). BACN provides a high-speed, IP-based airborne network infrastructure that extends communications ranges, bridges between radio frequencies, and "translates" among incompatible communications systems—including both tactical and civil cellular systems.

Potential capabilities must also be balanced to achieve desired effects. For example, increased persistence is one of the greatest advantages of RPA employment. However, any additional pods, payloads, or weapons placed aboard an aircraft will result in diminished range and endurance. Additionally, our communications infrastructure is increasingly stressed. The data transfer requirements inherent in RPA operations translate to extreme amounts of communications bandwidth.

AIR FORCE STRIKE FIGHTER SHORTFALL

78. Senator MCCAIN. General Schwartz, is there a projected strike fighter shortfall for the Air Force? If there is, then what is that number?

General SCHWARTZ. In 2010, the Air Force provided Congress a comprehensive review of the current and projected force structure that revealed a shortfall of approximately 3–5 percent of the total strike fighter aircraft through the FYDP. This shortfall is based on the number of fighter aircraft required to execute the National Defense Strategy at moderate risk utilizing guidance provided by the Quadrennial Defense Review as well as data from in-depth campaign modeling. The Air Force has an ongoing process to assess and aggressively manage force structure. Recent review provides insights for potential improvements with respect to this shortfall; however this analysis is ongoing and is a continually evolving product based upon the health of our fleet, strategic guidance, and status of major factors, such as the F–35 program.

79. Senator MCCAIN. General Schwartz, in your opinion, what are the options to help mitigate the strike fighter shortfall?

General SCHWARTZ. In 2010, the Air Force provided Congress a comprehensive review of the current and projected force structure that revealed a shortfall of approximately 3–5 percent of the total aircraft through the FYDP. The F–35 program status remains the key variable in the fighter force structure forecast as the Air Force transitions to a predominantly fifth generation capability. F–35 delays are manageable across the FYDP, but have long term impacts that require mitigation. These impacts will be mitigated through aggressive management of F–35 production, legacy fleet review and sustainment, along with selected service life extension and modernization programs.

In the near-term, to maintain "moderate" risk, the Air Force will sustain the F–16 Block 25–32 to a planned 8,000 hrs via pre-block structural sustainment funded via the fleet management program. In the mid-term, we will continue to assess the legacy fighter fleet and invest in selected service life extension and modernization programs. Finally, in the far-term, we will continue to monitor F–35 progress and continue to assess force capacity/capability.

80. Senator MCCAIN. General Schwartz, in a limited defense budget, would buying more quantities of legacy aircraft such as F–15s or F–16s help mitigate a strike fighter shortfall in our tactical aviation wings?

General SCHWARTZ. A robust F–16 Service Life Extension Program (SLEP) and capability modernization programs will help mitigate the fighter force shortfall. F–16 Block 40/50 SLEP and modernization provides the same capability as new legacy aircraft procurement at substantially less cost. These cost savings generated from SLEP versus new procurement help ensure funding is not diverted from F–22 modernization or F–35 acquisition.

LIGHT-SQUARED AND POSSIBLE DISRUPTION TO GLOBAL POSITIONING SYSTEM SIGNALS

81. Senator MCCAIN. Secretary Donley, Deputy Secretary of Defense Lynn recently voiced significant concerns to the Chairman of the Federal Communications Commission (FCC) regarding the FCC's provisional authorization of LightSquared's new wireless broadband proposal and the potential for interference of Global Positioning System (GPS) signals. According to Secretary Lynn, there is a "strong potential for interference to these critical national security systems." On that basis, Secretary Lynn strongly recommended that the FCC defer final action until proper interference analysis and mitigation studies can be conducted. Do you agree and share the concerns raised by Secretary Lynn? If so, why?

Secretary DONLEY. Yes, I share the same concerns raised by Deputy Secretary Lynn. The FCC's Order and Authorization issued to LightSquared, LLC on 26 January 2011 established an aggressive schedule to evaluate interference potential to Global Positioning System (GPS) users, with a final report deadline of 15 June 2011. This was a "fast-track approach" to evaluating potential impacts to a system as critical as GPS, particularly when compared to similar, past requests. Given LightSquared's proposal and the potential effect it may have to a broad range of national security, civil and commercial GPS users, it is important for us to complete a careful review. The Air Force, in concert with other agencies, worked vigorously to produce reliable test results and to analyze the potential impacts to GPS as quickly and effectively as possible. In late March 2011, Air Force engineers organized a test team under the National Positioning, Navigation and Timing Engineering Forum (NPEF) with representatives from across DOD, Federal Departments and Agencies, academia and industry, along with support from LightSquared. On 14 June 2011, the DOD and Department of Transportation (DOT) submitted the NPEF test report to the National Telecommunications and Information Administration. Report results demonstrated there are significant detrimental impacts to GPS operations, including degradation or loss of GPS function at standoff distances of a few kilometers extending to space. Possible mitigations were identified and evaluated but were deemed impractical as they would require costly significant modification or complete redesign and replacement of currently fielded GPS equipment, which could take 10–15 years or longer.

82. Senator MCCAIN. Secretary Donley, have you independently conveyed your concerns? If so, what did you say, and when did you convey them?

Secretary DONLEY. The Air Force has conveyed these concerns through the National Telecommunications and Information Administration (NTIA), which serves as our liaison to the Federal Communications Commission. The Air Force Representative to NTIA's Interdepartment Radio Advisory Committee (IRAC) signed a joint letter with eight other Federal Agency IRAC representatives expressing concerns.

When the Air Force became aware of potential interference to global positioning system (GPS) signals, which are recognized as the world's "gold standard" for space-based positioning, navigation and timing (PNT), Air Force engineers at our Space and Missile Systems Center organized a test team under the National Positioning, Navigation and Timing Engineering Forum (NPEF). In addition to the NPEF members, first responders, as well as several commercial companies, participated with support from LightSquared. On 14 June 2011, the DOD and DOT submitted the NPEF test report to the NTIA. Report results demonstrated there are significant detrimental impacts to GPS operations, including degradation or loss of GPS function at standoff distances of a few kilometers extending to space.

83. Senator MCCAIN. Secretary Donley, in your view, what are the National security implications of Light-Squared's proposal?

Secretary DONLEY. Global Positioning System (GPS) technology is vital to our National security and is relied upon by our military for a wide array of capabilities. GPS is integrated into almost every aspect of U.S. military operations. For example, GPS is used to guide troop movement, ensure the accuracy of precision-guided munitions, and synchronize communications networks. While military applications of GPS technology continue to grow, we must also look at national security implications in broader terms. Although we are all familiar with the position and navigation aspects of GPS capability, much of our National infrastructure and commercial applications rely on the GPS' unique timing component. For example, Federal, civil and commercial enterprises worldwide use GPS to time-stamp business transactions, providing consistent, accurate record maintenance. Major investment banks use GPS to synchronize their network computers located around the world.

It is for these and many more reasons that we are actively reviewing LightSquared's proposal to assess its affects, if any, on GPS receivers. The Air Force appreciates LightSquared's transparency and assistance in our efforts to evaluate military, civil and commercial GPS receivers.

EVOLVED EXPENDABLE LAUNCH VEHICLE

84. Senator MCCAIN. Secretary Donley, the fiscal year 2012 budget proposes to buy three less launch vehicles over the next 5 years yet will cost $3.4 billion more than what was planned in the fiscal year 2011 budget. That is three less rockets but the cost will increase by $3.4 billion. The Chief Executive Officer of the launch vehicle provider reportedly said that the #1 cause of cost increases for the Evolved

Expendable Launch Vehicle (EELV) is the uncertainty associated with NASA. And, according to United Launch Alliance (ULA), no major supplier of launch vehicles has right-sized their industrial base—leaving the Air Force to support it—when NASA used to support by more than 70 percent. In your view, is the uncertainty of NASA's future driving cost increases in the EELV program? If so, what, if anything, can be done to mitigate that negative impact?

Secretary DONLEY. Yes, the uncertainty of NASA's future launch vehicle programs is contributing to cost increases to the Evolved Expendable Launch Vehicle (EELV) program. This uncertainty and the fly out of the Space Shuttle program have stressed the launch industrial base—particularly the liquid and solid rocket propulsion industry. For example, the percentage of overhead the DOD covers at Pratt and Whitney Rocketdyne has increased from approximately 30 to 75 percent as a result of the retirement of the Space Shuttle and uncertainty of future NASA business.

The newly appointed Air Force Program Executive Office for Space Launch program is currently developing a new acquisition strategy for the EELV program, targeted to begin in fiscal year 2013. Key elements of the strategy are an initial Atlas V and Delta IV lot buy of sufficient size to ensure economic ordering and a steady launch vehicle production rate. An Air Force/NRO study team and the Broad Area Review 2010 (BAR X) recommended an annual minimum production rate of eight launch vehicle cores plus associated upper stage engines, payload fairings, and solid rockets to sustain our spacelift industrial base. A recently conducted should cost review of the EELV program revealed 84 cost reduction initiatives that are currently being implemented on the program. With lot buys and a steady production rate, and implementation of the should cost review initiatives, we believe the supplier base will be right sized and costs can be controlled.

Additionally, the Air Force and NRO intend to team with NASA to certify new providers as part of this acquisition strategy. A joint effort will ensure a consistent position is communicated to all potential new entrants on opportunities, certification, and requirements. We envision the EELV strategy will allow new entrants to compete for near-term missions above our block-buy commitment.

INTERCONTINENTAL BALLISTIC MISSILE MODERNIZATION

85. Senator MCCAIN. Secretary Donley, a key review board reportedly concluded that an equipment failure was responsible for an hour-long communication outage at F.E. Warren Air Force Base (AFB) that affected 50 nuclear missiles last fall. Given the age of the current intercontinental ballistic missile (ICBM) infrastructure, some have speculated that the incident may be indicative of problems with an aging ICBM infrastructure. Do you believe the incident is indicative of such a broader problem or that it is isolated?

Secretary DONLEY. Our newest Major Command, Air Force Global Strike Command, conducted an extensive review of last fall's event and determined this was an isolated incident and is not indicative of age related systemic problems within the Intercontinental Ballistic Missile (ICBM) force. Although this was an isolated event and the likelihood of a reoccurrence is remote, the Air Force is redesigning certain components to eliminate any possibility of a future like event. The Minuteman III (MMIII) ICBM weapon system alert rate exceeds 99 percent. The MMIII Weapon System continues to perform as a safe, secure and effective deterrent.

Consistent with the NDAA section 1251 report, the Air Force, through the leadership of Air Force Global Strike Command, has developed sustainment and modernization plans, specified in the ICBM Master Plan, to ensure the infrastructure necessary to support and operate our ICBM fleet. We feel these plans will meet the challenges required to sustain the MMIII to 2030.

86. Senator MCCAIN. Secretary Donley, how confident are you that the Air Force will be able to sustain the current ICBM force through 2030?

Secretary DONLEY. We are confident the Air Force will be able to sustain the current Intercontinental Ballistic Missile (ICBM) force through 2030. The Air Force has developed a low-risk ICBM roadmap outlining robust sustainment and modernization plans. There are certain components we will need to modernize in order to get us to the 2030 date, to include the fuze, the guidance system and the propulsion system. Infrastructure sustainment has been ongoing and will continue through 2030. Additionally, Congress has recently approved a study for a life extension program for the W78 warhead needed in the early 2020s.

87. Senator MCCAIN. Secretary Donley, when should a decision be made for pursuing the development of a follow-on ICBM?

Secretary DONLEY. In accordance with direction from the Nuclear Posture Review, the Air Force has begun an initial study associated with a Follow-on Intercontinental Ballistic Missile (ICBM) capability. Pre-Materiel Solution Analysis efforts for the potential ICBM Follow-on are already underway, to include a Ground Based Strategic Deterrence Capabilities Based Assessment (GBSD CBA). These efforts will lead to a formal Analysis of Alternatives (AoA) beginning in fiscal year 2013. Based on the results of the AoA, a program decision will be made as to the direction the Air Force should take to maintain a ground-based strategic nuclear deterrent capability for the United States. Research and development is expected to take approximately 15 years to develop, acquire, and field an initial operational capability.

JOINT MILITARY MEDICAL COMMAND

88. Senator MCCAIN. Secretary Donley and General Schwartz, in its recent report titled, "Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars and Enhance Revenue," the Government Accountability Office (GAO) cited realignment of military medical command structures as an opportunity to significantly reduce costs in military health care. Historically, the Air Force has opposed consolidation of Service medical programs, citing the unique relationship of Air Force medical assets to line commanders. Do you favor establishment of a unified military medical command among the military departments?

Secretary DONLEY and General SCHWARTZ. We do not favor the establishment of a unified military medical command.

The vast majority of beneficiaries and related costs in the DOD healthcare system support military dependents and retirees. In this context, the administration of healthcare delivery is properly the responsibility of the military departments and a civilian defense agency. A military command is neither required nor appropriate for healthcare delivery, and we should not be expanding the Unified Command system in functional support areas not servicing the operational needs of combatant commanders. The Air Force Medical Service is fully integrated with the Line of the Air Force and medical personnel are considered key members of the wing commander's team in accomplishing the wing mission. When Air Force units deploy, their medics deploy with them. The unified medical command would sever this close relationship at the expense of our existing effective organizational structure.

The Air Force fully supports joint operations. Unity of effort through synergy, interoperable, and interdependent, integrated parts ensures success in joint operations. Just as the Air Force provides lift, close air support, and battlefield situational awareness for joint ground forces, the Air Force Medical Service deploys over 1,707 medics worldwide to jointly support ground troops and air evacuation.

Service oversight of medical assets led to the most effective treatment of casualties in the history of warfare. Savings outlined in the GAO report are not likely to be realized by establishing an independent unified medical command. Joint commands tend to add expense with new headquarters and systems for oversight of their components. Costs for medical services can be reduced by reducing contract costs in both the direct care system and managed care support contracts. Simplifying oversight of Defense Health Program dollars with a single Service accounting system would save more dollars, through greater accountability and standardization, than a unified medical command.

Former Chief of Staff of the Army, General Casey, and General Schwartz worked with our Surgeons General to set up the Joint healthcare system in San Antonio. In September 2010, we signed a Memorandum of Agreement that established the San Antonio Military Health System. The governance structure is rotationally shared with a mission to optimize deployment readiness, clinical currency, graduate medical education, and quality health care for the 220,000 beneficiaries in the greater San Antonio area. There is no new or additional cost associated with this arrangement.

Our successful Joint effort at Landstuhl Regional Medical Center in Germany integrated over 300 Air Force medical professionals, alongside Army and Navy medics to provide en route care for over 86,000 patients since the initiation of OEF and Operation Iraqi Freedom.

Air Force medics are central players in the most effective Joint casualty care system in military history. Deployed to joint theater hospitals and supporting our air evacuation system, Air Force medics are saving lives of soldiers, sailors, marines, airmen, civilians, coalition forces, friend and foe alike.

We can drive unity of effort and achieve a more efficient Joint medical system without the expense of establishing a unified medical command.

89. Senator MCCAIN. Secretary Donley and General Schwartz, if you support such a command, how would you recommend that it be structured to optimize governance, efficiency, and warfighter support? If you do not support establishment of a unified medical command, please state the reasons why such action would not be in the best interests of the United States.

Secretary DONLEY and General SCHWARTZ. The Air Force does not support a unified medical command and do not agree there would be cost savings by the creation of such a command.

We believe a more effective and efficient Joint medical solution can be attained without the expense of establishing a unified medical command. Changes to doctrine can be made within current authorities and do not require the establishment of a new unified medical command. In order to achieve efficiencies, Service specific and Joint medical doctrine must be improved to assure Service capabilities are fully interoperable and interdependent to bolster unity of effort. The Services should continue integrating common medical platforms to reduce redundancy and lower costs.

A unified medical command may not achieve the intended synergy or unity of effort that others suggest. All models of the unified medical command to date do not include medical forces intrinsic to Service line units. Medical forces will need to continue to serve in these line units—Air Force line supported medics represent five percent of Air Force medical personnel; Navy shipboard assets represent 25 percent of medical personnel; and Army line Tables of Organization and Equipment (TOE) supported medics represent 48 percent of Army Active Duty medics.

Any new unified medical command will require new systems and structure to oversee component headquarters and assigned forces. This will drive even higher costs. If a unified medical command follows the example of the current Joint Task Force, national Capital Region Medical (JTF CAPMED), it is highly unlikely there will be any cost savings. There is no need for another military Service and establishing such, in the form of a unified medical command, without the discipline and historical rule sets that govern existing Services, will likely drive costs much higher. Even more critical, a unified medical command may not be as responsive to the needs of Service warfighters as is the current oversight by the Services.

Base Realignment and Closure 2005 created many opportunities for Joint oversight of medics. Given time to mature, these initiatives, along with the Service Surgeon Generals efforts to consolidate oversight of common support functions (information management, contracting, military health facility construction and financial management) in the new co-located medical headquarters will reduce redundancies. Adoption of a single Service accounting system to allocate Defense Health Program dollars and improve accountability would do more to reduce costs than a unified medical command.

AIR FORCE EFFICIENCY INITIATIVES

90. Senator MCCAIN. Secretary Donley, the Air Force recently proposed an efficiencies initiative to consolidate two Air Operations Centers (AOC), the 601st at Tyndall AFB, FL, and the 612th AOC at Davis Monthan AFB, AZ. The Air Force is currently assessing the two AOC locations using their Strategic Basing process. I want to ensure that the process is fair and based on the most urgent long-term needs of the Air Force, the combatant commands, and national security. What is the projected savings from this AOC consolidation and how will the savings be achieved?

Secretary DONLEY. The Air Force portion of the fiscal year 2012 President's budget directed consolidation of four Air and Space Operations Centers (AOC) to two and the inactivation of three Numbered Air Forces as part of the DOD's efficiency initiative. The proposed consolidation of the 601st and 612th AOCs represents one of these planned efficiencies and is currently on hold pending further analysis. As the 601st/612th AOC consolidation effort moved forward, an enterprise-wide option emerged that is potentially more efficient and effective for operational command and control. The Air Force is currently studying this new option which, if chosen, may obviate the need to consolidate the 601st and 612th AOCs and still achieve the necessary efficiency savings.

91. Senator MCCAIN. Secretary Donley, since both AOCs have been operating with less manning than was planned and authorized, what manpower assumed savings were used to develop the initiative?

Secretary DONLEY. The Air Force portion of the fiscal year 2012 President's budget directed consolidation of four AOCs to two and the inactivation of three Numbered Air Forces as part of the DOD's efficiency initiative. The proposed consolida-

tion of the 601/612 AOCs represents one of these intended efficiencies and is currently on hold pending further analysis. As the 601/612 AOC consolidation effort moved forward, an enterprise-wide option emerged as both more efficient and effective for operational command and control. The Air Force is currently studying this new option which, if chosen, may obviate the need to consolidate the 601/612 AOCs and still achieve the necessary efficiencies.

92. Senator McCain. Secretary Donley, is the projected savings based on a final concept of operations for a consolidated AOC? If not, why not?

Secretary Donley. The Air Force portion of the fiscal year 2012 President's budget directed consolidation of four AOCs to two and the inactivation of three Numbered Air Forces as part of the DOD's efficiency initiative. The proposed consolidation of the 601/612 AOCs represents one of these intended efficiencies and the projected savings were based on manpower only. This concept is currently on hold pending further analysis. As the 601/612 AOC consolidation effort moved forward, an enterprise-wide option emerged as both more efficient and effective for operational command and control. The Air Force is currently studying this new option which, if chosen, may obviate the need to consolidate the 601/612 AOCs and still achieve the necessary efficiencies.

93. Senator McCain. Secretary Donley, will the basing process be fair and transparent with the criteria made public, and subsequently the results of the assessment made available to Congress?

Secretary Donley. In accordance with the Air Force Strategic Basing process, the process will be fair and transparent, the basing criteria will be made public through an announcement to Congress, and the results of the assessment made available to Congress at the end of the process.

94. Senator McCain. Secretary Donley, as you know, the 601st AOC is collocated with 1st Air Force Headquarters, which also serves as the home of the Air Component Commander for U.S. Northern Command. Likewise, the 612th AOC is collocated with the 12th Air Force Commander and serves as the home for the Air Component Commander of U.S. Southern Command (SOUTHCOM). The consolidation will result in one Air Component Commander with no AOC on the same base to command and control air operations in their theater of operations. Why is this dislocation acceptable to the Air Force?

Secretary Donley. The Air Force portion of the fiscal year 2012 President's budget directed consolidation of four AOCs to two and the inactivation of three Numbered Air Forces as part of the DOD's efficiency initiative. The proposed consolidation of the 601/612 AOCs represents one of these intended efficiencies and is currently on hold pending further analysis. As the 601/612 AOC consolidation effort moved forward, an enterprise-wide option emerged as both more efficient and effective for operational command and control. The Air Force is currently studying this new option which, if chosen, may obviate the need to consolidate the 601/612 AOCs and still achieve the necessary efficiencies.

95. Senator McCain. Secretary Donley, what will be the operational impact to the Air Component Commander supporting the two combatant commanders of not having an AOC at their location?

Secretary Donley. The Air Force portion of the fiscal year 2012 President's budget directed consolidation of four AOCs to two and the inactivation of three Numbered Air Forces as part of the DOD's efficiency initiative. The proposed consolidation of the 601/612 AOCs represents one of these intended efficiencies and is currently on hold pending further analysis. As the 601/612 AOC consolidation effort moved forward, an enterprise-wide option emerged as both more efficient and effective for operational command and control. The Air Force is currently studying this new option which, if chosen, may obviate the need to consolidate the 601/612 AOCs and still achieve the necessary efficiencies.

96. Senator McCain. Secretary Donley, if this is a new concept of operations, should the Air Force be conducting other AOC consolidations?

Secretary Donley. Yes. In addition to the Continental United States, the Air Force is consolidating two Air and Space Operation Centers (AOCs) in Europe. The Air Force currently has no plans to further consolidate AOCs. However, when and where operationally feasible and within an acceptable level of risk, the Air Force will consider additional consolidations.

97. Senator McCAIN. Secretary Donley, DOD has proposed an efficiency initiative to reduce the number of Joint Task Forces (JTF). One of those being considered for consolidation is Joint Interagency Task Force (JIATF) South, which conducts counterdrug missions in primarily the SOUTHCOM area of responsibility. Has the Air Force been asked to consider the consolidation of JIATF South to either of the AOCs proposed for consolidation?

Secretary DONLEY. No. At this time, the Air Force has not been asked to consider the consolidation of the JIATF South to the Air Force Air and Space Operation Centers proposed for consolidation.

F–16 PILOT TRAINING

98. Senator McCAIN. Secretary Donley, at a time when the Air Force is being asked to find efficiencies in every activity, accepting risk in some cases by underfunding facility maintenance and flying hours, I am trying to understand the decision announced last year to move two F–16 training squadrons from Luke AFB, AZ, to Holloman AFB, NM. I realize that Luke AFB will receive up to five squadrons of F–35s, with the final number of training aircraft to be determined by the number of F–35s eventually in the Air Force inventory. I'm concerned that, like the F–22 Raptor, that number will shrink dramatically over time as the cost of the F–35 continues to rise. As it stands today, Luke AFB can accommodate up to eight squadrons of aircraft in existing facilities on the ramp. So, without knowing for sure how many F–35 squadrons will be stationed at Luke AFB, why spend funds and effort now to move two F–16 squadrons to Holloman AFB?

Secretary DONLEY. Relocating two F–16 squadrons from Luke Air Force Base to Holloman Air Force Base ensures the viability of a long-term strategic training location and the White Sands Missile Range (WSMR) as a national asset. Holloman also has the capacity to accept two training squadrons. This move capitalizes on existing airspace and range complex availability, including WSMR, and takes advantage of readily available Joint training opportunities at Fort Bliss.

99. Senator McCAIN. Secretary Donley, is this split-base training of F–16 pilots efficient?

Secretary DONLEY. The Air Force is moving active duty F–16 pilot training to Holloman Air Force Base, New Mexico in order to beddown pilot training for the F–35 Lightning II at Luke Air Force Base, Arizona. During the F–16 training transition, there will be a period where F–16 training squadrons operate at both Luke Air Force Base and Holloman Air Force Base. The staggered move will minimize the impact and loss of F–16 training. The disruption will be temporary, with all active duty Air Force F–16 pilot training consolidated at Holloman Air Force Base by approximately 2020.

100. Senator McCAIN. Secretary Donley, as currently planned, does the timing of the move of F–16s protect operations at Luke AFB from being subjected to a bathtub effect, where the F–16s will leave well before the first F–35s arrive?

Secretary DONLEY. The Air Force is diligently working to implement all fighter aircraft decisions made in July 2010, including minimizing manpower fluctuations across all installations. We are currently planning for the first of two F–16 FTU squadrons to transition from Luke AFB to Holloman AFB in the third quarter of fiscal year 2013. F–35As are programmed to arrive in the fourth quarter of fiscal year 2013. This plan minimizes manpower and aircraft fluctuations at Luke AFB.

101. Senator McCAIN. Secretary Donley, I see the Air Force has already requested three military construction (MILCON) projects totaling $18 million in the fiscal year 2012 budget request to prepare facilities at Holloman AFB for the arrival of the F–16s. Have the total costs for this move been determined? If so, please provide a comprehensive description of all one-time and recurring costs associated with the move.

Secretary DONLEY. Our current validated estimate to relocate two F–16 squadrons from Luke Air Force Base to Holloman Air Force Base (a multi-year move) is $42.2 million. Of that total, $18 million is for three fiscal year 2012 military construction (MILCON) projects, $3.5 million is for two fiscal year 2011 unspecified minor MILCON projects, $13.1 million is for 18 operation and maintenance (O&M) projects, and $7.6 million is for support requirements. Additionally, Air Education and Training Command has identified a potential requirement for additional MILCON, however those requirements have not yet been validated.

To further refine requirements, a Housing Requirements Market Analysis study is underway at Holloman and should be complete by the end of June 2011. If addi-

tional requirements are identified, we will include them in future housing privatization negotiations, and through cooperation with the community. In addition, the dormitory master plan will be updated to account for potential changes in the base population. If requirements dictate, MILCON projects may be programmed, as appropriate. The most cost-effective means to fund all these requirements is still being determined, including capitalizing on existing equipment and facilities where possible.

102. Senator MCCAIN. Secretary Donley, can the Air Force adequately conduct its pilot training mission at Holloman AFB, given the fact that the range to be used for training is owned, managed, and controlled by the Army, and their test activities have primacy in the Triad prioritization process?

Secretary DONLEY. The Air Force is able to adequately conduct its pilot training mission at Holloman Air Force Base using the TRIAD Military Operating Area (MOA), which consists of the White-Sands Missile Range (WSMR)/Holloman Air Force Base/Fort Bliss operating areas. There is adequate capacity at TRIAD MOA to meet all training requirements. The Air Force and Army have developed a new construct to provide a more effective and efficient use of the TRIAD.

103. Senator MCCAIN. Secretary Donley, why would the Air Force want to deliberately subject a tight F–16 pilot training syllabus to the impact of having to train on a range they do not own?

Secretary DONLEY. The Air Force and Army are using a joint scheduling enterprise to effectively schedule White Sands Missile Range (WSMR) and do not anticipate difficulties in supporting F–16 training. The Air Force and the Army have developed a new construct to provide a more effective and efficient use of the WSMR/Holloman Air Force Base/Fort Bliss operating area named the TRIAD Military Operating Area (MOA).

F–35 PILOT TRAINING

104. Senator MCCAIN. Secretary Donley, what is the current status and timeline for the arrival of the F–35 to Luke AFB?

Secretary DONLEY. As briefed to the SASC professional staff members and the State of Arizona staffers on 20 Jun 11, continued fluctuation in the F–35 program has resulted in changes to the aircraft delivery schedule. Luke AFB is currently scheduled to receive its first aircraft in the fourth quarter of fiscal year 2013.

105. Senator MCCAIN. Secretary Donley, what are the major milestones and estimated dates of completion for the environmental impact statement (EIS)?

Secretary DONLEY. The Air Force has determined that the use of a more accurate noise model, recently made available, would be used in the F–35 Training EIS for Pilot Training Center (PTC)-1. The draft EIS will be released in the fall of 2011 and a Record of Decision (ROD) will be signed no earlier than March 2012. We will continue to keep you informed on these efforts.

106. Senator MCCAIN. Secretary Donley, when are the first jets scheduled to arrive?

Secretary DONLEY. Based on adjustments to F–35 procurement included in the fiscal year 2012 budget, the Air Force is in the process of re-evaluating the F–35 aircraft delivery schedules. Luke AFB is currently scheduled to receive its first aircraft in the fourth quarter of fiscal year 2013.

QUESTIONS SUBMITTED BY SENATOR JEFF SESSIONS

TANKER COMPETITION

107. Senator SESSIONS. Secretary Donley, what was the final bid price submitted by Boeing that ultimately won the most recent Air Force tanker competition?

Secretary DONLEY. The publically released value of the Engineering and Manufacturing Development contract is $4.4 billion. The overall contract is valued at over $30 billion, with a final amount depending on the options exercised.

108. Senator SESSIONS. Secretary Donley, what is the total estimated cost avoidance to the government that resulted from the cancellation of the 2001 congressionally-authorized Boeing lease proposal to the current fixed-price contract?

Secretary DONLEY. There are many factors that make comparing costs from the varied structures of the proposed tanker lease in 2002, the KC–45 competition in 2008 and the current KC–46 competition in 2010–2011 very difficult. However, it is safe to say that the Department has reaped a substantial savings for the taxpayer by buying these tankers under the current full-and-open competition and fixed-price development contract.

OSD and Air Force representatives have met with congressional defense committee staff on several occasions to provide source selection and proprietary information since the contract award, and are willing to brief you on the bids and resulting cost savings from past competitions, at your convenience.

109. Senator SESSIONS. Secretary Donley, what is the projected unit price for the first 18 KC–46 aircraft?

Secretary DONLEY. OSD and Air Force representatives have met with congressional defense committee staff on several occasions to provide source selection and proprietary information since the contract award, and are willing to brief you on the bids at your convenience.

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

TACTICAL AIR FLEET

110. Senator CHAMBLISS. General Schwartz, in the past you have stated that the Air Force is accepting risk in its tactical air (TACAIR) fleet by forgoing the purchase of additional F–22s and, instead, extending the life of legacy 4th Generation Fighters. In light of continued delays in the F–35 program, can you give your current assessment of risk in this area?

General SCHWARTZ. OSD's decision to stop the purchase of F–22s at 187 was based on the planned F–35 initial operational capability (IOC) at the time. As you are aware, the F–35 IOC has slipped. There is no doubt that the slip will force us to be smart about how we marshal our resources to operate and overcome an adversary in an Anti-Access/Area Denial environment. In the short term, our ability to perform our mission is healthy. Service life extension (SLEP) and modernization of select 4th generation aircraft provides a cost effective solution to the forecasted shortfalls in the fighter force structure due to the F–35 program delays. This solution can mitigate some risk until the F–35 is fully capable and in sufficient numbers to perform its air superiority and global precision attack roles. Examples include upgrading the F–15 and F–16 fleets with advanced radars and self protection capabilities, and extending the F–16 service life. We are also making sure that the F–22's advanced capabilities are fully implemented.

111. Senator CHAMBLISS. General Schwartz, are there specific gaps that are of particular concern?

General SCHWARTZ. We are observing increasing deployment of adversary electronic attack capabilities that will place significant stress on the Air Force's ability to achieve and maintain air superiority. This problem will increase as these systems mature and proliferate globally. The Air Force ability to operate within some regions of the world is also challenged due to a growing ballistic missile threat. Ballistic missiles are not a new threat, but the latest versions are more accurate and, when combined with access to exquisite ISR, can significantly upset our ability to deploy into and conduct unfettered regional operations.

New adversary electronic warfare capabilities, combined with integrated air defense systems create another challenge for the Air Force. Our ability to use the space and cyber domains to command and control our platforms and systems will be increasingly contested across the range of military operations. These problems will only get worse as time goes on unless we move forward and modernize our air, space and cyber capabilities. We must also continue to develop tactics and procedures to operate in these challenging and degraded environments. The F–35 combined with the F–22 and the Long-Range Strike Family of Systems along with new radar, electronic warfare capabilities and weapons will all serve to ensure that the Air Force remains capable of delivering air superiority and precision effects globally.

112. Senator CHAMBLISS. General Schwartz, would you ever recommend procurement of additional legacy 4th Generation Fighters to mitigate this risk? Why or why not?

General SCHWARTZ. Not at this time. Starting with the fiscal year 2010 President's budget (PB), the Air Force committed to retire 250 legacy fighters to fund a

smaller and more capable force. As a bridge to the F–35, JSF, we will continue to sustain and modernize our legacy fighters and bombers in order to maintain our current capability and capacity.

When the F–35 initial operational capability slipped, our mid-term risk increased. The Air Force will mitigate this risk through aggressive management of F–35 production and legacy fighter sustainment, along with selected service life extension programs (SLEP) and modernization outside the FYDP. The fiscal year 2012 PB plans for capability modifications and SLEP for the F–16 Block 40/42/50/52 fleet. Selected legacy SLEP of the most suitable F–16 Block 40s and 50s would add approximately 6–8 years to their anticipated service life and provides the most cost effective alternative to transition to a fifth generation capability. The Air Force also intends to accelerate the F–15E Active Electronically Scanned Array (AESA) radar modernization program and continue the A–10C wing replacement program. The Air Force will continue to monitor and assess the fighter force structure and will remain flexible to pursue all appropriate courses of action necessary to mitigate risk should the situation change.

113. Senator CHAMBLISS. General Schwartz, it is my belief that the original F–35 concept—recapitalizing U.S. and allied fleets with a single family of highly capable, interoperable, and affordable fighters—makes even more sense today than it did when this program began. While it was not unexpected that other countries would develop a fifth generation capability, as both China and Russia recently demonstrated, it does underscore the need for our own F–35 fifth generation aircraft to be fielded as quickly as is feasible. Please comment.

General SCHWARTZ. It is true that potential adversaries around the world are fielding capabilities that are increasing the threat to our legacy 4th generation fighters and bombers. These include fifth generation fighters, integrated air defense systems, better munitions and effective electronic warfare capabilities. An operationally effective F–35, in coordination with the F–22, B–2 and ultimately, the Long-Range Strike Family of Systems will be necessary to effectively counter these increasingly effective weapons systems. While the Air Force would prefer the F–35 to be fielded sooner rather than later in order to meet these looming global challenges, it is vital that we field an F–35 that has the proven avionics and weapons integration capabilities needed to be operationally effective. Getting the F–35 to full-rate production has been a greater challenge than anticipated. Given the recent Technical Baseline Review, the program is moving forward as fast as pragmatically possible.

AIR DOMINANCE

114. Senator CHAMBLISS. General Schwartz, looking forward 10 to 15 years, how confident are you in the Air Force's ability to maintain air dominance in the Pacific in the event of a major conflict?

General SCHWARTZ. Our ability to provide air superiority for operations in the Pacific will be significantly challenged in the next 10 to 15 years. The Air Force will require robust tanker support and modernized fighter capability to ensure air superiority against rapidly evolving threats. Much of our ability will be dependent on the U.S. Navy's ability to dominate the sea in the Pacific. Working together, the Air Force and Navy complement each other and can create effects that neither service can do alone. That is why the Air Force and the Navy have been jointly pursuing the Air Sea Battle Initiative to ensure that a joint, integrated approach to the problem occurs.

115. Senator CHAMBLISS. General Schwartz, as other nations improve their air forces, air defenses, and are able to more effectively target our staging areas in that region, how much concern do these factors raise and are you concerned that certain courses of action or options the Air Force can offer the President today may not be available down the road?

General SCHWARTZ. Our primary concern is not that certain courses of action or options may be unavailable-rather, we must ensure the right courses of action are not delayed in the short-term. Potential adversaries are acquiring anti-access/area denial (A2/AD) capabilities, such as long range cruise and ballistic missiles, advanced surface-to-air missile systems, aircraft, surface ships, submarines, mines, counter-space systems and cyber warfare systems. Adversaries seek to use these capabilities to deny freedom of action to United States and partner nation militaries. Your inquiry directly addresses the issue of the A2/AD threat. The Air Force is acutely aware of the A2/AD threat and, partnering with the Department of the

Navy, has developed the Air-Sea Battle (ASB) concept to address this future challenge.

What is the A2/AD?

Anti-access: Action intended to slow deployment of friendly forces into a theater or cause forces to operate from distances farther from the locus of conflict than they would otherwise prefer. A2 affects movement to a theater.

Area-denial: Action intended to impede friendly operations within areas where an adversary cannot or will not prevent access. AD affects maneuver within a theater.

Failure to effectively address such capabilities will result in a greater than desired risk for United States and partner nation forces operations both within the A2/AD environment and at extended distances from the area of conflict. Either circumstance puts at risk the ability of the Joint Force to accomplish its assigned operational objectives. Furthermore, the A2/AD environment, by its very nature, requires an Air Force that is strategic in character, built on a backbone of a Long-Range Strike Family of Systems designed to rapidly break down an A2/AD environment in order to allow other forces to push forward into the region to restore stability.

Air Sea Battle (ASB)

ASB is a unified Air Force and Navy approach to address the evolving A2/AD environment. ASB focuses on enhancing three levels of cooperation:

Institutional Cooperation will be enhanced by establishing an enduring organizational construct that will continue formal collaboration to address the A2/AD environment as it evolves over time.

Conceptual Alignment will be perpetuated through the operational design which describes how capabilities and forces are integrated to accomplish operational objectives in an A2/AD environment.

Materiel solutions and innovations will be collaboratively vetted to ensure they are complementary where appropriate; redundant when mandated by capacity requirements; fully interoperable and fielded with integrated acquisition strategies seeking efficiencies where they can be achieved.

Addressing the A2/AD Problem

ASB utilizes the central operational design of "networked, integrated, attack-in-depth to disrupt, destroy, and defeat A2/AD threats.

Networked: A2/AD strategies require multiple networked systems to be effective. The best way to defeat an adversary's networks is with superior U.S. interconnected networks. Networked implies command, control, and communications capabilities to enable cross-domain advantage.

Integrated: A2/AD strategies seek to exploit vulnerabilities in U.S. force integration. Integration of Air Force and Navy forces counters these vulnerabilities by combining the strengths of air and naval forces through shared innovation. This integration provides the offensive and defensive capabilities necessary to counter the spectrum of A2/AD threats.

Attack-in-Depth is the method by which the United States defeats the adversary's A2/AD capabilities and restores air and sea control, enabling subsequent action. A multi-domain offensive or counter-offensive operation is necessary to attack adversary vulnerabilities across the depth of his battlespace.

Disrupt, Destroy, Defeat: A2/AD environments will be shaped by conducting sequential or concurrent tasks:

Disrupt: conduct offensive operations to disrupt the A2/AD adversary's command, control, communications, computer network, and ISR processes.

Destroy: conduct offensive operations to seek out and destroy or neutralize any threatening A2/AD weapons systems within effective range of operating U.S. forces.

Defeat: defeat the adversary's employed weapons to preserve essential Joint forces and their enablers in order to sustain offensive and defensive operations.

Combatant commanders can apply these tasks-disrupt, destroy, defeat-to achieve campaign crisis management escalation, de-escalation aims. The ASB concept will apply a tailorable portfolio of cross-domain capabilities to deter, and if necessary, defeat an A2/AD adversary in combat.

EFFICIENCY MEASURES

116. Senator CHAMBLISS. Secretary Donley and General Schwartz, regarding the efficiencies you are finding in your fiscal year 2012 budget and beyond, first I want you to know that I support your efforts and appreciate the fact that you are working to ensure every dollar you spend is a wise use of taxpayers' resources. To what extent are your efficiencies simply deferring expenditures to future years, versus real savings?

Secretary DONLEY and General SCHWARTZ. The Air Force identified corporate efficiency goals in ten overarching areas. Our efficiency goals represent real savings/reductions versus deferring expenditures to future years. Only ~1 percent of our $33.3 billion in Air Force-identified efficiency initiatives are related to re-phasing of programs due to fact-of-life slips or program execution status. They include re-phasing war Reserve material stockpile and training munitions procurement; re-phasing Wide Area Airborne Surveillance (WAAS) procurement; re-phasing AFNet support; and Link 16 Crypto Modernization for B–1, B–2, F–15. and F–16 systems. Real savings generated by these and other efficiencies permitted funds to be realigned to increase mission core capabilities and will reduce programmed or budgeted costs across the FYDP.

117. Senator CHAMBLISS. Secretary Donley and General Schwartz, rather than just finding ways to conduct missions more efficiently, thus saving money, have you worked to identify missions that you can stop doing; areas of focus and investment for the Air Force that may be outdated and unnecessary?

Secretary DONLEY and General SCHWARTZ. The Air Force is prepared to react to changes in strategic direction and national strategy that would reshape our force to realign with current global threats and realities. However, any potential changes to Air Force roles and missions, as defined by the National Military Strategy, would need to be led by the President, the Secretary of Defense, and Chairman of the Joint Chiefs of Staff.

In accordance with 10 U.S.C. 118b, DOD conducts a Quadrennial Roles and Missions Review (QRMR). The Secretary of Defense has always included Service participation in these reviews. One of the tasks of this review is to identify "any unnecessary duplication of core competencies and capabilities between defense components." Using the guidance provided in the most current QRMR and Quadrennial Defense Review, the Air Force continues to focus its investment of limited resources on the most critical capabilities required to conduct our current roles and missions.

Additionally, during development of the Air Force annual budget, every program and mission area is assessed to ensure that we are not wasting precious resources on outdated or unnecessary systems or processes. The next review is scheduled to take place in 2012 with the final report delivered to Congress in early 2013. Working in concert with the Secretary of Defense, the Chairman of the Joint Chiefs, and the other Services the Air Force will determine which, if any, missions it can stop doing.

118. Senator CHAMBLISS. Secretary Donley and General Schwartz, I believe we can be more efficient but at some point doing more with less becomes a self-defeating exercise. In areas that you are making cuts, particularly when it comes to cutting contractors, if the mission itself is not going away, how will you ensure that the mission gets done if the people doing it are gone?

Secretary DONLEY and General SCHWARTZ. The overall focus of our efficiency effort is to concentrate on reducing redundancy and management overhead without impacting the Air Force mission and services. The Air Force efficiency initiatives ensure that we could make changes in those areas without adversely affecting mission. The Air Force also considered external organization experiences and a review of our own internal practices. In the areas where we are reducing staff (either government or contractors), the Air Force plan is to either modify the work itself to eliminate unnecessary and redundant tasks or to stop doing a job altogether that is no longer deemed essential. This approach is a means to keep from getting into the trap of "doing more with less."

The Air Force corporate structure will closely monitor progress on efficiency goals and, as importantly, mission performance. Mission performance should either improve or be maintained at current levels.

C–5

119. Senator CHAMBLISS. General Schwartz, I understand there are now five operational C–5M Super Galaxies in service and the Air Force is using these assets to

support combat unit moves to locations in Afghanistan. I have heard good things regarding the performance of the C–5M; in fact I've heard it described as a game changer. I would be interested in your thoughts on this new aircraft. In your words, how well are the C–5Ms performing?

General SCHWARTZ. The C–5M is indeed performing very well. The modified aircraft is able to operate from shorter runways and carry more cargo over farther distances and with greater reliability. The AMP upgrades the aircraft avionics and has increased safety, eased crew workloads, and enhanced situational awareness. The RERP provides higher-thrust and more reliable and environmentally friendly turbofan engines. The C–5M's most recent accomplishments were in direct support of operations in Libya, where they delivered 38 percent more cargo for every hour flown when compared to the other C–5 models. The modification plan calls for delivery of 52 C–5Ms by 2016. The C–5M upgrade is absolutely vital to our strategic airlift capability for years to come.

120. Senator CHAMBLISS. General Schwartz, are they meeting the Air Force's expectation set for the C–5 RERP?

General SCHWARTZ. The program is on track to meet our expectations. We expect to have an initial operational capability by 2013, at which time our first unit will be completely equipped with C–5Ms. At this time we see no obstacles that will keep us from meeting that target.

121. Senator CHAMBLISS. Secretary Donley, assuming that Congress grants the Air Force's request to retire some number of C–5As while the Air Force continues to comply with the NDAA for Fiscal Year 2010 minimum number of strategic airlifters, can you provide the systematic approach and analysis that was used to comply with section 137 of the NDAA for Fiscal Year 2010 to consider making these excess C–5s available to Civil Reserve Air Fleet (CRAF) operators or international coalition partners?

Secretary DONLEY. To comply with section 137 of the NDAA for Fiscal Year 2010, the Air Force compiled a "Report on Retirement of C–5A Aircraft" in October 2010. This report concludes that the benefits of transferring C–5A aircraft to CRAF are limited. The analysis behind this is based on the fact that the C–5 is a Category C aircraft, meaning it is a combat configured platform, and would have to be demilitarized prior to being transferring to the CRAF. Demilitarization would render the aircraft suitable for scrap recycling only. Additionally, Category C aircraft are determined to not have commercial application based upon their military design characteristics. Furthermore, according to DOD 4160.21–M, transferring possession of Category C aircraft outside of the Federal Government is only authorized for museums or static displays.

The report also determines that no excess C–5 aircraft will be transferred to eligible international coalition partners due to the Air Force's requirements for spare parts and equipment. Currently, the demand for C–5 spare parts is significant, and in some cases supply chain backorders exceed 2 to 3 years. These retiring aircraft provide usable spare parts that will enable sustainment of the remaining active fleet.

122. Senator CHAMBLISS. Secretary Donley, you seemed to indicate in your March 17, 2011, testimony that Air National Guard and Air Force Reserve C–5As are already included in the C–5 RERP modernization, yet to date we have not received notification or documents to this effect. I understand that the Air Force already modified a C–5A to the C–5M Super Galaxy configuration and that its performance is comparable to any of the modernized C–5Bs (now C–5Ms). Since the Air Force is likely to have a number of C–5As in service for the next 30-plus years, it makes sense to me that the C–5 aircraft flown by our Air National Guard and Air Force Reserve should be modernized. For only $107 million investment for each RERP kit and installation, RERP pays for itself. Can you advise what the Air Force plans are for modernizing C–5As?

Secretary DONLEY. All C–5As not programmed for retirement will receive the AMP configuration. Additionally, 16 Air Force Reserve Command C–5Bs will be upgraded with the RERP modification and redesignated as C–5Ms.

MULTIFUNCTION ADVANCED DATA LINK

123. Senator CHAMBLISS. General Schwartz, during our hearing several weeks ago with Secretary Gates, when I asked if DOD might be considering buying more F–22s, he indicated that there were "hundreds of millions of dollars" for F–22 up-

grades in the budget request. While there are funds requested for F–22 squadrons, I do not find any funds for the Multifunction Advanced Data Link (MADL). In 2008, OSD published an Acquisition Decision Memorandum directing the MADL as the data link to provide the connectivity between our low observable (LO) aircraft beginning with the F–22. I understand that MADL is now deferred from the F–22 and I note that the most recent President's budget request includes no funding for MADL. It now appears that we are without a program to provide connectivity between our LO fighters and other platforms. I believe we must have a means by which our newest LO fighters can be identified and are able to collaborate with each other directly or through some sort of gateway connection to share position and sensor data appropriately among our own forces. This connectivity is needed to connect our latest generations of LO aircraft to conduct operations, provide necessary command and control, and prevent fratricide. What programs are included and what resources are provided in your budget request this year to ensure timely development of these capabilities?

General SCHWARTZ. The F–22 currently is able to use the IntraFlight Data Link (IFDL) that allows it to communicate with other F–22s. The MADL is still under development as part of the F–35 JSF program, as it was originally planned.

As the result of a cost and risk analysis, the Air Force decided in the fiscal year 2012 budget to defer integration of MADL onto the F–22 until MADL matures within the F–35. While this maturation occurs, the USAF will continue to assist the F–35 program office and the F–22 program office to ensure smooth integration of MADL on the F–22. In fiscal year 2011, $24 million was requested for the MADL Enterprise for this effort.

In addition to these efforts, the capability to share data between the F–22 and our current fleet of fighters has been demonstrated successfully in multiple exercises with the BACN IFDL Subsystem (BACN BIS), hosted on a business jet test aircraft. This capability was not tested on the BACN Global Hawk Block 20 and is not fielded. The business jets and the Global Hawks equipped with the BACN payload and flying today in Afghanistan do not, at this time, have this specific F–22 gateway capability installed, since there is no need in the current theater for this capability. We are currently studying the costs and risks of implementing a F–22 gateway capability. If the cost-risk analysis is favorable, the USAF can proceed to introduce this F–22 gateway capability as an interim solution.

124. Senator CHAMBLISS. General Schwartz, in your view, are we doing enough, and proceeding rapidly enough, to acquire this capability?

General SCHWARTZ. Yes. We are proceeding in an effective manner to enable this capability. We are continuing to assess and balance the technical and cost risks and hope to deliver an interim capability as soon as possible.

QUESTIONS SUBMITTED BY SENATOR ROGER F. WICKER

GLOBAL HAWK

125. Senator WICKER. Secretary Donley and General Schwartz, please provide an update on Global Hawk Operations in Libya and in Japan.

Secretary DONLEY and General SCHWARTZ. Our newest Global Hawk, the Block 30, a larger aircraft with improved sensors, flies almost daily in support of Operation Odyssey Dawn and Operation Unified Protector. At the same time, Global Hawk continues to support Japan with Operation Tomodachi relief efforts.

In Libya, the Global Hawk served a key role in the battle to dismantle the regime's Integrated Air Defense System by providing both pre- and post-strike imagery of surface-to-air missile sites and airfields. Flying from Sicily, the aircraft was able to remain on station for over 24 hours at a time. This endurance, when combined with the Global Hawk's enhanced sensor capabilities, enabled it to obtain over 400 frames of still imagery per mission, thereby satisfying the need for near-real-time status updates of regime and opposition forces. The RQ–4 also supported the search and rescue operation that recovered our downed airmen following the F–15 mishap.

In Japan, not only did the Global Hawk provide high-resolution imagery of earthquake and tsunami affected areas, but its infra-red imaging of damaged nuclear facilities enabled analysts to determine the temperature of various hot spots throughout the facility. In addition, the Global Hawk brought persistence and flexibility to the Pacific theater through its ability to fly to and from northern Japan from Guam (1,500 miles each way), while retaining the endurance to remain on station for 17 hours.

126. Senator WICKER. Secretary Donley and General Schwartz, how well is the Global Hawk performing in theater from the warfighter perspective?

Secretary DONLEY and General SCHWARTZ. Global Hawk aircraft are flying continuously in CENTCOM providing critical ISR and communications relay support to warfighters in Afghanistan and Iraq. The ISR configured Global Hawks carry a combination of electro-optical, infra-red, and synthetic aperture radar (SAR) sensors on one platform to give the warfighter maximum flexibility to adapt to changing operational and environmental conditions during a single mission. The Block 10s currently in CENTCOM are on schedule to be replaced in May 2011 by the larger Block 30 aircraft, which will carry a robust signals intelligence payload in addition to its imagery sensors.

The Global Hawk Block 20 aircraft, equipped with the BACN payload are truly game changers and have been credited with saving lives in Afghanistan. Global Hawk BACN functionality reduces Command and Control issues associated with incompatible communications systems, adverse terrain, and distance. This payload extends communications "reach" for systems like Link 16 and Situation Awareness Data Link (SADL) and has special utility as an Army ground force voice and data relay. This system reduces the kill chain timeline by 20 percent which enables a 40 percent increase in kinetic effects against insurgents.

The Block 30 Global Hawk is exceeding the performance of the Block 10. We pressed the Block 30 into service sooner than anticipated due to urgent needs in Japan and Libya. Consequently, we are working through reliability issues discovered during Global Hawk test and development and are seeing the system prove itself in real world operations. During March 2011 alone, Block 10/20/30 Global Hawks flew 119 missions, logging 2,134.5 flight hours.

127. Senator WICKER. Secretary Donley and General Schwartz, what is your assessment of how we can further enhance the capabilities of the Global Hawk in support of our warfighters at sea or on the ground?

Secretary DONLEY and General SCHWARTZ. Over the FYDP, we will field six CAPs of multi-Intelligence (INT) Block 30 aircraft, three of which are just beginning operations in CENTCOM, European Command/Africa Command, and PACOM. These six CAPs represent our objective force structure to fulfill the Nation's requirement for high-altitude ISR.

Beginning in 2013, we will field the newest version of the Global Hawk, the Block 40. It will carry the Multi-Platform Radar Technical Insertion Program radar and provide a multi-mission capability to the Battle Management Command and Control infrastructure as well as the ISR community. The radar will provide GMTI and high-resolution SAR imagery simultaneously as part of our baseline capability. As funding becomes available, the radar will be upgraded to detect maritime and airborne targets and provide some classified capability similar to that provided by other state-of-the-art airborne radars.

Our current budget plans include key enhancements necessary to achieve the optimum performance from both the Block 30 and Block 40 assets. The first is our Ground Station Rearchitecture where we will replace the 13-year-old ground station technology and, at the same time, modernize the architecture to make it adaptable to emerging needs and, very important, make it compatible with the Navy's MQ–4C Broad Area Maritime Surveillance (BAMS) System. The second is our Communications System Rearchitecture project. This will enable the full use of all our Block 30 sensors simultaneously and make us compatible with the Wideband Global Satellite system for worldwide connectivity.

Perhaps the greatest enhancement for the warfighter is the work we are doing with our Navy partner in achieving as much technical and operational synergy as possible between the RQ–4 and MQ–4C programs. We are working towards a common command and control "core" for our ground systems, enabling us to control each others' aircraft. We also plan to achieve commonality and cost savings in our communications systems. Finally, we have plans for Joint Global Hawk/BAMS basing, joint aircraft and maintenance training, and, if possible, a joint aircraft maintenance facility. Our success will pave the way for greater cooperation in mission operations for the benefit of the warfighter.

VERTICAL LIFT SUPPORT

128. Senator WICKER. Secretary Donley and General Schwartz, I ardently believe that competition always provides best-value to the warfighter and the American taxpayers. What do you believe are key criteria in determining whether a program should be sole-sourced or competitively-bid?

Secretary DONLEY and General SCHWARTZ. The Federal Acquisition Regulation (FAR) Subpart 6 prescribes policies and procedures to be used to promote full and open competition. 10 U.S.C. 2304 and 41 U.S.C. 253 require, with certain limited exceptions, that contracting officers shall promote and provide for full and open competition in soliciting offers and awarding Government contracts. Listed at FAR 6.302 are exceptions permitting other than full and open competitions:

i. Only one responsible source and no other supplies or services will satisfy agency requirements.
ii. Unusual and compelling urgency.
iii. Industrial mobilization; engineering, developmental or research capability; or expert services.
iv. International agreements.
v. Authorized or required by statute.
vi. National Security.
vii. Public Interest.

Policies and procedures for contracting without full and open competition are prescribed in FAR Subpart 6 and Defense Federal Acquisition Regulation Supplement (DFARS) Subpart 206. In accordance with FAR Subpart 6, if any of the above listed exceptions to competition apply, the contracting officer shall not commence negotiations or award a sole source contract unless the contracting officer——

Justifies the use of such actions in writing;

i. Certifies the accuracy and completeness of the justification;
ii. Obtains the appropriate level of approval for the proposed action—(levels are tied to dollar amounts and type exception).

129. Senator WICKER. Secretary Donley and General Schwartz, please provide an update on the Air Force's acquisition plans for the Vertical Lift Support Platform helicopter.

Secretary DONLEY and General SCHWARTZ. The Air Force plans to conduct a full and open competition for the Common Vertical Lift Support Platform program and award a contract to initiate procurement in fiscal year 2012. We intend to purchase a Non-Developmental Item/Off-The-Shelf aircraft that will allow us to meet the warfighter requirement for an initial operational capability in fiscal year 2015.

130. Senator WICKER. Secretary Donley and General Schwartz, will the program be competitively bid?

Secretary DONLEY and General SCHWARTZ. Yes. The Air Force will conduct a source selection for the Common Vertical Lift Support Platform program based on a full and open competition.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

PROPOSED REDUCTION TO B–1 FLEET

131. Senator CORNYN. General Schwartz, in a recent speech, Secretary Gates stated, "The fact that we are a nation at war . . . calls for sustaining the current military force structure." The Air Force currently has a fleet of 66 B–1s, many of which are based in Texas at Dyess AFB. The fiscal year 2012 budget proposes to cut 6 B–1s from the fleet's 37 primary mission assigned aircraft—a 16 percent reduction in a fleet of combat aircraft that are heavily used in Afghanistan. In your view, how are the proposed cuts to the B–1 bomber fleet in the fiscal year 2012 budget consistent with Secretary Gates' message on the need to sustain the current military force structure during a time of war?

General SCHWARTZ. Secretary Gates' message to sustain force structure was accompanied by a similar call for "maintaining modest but real growth in the defense top-line over the long term."[1] In the same speech, Secretary Gates also acknowledged the Nation's current fiscal situation makes answering this call untenable as the Defense budget cannot be exempted from the scrutiny and pressure faced by the rest of our government. Furthermore, in line with the 2010 Quadrennial Defense Review, we must rebalance current capabilities to prevail in today's wars while building the capabilities needed to deal with future threats.[2]

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[1] Secretary of Defense Statement on Department Budget and Efficiencies, 6 Jan. 2011.
[2] 2010 QDR, p. iii.

The Air Force conducted a comprehensive review of current bomber force structure, existing capabilities, and future power projection requirements in determining the risk associated with a B–1 fleet reduction.

The results of high-fidelity modeling and simulation analysis conducted by Air Force Studies and Analysis indicated a reduction of six B–1 primary aircraft authorizations involves an acceptable level of risk against OSD-approved warfighting scenarios designed to assess capacity and force sufficiency to achieve campaign objectives within the specified time period.

The Air Force conducted comparative analysis between B–1, B–2, and B–52 current and historical fleet mission capable rates, as well as model driven variable cost per flying hour data using the Air Force Cost Analysis Agency's 2010 Air Force Cost and Performance tables, in order to support measured force structure adjustments. The B–1 in particular faces several grounding concerns due to a thin industrial base and avionics sustainment issues. In light of these facts, the Air Force determined a reduction of six B–1s is a prudent course of action to address these critical issues, thereby increasing the pool of equipment spares and freeing funds to source critical sustainment and capability modifications. The Air Force expects to achieve an increase in aircraft availability in the near-term as a result of these retirements, while bridging the gap to the future long-range strike bomber.

132. Senator CORNYN. General Schwartz, what are your plans to replace the operational capability that would be lost through the proposed retirement of these six primary mission aircraft?

General SCHWARTZ. The results of tactical and campaign level analysis conducted by Air Force Studies and Analysis indicated a reduction of six B–1 primary aircraft authorizations can be taken with limited risk against currently approved OSD Analytic Agenda scenarios. Analysis focused on both mid-term (2016) and long-range (2024) scenarios that resulted in the optimum force structure composition based on the prevailing strategy and the force planning construct. Cost per flying hour and mission capable rate analyses further supported a modest B–1 reduction as a wise reinvestment strategy geared toward increasing the pool of equipment spares and freeing up funds to source critical sustainment and capability modifications. The Air Force expects to achieve an increase in aircraft availability in the near-term as a result of these retirements, and money saved will be used, in part, to continue to fund fleet modernization programs including fully integrated data link, vertical situation display, and central integrated test system upgrades, providing a capabilities-based bridge to the long-range strike bomber (LRS–B).

133. Senator CORNYN. General Schwartz, exactly how much of the savings obtained from this cut will be reinvested in sustaining and improving the current B–1 fleet, to include enhancements to a new radar system?

General SCHWARTZ. The retirement of six B–1s will provide a total fiscal year 2012 savings of $61.9 million in procurement and sustainment funding. Of these savings, the Air Force will reinvest $32.9 million in fiscal year 2012 into critical B–1 sustainment and modernization programs to ensure the health of the remaining fleet.

These programs include procurement and installation of Vertical Situation Display Upgrade and Central Integrated Test System sustainment efforts, Fully Integrated Data Link capability upgrade, and procurement of critical initial spares for these modifications. The ongoing Radar Maintainability and Improvement Program replaces two unsupportable Line Replaceable Units within the current radar system.

The Air Force is assessing the remaining components of the B–1 radar, with consideration to both supportability and performance. The Department applied the remainder of the savings from the B–1 reduction to other Air Force and DOD priorities to include continuing to strengthen the nuclear enterprise and investing in building partnerships.

134. Senator CORNYN. General Schwartz, the B–1 has proven to be a critical component of our long-range strike operations overseas, and as I understand it, has been called upon to maintain a constant presence in the skies over Afghanistan. Air Force officials have testified that the B–1 has employed nearly 40 percent of all munitions in OEF, and senior U.S. military leaders have consistently acknowledged that the B–1 fleet is doing an outstanding job. General Petraeus has called the B–1 a great platform and a very capable bomber. How did you determine, and what analysis supports, the decision that six B–1 aircraft are extraneous to the current warfighting requirement?

General SCHWARTZ. While it is true that the B–1 is doing an outstanding job in the current fight, the fleet in general faces several grounding concerns due to a thin

industrial base and avionics sustainment issues. In light of these facts, the Air Force determined a reduction of six B–1s is a prudent course of action to address these critical issues, thereby increasing the pool of equipment spares and freeing up funds to source critical sustainment and capability modifications. The Air Force expects to achieve an increase in aircraft availability in the near-term as a result of these retirements, while bridging the gap to the future long-range strike bomber.

The Air Force conducted a comprehensive review of current bomber force structure, existing capabilities, and future power projection requirements in determining the risk associated with a B–1 fleet reduction.

The results of high-fidelity modeling and simulation analysis conducted by Air Force Studies and Analysis indicated a reduction of six B–1 primary aircraft authorizations involves an acceptable level of risk against OSD-approved warfighting scenarios designed to assess capacity and force sufficiency to achieve campaign objectives within the specified time period.

Additionally, the Air Force conducted comparative analysis between B–1, B–2, and B–52 current and historical fleet mission capable rates, as well as model driven variable cost per flying hour data using the Air Force Cost Analysis Agency's 2010 Air Force Cost and Performance tables, in order to support measured force structure adjustments.

135. Senator CORNYN. General Schwartz, how will the proposed cuts to the B–1 fleet impact B–1 operations in Afghanistan in the years to come?

General SCHWARTZ. The proposed retirement of six B–1s will not impact ongoing theater operations. The Air Force expects to achieve an increase in aircraft availability in the near-term as a result of these retirements due to increased equipment spares availability, while freeing funds for critical sustainment and modernization efforts to bridge the gap to the future long-range strike bomber.

136. Senator CORNYN. General Schwartz, in your testimony you were asked by Senator Chambliss about the type of aircraft that would be used to enforce a no-fly zone over Libya. You stated, "and you would have, undoubtedly, some bomber aircraft that would give you long dwell over specified target areas." Considering the extensive role of the B–1 in Afghanistan and the potential that it could be used in future operations in Libya, is it prudent to consider any cuts to the B–1 fleet at this time?

General SCHWARTZ. Recent aircraft availability statistics, near-term estimates indicating a declining trend in aircraft availability, a thin industrial base, and avionics sustainment issues support the Air Force's decision to commence a modest reduction in bomber force structure.

The Air Force conducted a comprehensive review of current bomber force structure, existing capabilities, and future power projection requirements in determining the risk associated with a B–1 fleet reduction.

The results of high-fidelity modeling and simulation analysis conducted by Air Force Studies and Analysis indicated a reduction of six B–1 primary aircraft authorizations involves an acceptable level of risk against OSD-approved warfighting scenarios designed to assess capacity and force sufficiency to achieve campaign objectives within the specified time period.

The Air Force conducted comparative analysis between B–1, B–2, and B–52 current and historical fleet mission capable rates, as well as model driven variable cost per flying hour data using the Air Force Cost Analysis Agency's 2010 Air Force Cost and Performance tables, in order to support measured force structure adjustments. The B–1 in particular faces several grounding concerns due to a thin industrial base and avionics sustainment issues. In light of these facts, the Air Force determined a reduction of six B–1s is a prudent course of action to address these critical issues, thereby increasing the pool of equipment spares and freeing funds to source critical sustainment and capability modifications. The Air Force expects to achieve an increase in aircraft availability in the near-term as a result of these retirements, while bridging the gap to the future long-range strike bomber.

LONG-RANGE STRIKE

137. Senator CORNYN. Secretary Donley, the fiscal year 2012 DOD budget request includes $197 million in Air Force research, development, test, and evaluation (RDT&E) funding to begin development of a new long-range bomber that we are told would be penetrating, carry precision-guided conventional weapons, and be nuclear-capable. In your testimony, you state that, "investing in a new penetrating bomber is critical to maintaining our long-range strike capability in the face of increasing

risk associated with anti-access and area-denied environments." In your opinion, given that the Air Force only has 96 combat-coded bombers, would it be premature to retire any bomber aircraft before it is reasonably certain that a new long-range strike bomber will be fielded in the near future?

Secretary DONLEY. The Air Force remains committed to the Core Functions of nuclear deterrence operations and global precision attack and will continue to evaluate the legacy bomber fleet in concert with the entire Combat Air Forces fleets. This will ensure the proper mix of assets are available to provide the capacity and capability required to support our National interests as we bridge the gap to the future long-range strike bomber.

The Air Force conducted a comprehensive review of current bomber force structure, existing capabilities, and future power projection requirements in determining the risk associated with a B–1 fleet reduction.

The results of high-fidelity modeling and simulation analysis conducted by Air Force Studies and Analysis indicated a reduction of six B–1 primary aircraft authorizations involves an acceptable level of risk against OSD-approved warfighting scenarios designed to assess capacity and force sufficiency to achieve campaign objectives within the specified time period.

The Air Force conducted comparative analysis between B–1, B–2, and B–52 current and historical fleet mission capable rates, as well as model driven variable cost per flying hour data using the Air Force Cost Analysis Agency's 2010 Air Force Cost and Performance tables, in order to support measured force structure adjustments. The B–1 in particular faces several grounding concerns due to a thin industrial base and avionics sustainment issues. In light of these facts, the Air Force determined a reduction of six B–1s is a prudent course of action to address these critical issues, thereby increasing the pool of equipment spares and freeing funds to source critical sustainment and capability modifications. The Air Force expects to achieve an increase in aircraft availability in the near-term as a result of these retirements, while bridging the gap to the future long-range strike bomber.

138. Senator CORNYN. Secretary Donley, according to a Defense News article on February 16, 2011, Major General David Scott, Director of Operational Capability Requirements for the Air Force, told the defense industry that if the long-range strike family of systems is, "not affordable, we're not going to buy it, and it's going to just fall by the wayside like it has at a different time 2 years ago." What steps are you taking to ensure that the new long-range bomber does not fall by the wayside like the Air Force's next-generation bomber program that was deferred in fiscal year 2010?

Secretary DONLEY. The new long-range strike bomber program is very much focused on affordability, constraining requirements, and lowering technological risk. The program will use a streamlined management and acquisition approach to balance capability with affordability. The new bomber will use existing, mature technologies and leverage systems and subsystems from other programs to the maximum extent possible. Additionally, the Air Force will limit requirements based on affordability using realistic cost targets to inform capability and cost trade-offs.

139. Senator CORNYN. Secretary Donley, in January, you told reporters that while the new bomber would be able to carry nuclear weapons, it would not be immediately certified for nuclear weapons. Why will the new bomber not be certified at the outset to carry nuclear weapons?

Secretary DONLEY. The Secretary of Defense directed that the new bomber be nuclear capable. The new long-range strike bomber will be designed from the outset to be survivable in a nuclear environment and capable of employing nuclear weapons. This includes compliance with Nuclear Weapons System Safety Rules, Nuclear Surety Directives, and applicable Military Standards during the engineering, manufacture, and design stages. Additionally, we will continue to sustain and maintain the existing bomber fleet. Given the timeline we envision for fielding the new long-range strike bomber, we have sufficient legacy capacity and capability to meet the Nation's nuclear requirements. Nuclear certification is a stringent process with strict requirements, requiring additional rigorous testing beyond what is normally necessary for conventional strike aircraft. To preserve our focus on affordability and fielding capabilities when they are necessary, we will work with the combatant commanders to ensure that the new long-range strike bomber will be ready for the nuclear mission when they require such a capacity.

This approach allows future leaders to tailor the bomber force to meet both conventional and nuclear requirements within the constructs of national policy, emerging threats, and treaty compliance.

140. Senator CORNYN. Secretary Donley, what plans, if any, are being made to enable the B–2 to be certified to deliver a nuclear air-launched cruise missile?

Secretary DONLEY. Strengthening the nuclear enterprise remains the top priority of the U.S. Air Force. The Air Launched Cruise Missile is a critical part of that enterprise. We are committed to retaining this capability through the Long-Range Standoff Weapon (LRSO). The LRSO Analysis of Alternatives, scheduled to begin in August 2011, will look at alternatives that are suitable for internal carriage on the B–2, B–52, and the new long-range strike bomber.

AIR-SEA BATTLE CONCEPT

141. Senator CORNYN. General Schwartz, the 2010 Quadrennial Defense Review (QDR) directs the development of a joint ASB concept between the Navy and the Air Force. Secretary Gates, in his recent speech at the U.S. Air Force Academy, said this new doctrine recognizes "the enormous potential in developing new joint warfighting capabilities—think of naval forces in airfield defense, or stealth bombers augmented by Navy submarines—and the clear benefits from this more efficient use of taxpayer dollars." What is the current status of the development and implementation of the ASB concept?

General SCHWARTZ. The ASB Concept was approved and signed by the Chief of Naval Operations (CNO), Chief of Staff of the Air Force (CSAF), and the Commandant of the Marine Corps. Further, on June 2, 2011, the Secretaries of the Air Force and Navy approved the concept and annexes and forwarded them to the Secretary of Defense. The approved annexes are: the Concept Initiative Categories annex; the Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel and Facilities Initiative Actions/Near-Term annex; the Initiative Actions/Mid- and Far-Term annex; and the Initiative Actions/Spreadsheet. These annexes describe in detail the initiatives which allow air and naval forces to achieve ASB objectives, including the timing and relationships between all the actions identified. These documents will allow the ASB office, when activated, to lead the implementation of ASB throughout the Air Force, Navy, and Marine Corps.

The ASB office, to be established by a multi-service Memorandum of Understanding and manned by elements of each Service, will advocate, facilitate, monitor, and assess the integrated implementation of the ASB concept and initiatives, while further developing the concept. In the "facilitate, monitor, and assess" roles, the ASB office will coordinate and synchronize force development activities throughout the Services and report progress back to the Headquarters. To "further develop" the concept, the ASB office will ensure Services provide combatant commanders with forces capable of addressing current and emerging A2/AD challenges.

142. Senator CORNYN. General Schwartz, to what extent has the ASB concept already influenced the investment decisions reflected in the Air Force's fiscal year 2012 budget request and the latest FYDP, and to what extent will it guide investment decisions in the future?

General SCHWARTZ. The Air Force and the Navy are in the final stages of solidifying the ASB concept document that outlines the actions and capabilities that further integrate our air and naval forces to preserve and bolster our Nation's freedom of action in the air, maritime, space, and cyberspace domains. While the concept was still being fully developed during the fiscal year 2012 budget build, the Air Force budget request includes funding for a broad range of programs that support the concept and provide significant capabilities in the ASB arena.

For example, this budget request includes $197 million in fiscal year 2012 for developing the Air Force's Long-Range Penetrating Bomber to provide enhanced capabilities to counter long-range integrated air defense systems. The Air Force budget request also includes an enhancement to the active Electronically Scanned Array radar improvement program that accelerates the procurement of these advanced radars on F–15C and F–15E aircraft by adding $240.9 million/FYDP. In an effort to move toward a shared organization and investment vision for a Distributed Common Ground System with the Navy, the Air Force requests $15 million in fiscal year 2012 for new critical ISR Tasking, Processing, Exploitation, and Dissemination capabilities. In supporting these and a multitude of other ASB initiatives, the Air Force seeks to enhance key mission areas while maintaining a broad range of agile and flexible capabilities to address emergent challenges posed by anti-air capabilities.

ASB is informed by the fiscal constraints facing both the Federal Government in general and the DOD. ASB uses a portfolio of U.S. forces and enablers, organized across domains by mission. In fiscal year 2012, the Air Force invested significant

resources within critical ASB mission areas to address evolving threats to access. Efficiency is a goal of the concept in that it will improve warfighter effectiveness and put in place the institutional foundations necessary to sustain the development of integrated air and naval forces. The concept will be one of many factors guiding the Air Force's investment decisions in fiscal year 2013 and beyond.

F–35 ACQUISITION

143. Senator CORNYN. Secretary Donley, you note in your testimony that the multi-role F–35A is the centerpiece of the Air Force's future precision attack capability and will complement the F–22's world-class air superiority capabilities. The fiscal year 2012 budget request includes a major restructuring of the F–35 program that cuts procurement of the F–35 by 124 aircraft over the FYDP. Fifty-seven of the 124 aircraft to be cut are the Air Force variant, even though DOD has said that the F–35A is performing satisfactorily. Please provide an update on this critical program and its importance to the future of the Air Force.

Secretary DONLEY. The F–35 remains the cornerstone of our future tactical aircraft (TACAIR) fleet and continues to perform satisfactorily. In the first quarter of 2011, the F–35A test fleet completed 82 test flights compared to the plan of 62 flights (the total program (F–35A/B/C) numbers for the quarter were 199 test flights compared to a plan of 142 test flights). The first two production aircraft (AF–6/7) flew seven acceptance flights in preparation for delivery to the Air Force at Edwards Air Force Base in April 2011.

The Air Force has been and will continue to provide detailed program metrics to committee staff members on a monthly basis.

144. Senator CORNYN. Secretary Donley, please comment on the immediate and near-term per unit cost impact for the Air Force as a result of this decision.

Secretary DONLEY. The OSD CAPE is analyzing the detailed per unit cost impacts of the reduction of 124 aircraft throughout the FYDP in order to support the Milestone B Defense Acquisition Board, currently scheduled for no earlier than October 2011. We will have better definition of the immediate and near-term per unit cost impact associated with the reduction when OSD CAPE completes its analysis.

145. Senator CORNYN. General Schwartz, on January 11, the new Chinese fifth-generation fighter, the Chengdu J–20, conducted a test flight. Analysts say the J–20, like our F–22, would be able to cruise at supersonic speeds at very high altitudes. Other reports indicate it would be able to carry more weapons, including air-to-air missiles with longer ranges than their U.S. counterparts; anti-ship and anti-surface weapons; and potentially weapons to destroy U.S. satellites. It is expected that the Chinese fighter will enter service in 5 to 7 years, when our F–22 Raptor is more than 15 years old. In light of these recent revelations and the potential threat environment, it seems to me we should be buying fifth-generation fighters such as the F–35 in greater, not fewer, numbers. Do you believe cutting the purchase of 57 F–35As, and a total 124 F–35s, from the FYDP can be justified, given this potential threat?

General SCHWARTZ. Yes, cutting the purchase of 57 F–35As, and a total of 124 F–35s, from the FYDP is justified. DOD and the Air Force continually assess potential threats and the reduction in the number of fifth generation fighters across the FYDP does not significantly add risk to the Air Force's ability to meet national security objectives. Procurement of F–35 aircraft was reduced in order to place the program on more secure footing and cut concurrency risks. Reducing the procurement ramp provides appropriate time to develop and test the full warfighting capability of the F–35.

146. Senator CORNYN. General Schwartz, in a recent speech at the U.S. Air Force Academy, Secretary Gates said, "I believe that air supremacy—in all its components—will be indispensable to maintaining American military strength, deterrence, and global reach for decades to come." He went on to say, "the F–22 is far and away the best air-to-air fighter ever produced, and it will ensure U.S. command of the skies for the next generation." In your opinion, do the recent revelations regarding the Chinese J–20 indicate that the decision to cancel the F–22 program may have been premature and based on flawed or incomplete intelligence?

General SCHWARTZ. The timeline for design and flight testing of the J–20 was ahead of intelligence estimates. However, analysis of future scenarios nonetheless incorporated possession of fifth generation capabilities by other nations. The size of the F–22 fleet is currently estimated as capable of supporting expected conflicts. As

aircraft such as the J–20 come online, continued support of F–22 modernization to provide required capabilities versus the demonstrated rapidly evolving threat is key to gaining Air Superiority through the complementary capabilities of the F–22 and F–35.

BUDGET REQUEST FOR MUSEUM FUNDING

147. Senator CORNYN. Secretary Donley, the Air Force's fiscal year 2012 DOD budget request includes $14 million to fund preparation and delivery of a retired space shuttle at the National Museum of the U.S. Air Force (NMUSAF). At a time when Secretary Gates has promised to eliminate excess programs and reduce unnecessary expenditures, I am disappointed that the Air Force considers this project a priority, especially when NASA Administrator Bolden has not yet made a decision on the geographic allocation of retired NASA shuttles. Did you consult with NASA prior to making this request?

Secretary DONLEY. No, the Air Force did not consult with NASA prior to making the request for funds; however, the Air Force was acting pursuant to NASA guidance. NASA issued a Request for Information to the public in January 2010 in which it required potential recipient organizations to demonstrate the capability to bear a $28.8 million cost to complete display preparation for an orbiter and ferry the orbiter to its ultimate display location. NASA plans to retire the orbiters beginning in fiscal year 2011 and deliver them and other equipment to recipients by the end of fiscal year 2012.

Per the DOD budget process, any substantial known requirement must be included in the President's budget to prevent an unplanned execution year bill. Therefore, the Air Force incorporated the retired shuttle project in its fiscal year 2012 budget request.

Ultimately, NASA did not select the NMUSAF as a site for one of the retired orbiters and, thus, the $14 million is no longer required. However, NASA did select NMUSAF to receive a crew training module and other smaller artifacts. The NMUSAF is developing, designing and implementing exhibits and Science, Technology, Education, and Math (STEM)-related activities as part of an Air Force/NASA partnership. Display of these artifacts will further educate the American and international public of our achievements in space. The Air Force will need as much as $2 million to transport NASA artifacts to the NMUSAF, and to purchase exhibit materials and interactive educational (especially STEM) displays.

Space-associated artifacts provide learning opportunities for the history of the Air Force's involvement in space programs. NMUSAF artifacts and collections inform Air Force personnel and encourage and maintain the American public's support for its Air Force. NMUSAF provides unique STEM-related educational opportunities and important lessons for our servicemen and servicewomen, their families, and the general public. The museum is one of the most accessible parts of our military establishment and is a popular link between the public and military history.

148. Senator CORNYN. Secretary Donley, how can you justify subsidizing this unnecessary museum project at a time when the Federal Government is racking up record deficits and when private funding is available?

Secretary DONLEY. The Air Force is responsible to resource the interagency transfer of excess property it obtains from other Federal agencies. Per the DOD budget process, any substantial known requirement must be included in the President's budget to prevent an unplanned execution year bill. Therefore, the Air Force incorporated the retired orbiter project in its fiscal year 2012 budget request.

Private funds were not available for obtaining a retired orbiter. The Air Force Museum Foundation, a private organization with IRS 501(c)(3) status, is primarily chartered to provide for major construction needs for NMUSAF; however, its mission does not include funding for operations and maintenance functions.

T–38 REPLACEMENT AIRCRAFT

149. Senator CORNYN. Secretary Donley, the average T–38 aircraft is over 40 years old. It is my understanding that the Chief of Air Education and Training is currently conducting an analysis to determine the way ahead for a T–38 replacement aircraft. One solution would be to embark on a joint effort to develop a T–38 replacement with a partner nation such as India, where a partnership already exists for the U.S. military to train Indian aviators. Benefits of a joint development effort would include a second stream of investment in the T–38 replacement, reduction of costs for the Air Force, and strengthening of ties with a very important part-

ner nation. Has the Air Force considered an effort with a partner nation to develop and deliver a replacement for the T–38?

Secretary DONLEY. OSD is reviewing the sufficiency of the Analysis of Alternatives for the Advanced Pilot Trainer aircraft, which will replace the T–38. Once the analysis is complete and a Request for Information is sent out to the aviation industry, the Air Force can pursue an acquisition strategy that best fits the requirement for the replacement trainer.

The Air Force has not pursued an effort to partner with another nation to develop a replacement for the T–38. Formalizing an arrangement with a partner nation, determining common requirements, and developing a suitable aircraft would take far longer than acquiring a currently available platform. A nondevelopmental aircraft offers the best opportunity to meet the Air Force's desired schedule.

150. Senator CORNYN. Secretary Donley, what are the advantages and disadvantages of partnering with a nation such as India on the development and fielding of a non-combat aircraft such as the T–38?

Secretary DONLEY. In general, non-combat aircraft procurement involves a commercially available platform that is tailored to meet military requirements, and as a result there is not an opportunity for joint development. If we were going to develop a new platform, potential benefits of a joint development effort include additional investment funds, reduction of costs for the Air Force, and strengthened ties with allied nations. The potential disadvantages include lengthened schedule time, challenge of achieving consensus on requirements, potential for one partner's requirements to drive costs, and time to develop necessary agreements.

With respect to India, per its January 2011 Defense Production Policy, India prefers indigenous design, development, and manufacture of defense equipment, unless Indian industry is unable to make or procure the items from indigenous sources. India is developing the Indigenous Jet Trainer, HJT–36, which is expected to be operational later this year. The BAE Hawk Mk 132 currently serves as the Indian Air Force's advanced jet trainer. It entered service in 2010.

[Whereupon, at 12:04 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, MARCH 29, 2011

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

U.S. EUROPEAN COMMAND AND U.S. STRATEGIC COMMAND

The committee met, pursuant to notice, at 9:34 a.m. in room SD–G50, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Reed, Nelson, Webb, Udall, Hagan, Begich, Manchin, Shaheen, Blumenthal, McCain, Inhofe, Sessions, Wicker, Brown, Portman, Ayotte, Collins, Cornyn, and Vitter.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Madelyn R. Creedon, counsel; Richard W. Fieldhouse, professional staff member; Jessica L. Kingston, research assistant; Michael J. Kuiken, professional staff member; Jason W. Maroney, counsel; Thomas K. McConnnell, professional staff member; William G.P. Monahan, counsel; and Roy F. Phillips, professional staff member.

Minority staff members present: David M. Morriss, minority staff director; Adam J. Barker, professional staff member; Daniel A. Lerner, professional staff member; and Christopher J. Paul, professional staff member.

Staff assistants present: Kathleen A. Kulenkampff, Christine G. Lang, and Brian F. Sebold.

Committee members' assistants present: Vance Serchuk, assistant to Senator Lieberman; Carolyn Chuhta, assistant to Senator Reed; Ann Premer, assistant to Senator Nelson; Gordon Peterson, assistant to Senator Webb; Casey Howard, assistant to Senator Udall; Roger Pena, assistant to Senator Hagan; Lindsay Kavanaugh, assistant to Senator Begich; Joanne McLaughlin, assistant to Senator Manchin; Chad Kreikemeier, assistant to Senator Shaheen; Anthony Lazarski, assistant to Senator Inhofe; Lenwood Landrum, assistant to Senator Sessions; Clyde Taylor IV, assistant to Senator Chambliss; Joseph Lai, assistant to Senator Wicker; Charles Prosch, assistant to Senator Brown; Gordon Gray,

assistant to Senator Portman; Brad Bowman, assistant to Senator Ayotte; Matthew Rimkunas, assistant to Senator Graham; Dave Hanke, assistant to Senator Coryn; and Joshua Hodges, assistant to Senator Vitter.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everyone. This morning's hearing is one in a series of posture hearings held annually with the combatant commanders as part of the committee's review of the President's budget request for the coming fiscal year budget. Our witnesses are Admiral James Stavridis, North Atlantic Treaty Organization (NATO) Supreme Allied Commander, Europe, and Commander of the U.S. European Command (EUCOM); and General C. Robert Kehler, Commander, U.S. Strategic Command (STRATCOM). We welcome you both.

Admiral Stavridis is no stranger to this committee, having previously served as Commander of the U.S. Southern Command. This is his second appearance before the committee in his current position. He comes at a most propitious time, being Supreme Allied Commander in Europe, in other words our NATO commander.

This is General Kehler's first opportunity to testify before the committee as the Commander of STRATCOM, having assumed command responsibilities just 2 months ago. General Kehler is not new to the issues, however, as most of his career has been involved with strategic and space systems.

On behalf of the committee, let me thank you both for your long and distinguished service. We would also like to recognize the men and women who serve in the EUCOM area and around the world as members of the forces of STRATCOM as they support and enable a wide range of important global missions. Please pass along the appreciation of this committee to them for their commitment and their dedication, and to their families for the essential support that they provide.

Once again, our service men and women have been called into harm's way, this time as part of an international coalition to prevent the Qadhafi regime in Libya from carrying out a bloodbath against the Libyan people, who are currently seeking, often at great risk, the same democratic and human rights that are inspiring others in the Arab world.

President Obama has taken a thoughtful and deliberate approach to the U.S. involvement in the Libyan crisis, emphasizing that a military mission be limited and have the support of a broad international coalition, including the endorsement of the United Nations (U.N.) and the Arab League. Securing the support and participation of an international coalition has been critical, both for regional and international acceptance of the use of military force and ensuring that the risks and costs of operations are not principally America's.

The President has consistently made clear that the U.S. leadership of this mission would be limited in time, and that there would be a handoff of command and control to a NATO-led coalition, which currently includes at least two Arab countries.

President Obama has reiterated that it is a U.S. goal that Colonel Qadhafi should go. To achieve that goal without foreign ground

forces, the United States has applied significant tools of national power to increase heavy pressure against Colonel Qadhafi, his family, and close associates, including economic sanctions, a travel ban, and a freeze on more than $30 billion in Libyan assets.

Today, representatives from coalition countries, as well as from the United States, the Arab League, the African Union, and other Arab countries, are meeting in London to discuss the international effort in support of the Libyan people. Qadhafi is more and more isolated, his military capabilities continue to be degraded, and air strikes will continue as long as he continues to threaten his own people.

The international community, including critically important Arab countries, have responded to Qadhafi's repression with U.N. Security Council Resolution 1970, which imposed sanctions and a weapons embargo against Libya, and U.N. Security Council Resolution 1973, which authorizes the use of "all necessary measures" to impose a no-fly zone and to protect Libyan civilians from the threat of attack by the Qadhafi Government.

While coalition operations to enforce the U.N. Security Council resolution were initially under a task force led by the Commander of U.S. Africa Command, both EUCOM and STRATCOM have provided important support to establishment of the no-fly zone. Maritime and air assets based in Europe participated in the no-fly zone and in operations to protect civilians. STRATCOM demonstrated its global strike responsibilities when the B–2 Stealth bomber bombed airfields and other targets in Libya.

Our coalition partners have brought significant assets to the arms embargo and no-fly missions against Libya. Enforcing the no-fly zone has involved aircraft from 10 countries, including Qatar and the United Arab Emirates (UAE), and maritime operations are being conducted by nearly 40 ships, two-thirds of which are provided by coalition partners, including aircraft carriers from France and Italy.

Last week NATO took charge of the mission of enforcing the arms embargo and the no-fly zone against Libya, and on Sunday the North Atlantic Council (NAC), NATO's political body, agreed to take command of all aspects of the military operations under the U.N. Security Council Resolution 1973, including the mission of protecting the Libyan people. Canadian Lieutenant General Bouchard, who will head the task force in charge of these operations, will report through the NATO Joint Task Force Command-Naples to Admiral Stavridis in his capacity as NATO Supreme Allied Commander-Europe.

The President carefully set out the mission and helped organize a U.N. mandate and a coalition to pursue it before the mission was launched. It has gained momentum and achieved some notable success, and so far without any allied casualties. It is a unique moment in history when the international community comes together to stop a tyrant who is massacring his people.

The President from the beginning said the military mission did not include regime change. If it did, it would surely require outside ground forces, which the President clearly and properly rejects. Our military leaders' fear of mission creep has been understood by the President and respected. Those who are in favor of including

the military mission with the toppling of Qadhafi, need to address the problems created by getting deeper into the land of an Arab country, putting ourselves in the middle of a civil war, almost certainly destroying the coalition, and ignoring the U.N. mandate. The creation of that international coalition and mandate are of historic importance and essential to avoiding serious pitfalls.

The goal of our effort is to make it possible for the Libyan people to have the opportunity to decide Qadhafi's fate, just as the Egyptian people decided Mubarak's. If the situation on the ground in Libya continues to be volatile and Qadhafi continues to threaten his own people, then the issue arises as to whether the coalition should arm the opposition in Libya. Such a step must be considered in the context of a NATO decision, it will require consensus. One critical consideration is whether providing arms to the rebels would be consistent with the mission and the mandate for intervention and, perhaps most importantly, whether the NATO coalition and its partners would maintain the critically essential unity if such a policy were adopted.

President Obama has been cautious in weighing the conditions for the use of military force. I believe he will continue to weigh carefully the pros and cons of providing offensive arms, such as heavy vehicles and artillery, to the opposition.

In Afghanistan, our European allies and partners make up the vast majority of the 48 countries and the more than 40,000 non-U.S. troops participating in the NATO-led International Security Assistance Force (ISAF). Along with 90,000 U.S. troops, our ISAF partners' contributions have been significant, and we honor their sacrifices. At the NATO Lisbon summit last November, the ISAF participants agreed to endorse the Afghan Government's assuming responsibility for security. This is an important and a welcome step. Recently President Karzai announced the first round of provinces and districts across Afghanistan where Afghanistan National Security Forces (ANSF) will take the security lead starting this summer.

If we are to succeed, our message and our actions must be twofold. We must impart a sense of urgency to the Afghans on the need to take ownership of their country's security, which is why I've been such a strong supporter of the July 2011 date set by the President to begin reductions of U.S. forces and begin accelerating the transition of security responsibility to ANSF.

At the same time, we must assure and reassure the Afghans that as they assume more and more responsibility for security, we will be there to support them. Our European allies need to focus more on seeing this mission through to a successful conclusion and NATO members need to meet ISAF requirements for trainers for the Afghan army and police.

The balance of my statement I will put into the record, and I will call now on Senator McCain.

[The prepared statement of Senator Levin follows:]

PREPARED STATEMENT BY SENATOR CARL LEVIN

This morning's hearing is one in the series of posture hearings held annually with the combatant commanders as part of the committee's review of the President's budget request for the coming fiscal year budget. Our witnesses are Admiral James G. Stavridis, NATO Supreme Allied Commander, Europe, and Commander, U.S. Eu-

ropean Command (EUCOM); and General C. Robert Kehler, Commander, U.S. Strategic Command (STRATCOM). Welcome to you both.

Admiral Stavridis is no stranger to this committee, having previously served as Commander of U.S. Southern Command, and this is his second appearance before this committee in his current position. But he comes at a most propitious time, being Supreme Allied Commander Europe, i.e., our NATO Commander. This is General Kehler's first opportunity to testify before the committee as the Commander of the U.S. Strategic Command, having assumed command responsibilities just 2 months ago. General Kehler is not new to the issues, however, as most of his career has been involved with strategic and space systems. On behalf of the committee, let me thank you both for your long and distinguished service.

I would also like to recognize the men and women who serve in the EUCOM area and around the world as members of the forces of STRATCOM as they support and enable a wide range of important global missions. Please pass along the appreciation of this committee to them for their commitment and dedication, and to their families for the essential support they provide.

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Securing the support and participation of a broad international coalition has been critical, both for regional and international acceptance of the use of military force and for ensuring that the risks and costs of operations are not principally America's. The President has consistently made clear that the U.S. leadership of this mission would be limited in time, and that there would be a hand-off of command and control to a NATO-led coalition, which currently includes at least two Arab countries.

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If the situation on the ground in Libya continues to be volatile and Qadhafi continues to threaten his own people, then the issue arises as to whether the coalition should arm the opposition in Libya. Because such a step must be considered in the context of a NATO decision, it will require consensus. One critical consideration is whether providing arms to the rebels would be consistent with the mission and the mandate for intervention and perhaps most importantly whether the NATO coalition and its partners would maintain the critically essential unity if such a policy were adopted. President Obama has been cautious in weighing the conditions for the use of military force. I believe he will continue to weigh carefully the pros and cons of providing offensive arms such as heavy vehicles and artillery to the opposition.

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The last year has been an important one for EUCOM in the area of missile defense. In November, NATO decided at the Lisbon Summit to adopt as a core mission the missile defense of NATO territory and population. NATO endorsed the U.S. European Phased Adaptive Approach (EPAA) as the U.S. contribution to that NATO missile defense system, and decided to expand its missile defense command and control network for that mission. As part of its historic missile defense decisions, NATO also invited Russia to cooperate with the alliance on missile defense, something that I believe holds potential to improve U.S. and NATO relations with Russia, and to send an important signal to Iran about our joint determination to counter its nuclear and missile programs.

Just a few weeks ago, the U.S. Navy sent the first Aegis Ballistic Missile Defense ship for the EPAA mission, the USS *Monterey*, on its first deployment to the Mediterranean Sea for missile defense duty as part of Phase 1 of the EPAA.

STRATCOM is the command responsible for ensuring that missile defenses are militarily effective. As missile capabilities of countries such as Iran and North Korea grow, the threat to deployed U.S. forces and allies in these regions also grows. The phased adaptive approach being established in Europe and as the U.S. element to NATO missile defense presents the most realistic option for defeating existing and anticipated regional missile threats. General Kehler and Admiral Stavridis, this is an area where both commands work collaboratively to ensure reliable capability. I look forward to hearing how you expect the implementation of PAA to proceed, and what you believe are the prospects and potential benefits of missile defense cooperation with Russia. I look forward also to discussing NATO's commitment to missile defenses.

General Kehler, STRATCOM is indeed a global command with responsibility for space, strategic nuclear forces, global strike, cyber—with the new Cyber Command as a sub-unified command in STRATCOM, missile defense, intelligence, surveillance, and reconnaissance, and combating weapons of mass destruction.

Among the many challenges facing STRATCOM is the implementation of the New START treaty. Under the treaty both the United States and Russia have 7 years to come into compliance with the reduced levels of nuclear delivery systems and warheads. While we recognize that it is early in the reduction process, and that it will take most of the 7 years to make the decisions and implement the necessary changes in the force structure, the committee remains interested in the overall effort.

When President Obama signed the START treaty in Prague in April 2010, he reaffirmed his commitment, made in Prague in April 2009, to continue to make reductions in nuclear forces. With respect to the new treaty he said: "While the New START treaty is an important first step forward, it is just one step on a longer journey. As I said last year in Prague, this treaty will set the stage for further cuts. Going forward, we hope to pursue discussions with Russia on reducing both our strategic and tactical weapons, including non-deployed weapons."

Earlier this month 41 Senators, including several on this committee, sent a letter to the President raising concerns about reductions beyond those in the New START treaty and the administration's ongoing deterrence review. I look forward to getting into a more detailed discussion this morning on the nuclear forces and how they will be reduced under the treaty, as well as on any plans being discussed for further reductions.

The new subunified Cyber Command became fully operational at the end of last year. Nevertheless there are still many unresolved policy and other issues confronting the new command. General Kehler, we look forward to your views on the way ahead for both the Cyber Command as well as the forces from the military Services that will support the command.

Space systems and the capabilities they provide have given a significant advantage to the United States and its allies both militarily and economically. Maintaining this advantage, however, is increasingly difficult as others intentionally seek to reduce our military advantage. In addition, as civil uses of the radio frequency spectrum increase, the possibility that important signals can or will be inadvertently or purposely jammed also increases. General Kehler, you have described space as "contested, congested, and competitive." We look forward to a discussion as to the scope of the problem facing the STRATCOM and your views on how to ensure that the United States maintains the uninterrupted use of space and space assets. This includes how the United States might participate with other countries to establish rules of the road for space.

Finally, one of the most important missions is STRATCOM's role in combating weapons of mass destruction, particularly the efforts to stop proliferation of nuclear and related technologies. Proliferation prevention is a vital part of deterrence, but one that is often not fully supported or funded. While maintaining a safe, secure, and reliable nuclear stockpile is the most visible element of deterrence, preventing states and non-state actors from acquiring nuclear weapons, materials and technologies, is equally important. I look forward to receiving your thoughts on how the proliferation prevention programs and efforts can be strengthened and made more effective.

STATEMENT OF SENATOR JOHN McCAIN

Senator McCAIN. Thank you, Mr. Chairman, and let me thank our witnesses for joining us this morning and for their many years of service to our Nation. On behalf of the entire committee, I'd like to extend our thanks to all of the brave men and women in uniform you lead, who sacrifice so faithfully for us.

I'd like to echo the chairman in saying it's a pleasure to have General Kehler before the committee for the first time in his capacity as Commander of STRATCOM. Of course, it's always a pleasure to have Admiral Stavridis back before this committee to discuss the many complex challenges in EUCOM, especially with U.S. forces engaged in military operations in Libya and with the upcoming transition of that mission to NATO command.

As the chairman said, the committee will hold a hearing this Thursday on the current operations in Libya, so let me just say briefly, the decision to intervene militarily in Libya was right and necessary. I believe last night the President made a clear and convincing case for that. The President's action surely averted a mass atrocity in Benghazi. Had we not intervened, Libyan refugees would now be destabilizing Egypt and Tunisia, America's moral standing in the broader Middle East would have been devastated, as we turned a deaf ear on Arabs and Muslims who were pleading for our rescue. The result of all this would have been a fertile breeding ground in Libya for radicalization, hatred, and the ideology of al Qaeda.

Now that we have prevented the worst outcome, we have an opportunity to achieve the broader U.S. goal in Libya, as the President stated, forcing Qadhafi to leave power. I disagree with the President, that the use of force should be ruled out, but clearly facts on the ground show that we are taking necessary steps to do so.

With our support, opposition forces are making significant progress toward that end on the ground. We just saw in Sirte that U.S. and allied air power is the key element in whether these rebels, the anti-Qadhafi forces, succeed or fail. We need to keep the pressure on Qadhafi and add to it where possible.

Qadhafi may crack. It's very possible that he may do so. But I don't think we can place all of our hopes on that outcome. A long and costly stalemate is not in our interest. It was not in our interest to have a 10-year stalemate in Iraq following Operation Desert Storm. A long and costly stalemate in Libya would not be beneficial to any party.

Though our focus is now on Libya, we must remember how many vital and diverse national security issues are being addressed in both of the commands that our witnesses lead. In EUCOM, all of the many diverse missions of our Armed Forces intersect, from combating transnational threats like terrorism or cyber attacks to building partnership capacity, from supporting NATO's counter-insurgency campaign in Afghanistan to maintaining the strategic balance of forces with other Eurasian powers. EUCOM is doing it all.

In addition to Libya, I'd be interested to hear what steps, if any, are being taken to support the defensive rearmament of Georgia. It's not in our interest to leave a stalwart partner and NATO aspirant country without the means to properly defend itself.

I also believe the entire committee would be interested in an update on the initial phase of our deployment of the European-phased Adaptive Approach (EPAA) to missile defense, as well as the progress made in projections for meeting the timeline set forth by the President for phases 2 through 4. This is especially important in light of recent statements by Russian leaders rejecting stated U.S. policy of deploying all four phases of this critical missile defense program.

I know that both our witnesses have been involved, to varying degrees, in the search for common ground on missile defense with Russia. We'd be eager to hear both of our witnesses' assessment on the prospects of such cooperation ever occurring.

Similarly, General Kehler, you take command of STRATCOM at a pivotal time, as we embark on a robust modernization of the nuclear triad and weapons complex, define strategic defense capabilities for the 21st century, and cement the role of cyber security and cyber warfare as core competencies.

The President's budget for fiscal year 2012 represents the initial investment in what will be a costly, yet vital, reinvestment in nuclear weapons modernization. The importance of Congress fully funding the long-term modernization of the nuclear weapons complex should have been driven home last year during the debate over the New Strategic Arms Reduction Treaty (START). Yet, in the fiscal year 2011 appropriations bill that Congress is now considering for the Department of Defense (DOD), the House has cut the President's request by $312 million and the Senate cut the request by $185 million. These actions are very troubling to me and I'd like to know whether you share this assessment, General Kehler, as well as how such cuts would affect your command's mission of fielding safe, reliable, and effective strategic forces.

Finally, on the issue of our cyber security, I was struck by a statement that General Keith Alexander made in recent testimony to the House Armed Services Committee. He said, and I quote: "We are finding that we do not have the capacity to do everything we need to accomplish. To put it bluntly, we are very thin and a crisis would quickly stress our cyber forces." General Alexander was also very clear that the threat is not a "hypothetical danger."

I remain concerned that DOD lacks both the necessary legal authorities and sufficiently-trained personnel to fully perform its critical role in the realm of cyber security.

Again, I welcome the witnesses. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain.

Admiral Stavridis.

STATEMENT OF ADM JAMES G. STAVRIDIS, USN, COMMANDER, U.S. EUROPEAN COMMAND/SUPREME ALLIED COMMANDER, EUROPE

Admiral STAVRIDIS. Mr. Chairman, ranking member, members of the committee, thank you. It's a pleasure and an honor to be with you here and also a great chance to be with Bob Kehler for his inaugural testimony, as several of you pointed out.

I would like to take just a moment upfront to mention some of the things we're doing at EUCOM, and I'll group them into three broad categories. One is military operations, one is partnering and training with allies and friends, and the third is something I think is very important and it's engaging with the interagency.

In terms of military operations, I'll conclude with a word about Libya, but let me start with a word about Afghanistan. At any given time, about 80 percent of the 45,000 non-U.S. troops who are in Afghanistan come from Europe. At this moment we have 12,000 EUCOM soldiers who are forward deployed. We focus on Afghanistan from EUCOM and try our best to support General Jim Mattis and of course General Dave Petraeus, who's both our NATO and our U.S. Commander in Afghanistan.

Like General Petraeus, and of course he was up about a week ago, I am today cautiously optimistic about Afghanistan. I see

progress. As Dave said, it's fragile, but I believe that we are moving forward in the right direction. Today we have a coalition of 49 troop-contributing nations, the largest coalition in history, and it is making measurable progress in the transition to Afghan-led security operations.

I can talk more about that in the question and answer period, but I did want to register my sense of cautious optimism for our progress in Afghanistan today.

Partnership is a very important aspect of what we do at EUCOM, 51 nations are part of our military-to-military relationships. Last year, for example, we had 33 major exercises, engaging about 50,000 folks. We do a significant amount of training across the spectrum. Senator McCain mentioned Georgia. We do a fair amount with Georgia. Partnership-building is part of why there are 45,000 non-U.S. troops today with us in Afghanistan.

Third, interagency, we are also very engaged at EUCOM with our interagency partners. We are engaged in everything from disaster relief, in both Israel and Russia last year after forest fires, to working with the Drug Enforcement Administration on stemming the flow of narcotics out of Afghanistan because the profits and the money from that goes right back into the pockets of the Taliban.

Those three things, Mr. Chairman and ranking member, are where we're trying to focus: military operations, our partnering, and on our very good work with the interagency.

In terms of future challenges, we talked about Afghanistan. We are also very concerned about the ballistic missile threat, as Senator McCain said. We can talk about how we're doing, and I think the answer is reasonably well, on implementing the EPAA. We are seeking the right balance of relationship with Russia, trying to find zones of cooperation where we can. We continue to work on our military-to-military relationships with Israel and Turkey which are very important. Terrorism and cyber issues are on our plate, as well.

Let me say a word about Libya since both the chairman and the ranking member mentioned it in their opening statements. I would like to clarify that I wear two hats. One is EUCOM, and in that U.S. capacity I am what is called a supporting commander. I am supporting the lead combatant commander, General Carter Ham. He is the principal U.S. operator and has been largely responsible for leading the coalition that has been in operation for several weeks. My role there is support, logistics, and moving troops forward for him.

In terms of my other hat as the Supreme Allied Commander of Europe, I am effectively the operations officer for NATO. In that regard, as Senator McCain and Senator Levin mentioned, we are in fact taking this mission, the arms embargo mission, as of several days ago. We've taken the no-fly zone and now we are prepared over the next 24 to 48 hours to take over protecting the population, all of which stems directly from the U.N. Security Council Resolution.

We are in the process of transitioning to a NATO-led operation from this coalition and I can certainly talk about aspects of that in my NATO hat as desired.

I hope that gives you a quick overview of what we're focused on at EUCOM. I'll conclude by saying I'm very proud of the men and women who serve there. I'll certainly carry back the comments of the chairman, the ranking member, and the whole committee. I would conclude by saying that we at EUCOM are very grateful for Congress, the Senate and the House of Representatives, for the support you give us, for taking the time to come and visit us, and for your interest and your questions, which sharpen our responses and hopefully help us contribute to U.S. national security.

Thank you, sir.

[The prepared statement of Admiral Stavridis follows:]

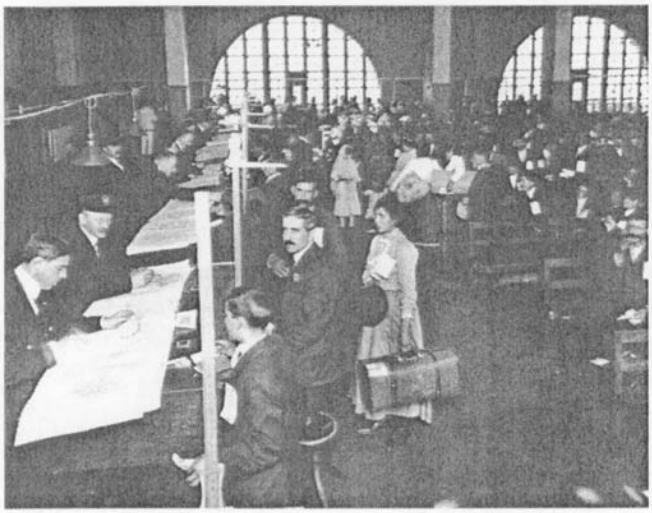
PREPARED STATEMENT BY ADM JAMES G. STAVRIDIS, USN

INTRODUCTION

Mr. Chairman, ranking member, and distinguished members of the committee, I would like to thank you for the opportunity to appear before you today to share with you the successes achieved and the challenges being faced by the men and women of both the U.S. European Command (EUCOM) and the North Atlantic Treaty Organization's (NATO) Allied Command Operations since I last appeared before you. I have now been at the helm of these commands for almost 2 years and am happy to report we continue to make progress and develop stronger partnerships for our shared security. The most important activities and initiatives contained in these pages are those in which we work together with our allies and partners to build capacity to ensure U.S. security in the European theater and, thus, defend our homeland forward.

The United States and Europe are inextricably linked—politically as allies and partners in diplomacy. Additionally, the European Union (EU) and U.S. economies account for about half the global economy. The two economies are interdependent to a high degree. The United States and the EU are each other's top trading partners. In 2009, the EU exported $280 billion in goods to the United States, and imported $220 billion in goods from the United States.

The most important ties for our command, of course, are those between our militaries. U.S. military traditions grew out of European ones. We have learned from each other, often in the demanding circumstances of combat, and we have consistently found ways to become partners and then allies. For the greater part of a century, U.S. soldiers have shared battlefields with their European counterparts—from the Argonne Forest to the sands of Normandy to the mountains of Afghanistan. With respect to mutual and global security perspectives, Europeans are superb partners.



European immigrants entering the U.S. through Ellis Island

MISSION AND VISION

The mission of EUCOM is to conduct military operations, international military engagement, and interagency partnering to enhance transatlantic security and defend the United States forward.

We strive to be an agile security organization able to conduct full spectrum activities as part of whole-of-government solutions to secure enduring stability in Europe and Eurasia.

- Our area of focus covers roughly one-fifth of the planet, including all of Europe, large portions of Asia, parts of the Middle East and the Arctic and Atlantic Oceans.
- We are responsible for U.S. military relations with NATO and 51 countries on 2 continents with a total population of close to 1 billion people.
- We direct the operation of more than 80,000 military personnel across 10.7 million square miles of land and 13 million square miles of ocean.
- We are responsible for maintaining the quality of life, including health care and schools, for approximately 130,000 Department of Defense (DOD) family members living in Europe.

Progress

EUCOM has achieved progress through proactive initiatives and by responding to challenges and opportunities that arose over the past year.

EUCOM's Support to International Security Assistance Force (ISAF) in Afghanistan.

EUCOM's activities to support ISAF operations are extensive and effective. At any given time, approximately 80 percent of the non-U.S. countries deployed to Afghanistan are from the European theater. EUCOM's support to ISAF is largely focused on preparing these partner nations for deployment to Afghanistan. This includes dispatching mobile planning teams to assess partner nation equipment and training requirements and working with the country to develop a comprehensive pre-deployment plan.

These requirements may include provision of equipment such as up-armored high mobility multipurpose wheeled vehicles (HMMWV) and mine-resistant ambush protected vehicles (MRAP), and pre-deployment training to counter improvised explosive devices, build Observer Mentor Liaison Teams, and provide Expeditionary Intelligence Training courses tailored to the complex Afghan counterinsurgency environment. The command also works closely with our partner nations to fill critical National Training Mission-Afghanistan (NTM–A) training requirements.

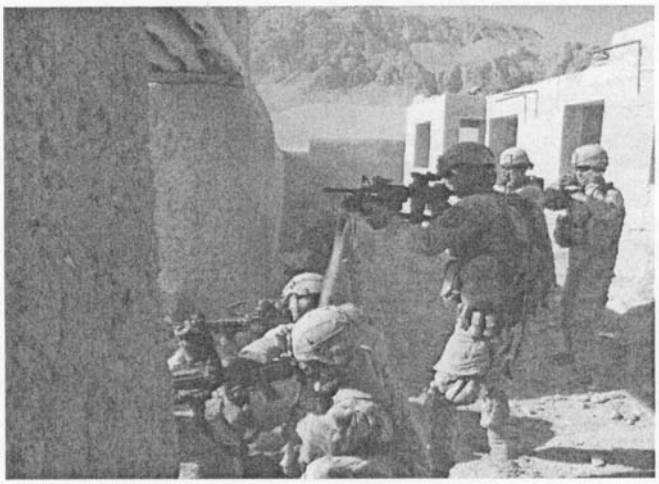
Combat training for Afghan National Security Forces

In quantitative terms, since I last appeared before this committee, EUCOM has dispatched over 20 mobile planning teams and conducted 3 Observer Mentor Liaison Team rotations at the Joint Multinational Readiness Center, which included 16 countries and 1,045 personnel and conducted 8 Expeditionary Intelligence Training courses in which we have trained 230 personnel from 14 countries.

International Security Assistance Force non-commissioned officers (NCO) raise their right hands and repeat the charge of the NCO during an NCO induction ceremony in Afghanistan

We have also trained over 1,860 soldiers from 15 countries to counter the threats posed by improvised explosive devices, and trained 2 Polish Brigades and 2 Georgian battalions for deployment to Afghanistan. On the logistics side, we have moved 487 tons of equipment through Europe to Afghanistan over the Northern Distribution Network. In fiscal year 2010, we coordinated use of the DOD Lift and Sustain

Program to provide nonreimbursable air and sealift to move 14,897 passengers and 4,206 tons of cargo for 13 contributing nations, who would have otherwise been unable to move equipment and personnel to Afghanistan. Also, we are able to support partner movements through our active involvement in two major European military transportation consortiums. EUCOM also coordinates and schedules the United States' allocation of 1,000 flight hours in the Heavy Airlift Wing (HAW), comprised of three cooperatively shared Hungarian registered and certified C–17 aircraft.



U.S. Army Soldiers from the 173rd Airborne Brigade Combat Team get ready to engage enemy combatants

Counter-Improvised Explosive Device Training

A growth area for EUCOM this fiscal year is counter-improvised explosive device training, where we plan to train as many as 5,000 partner nation soldiers during this fiscal year.

Assuring Access

EUCOM plays a critical role in assuring that the United States continues to enjoy access within and beyond EUCOM's area of focus. Our mature basing footprint includes several locations that are used in support of U.S. Transportation Command's enroute strategy which has proven to be vital in supporting recent operations in Afghanistan and Iraq. Well-established relationships with partner nations further complement our access capability.

Multi-National Joint and Interagency Exercises

The most intensive form of peacetime interaction with our allies and partners occurs in the conduct of joint exercises. EUCOM maintained a robust bilateral and multilateral exercise program last year, executing 33 major exercises involving nearly 50,000 U.S., allied, and partner nation personnel from 40 nations. The exercises focused on preparing partner nations for ongoing coalition operations including the ISAF in Afghanistan, enhancing NATO interoperability, and improving our military capability and interoperability with Israel.

Exercises in the Baltics, Balkans, and Caucasus

In support of NATO, EUCOM provided forces for nine NATO and NATO Partnership for Peace events in the Baltics. U.S. Naval Forces Europe also executed Exercise Baltic Operations, a longstanding multinational maritime exercise which included 12 nations focused on maritime interdiction and amphibious interoperability. Addressing the Balkans, two major exercises, Immediate Response 10 and Combined Endeavor 10, bolstered partner capabilities and eased regional tensions. Of particular note, EUCOM conducted Jackal Stone 10, a field training exercise in Poland and numerous other locations throughout the world, in cooperation with Spe-

cial Operations Command. This event involved more than 7 nations and approximately 1,100 partner nation Special Operation Forces personnel. Jackal Stone, along with other Special Operations exercises and Joint Combined Exchange Training events in over 25 countries, directly supports U.S. and partner Special Operations Forces' readiness and capabilities for U.S., NATO, and EUCOM missions ranging from counter terrorism to high-intensity conflict.

Arctic Zephyr

Arctic Zephyr is a multi-phased exercise, convening initially as a table-top event and projected ultimately to culminate in a multinational search-and-rescue field exercise. In support of U.S. policy and strategy on Arctic issues, the long term goals of Arctic Zephyr are to maintain an understanding of the legal, commercial, and political ramifications of the changing Arctic environment and to strengthen relationships with other Arctic nations. This is one of the areas where EUCOM finds common ground and opportunities for cooperation with Russia.

Austere Challenge

EUCOM headquarters continues to successfully execute the Austere Challenge exercise series, the premier joint force headquarters exercise in the European theater. Austere Challenge 10 forged ahead into new territory when it expanded to train two Joint Task Force (JTF) headquarters simultaneously while incorporating a French-led Joint Force Air Component as well as French and Polish Brigade headquarters response cells, all firsts in European theater training. The benefits of combined, multiple JTF exercises are clear: challenge the Headquarters and component staffs; reinforce the U.S. position of seeking multi-national solutions; train as we fight; and identify the strengths and limitations of U.S. and coalition interoperability capabilities.

A major advance during Austere Challenge 10 was the establishment of an enduring computer network for future training events and real world operations. EUCOM planners identified and established the battlefield information collection and exploitation system as the most capable network for expansion to support Coalition Task Force operations with NATO partners. More importantly, this system is being used at the Joint Multinational Training Center at Grafenwoehr, Germany, by U.S. and coalition forces preparing for deployment to Afghanistan.

Austere Challenge 11 will venture back into the full spectrum, major combat operations arena. Participation will expand outside the theater and there will be a heavy focus on operating in the challenging cyberspace. The 34th Infantry Division Headquarters, from the Minnesota Army National Guard, will provide the Combined/Joint Force Land Component Commander, and French and Polish Land forces will participate for a second year to operate as Mechanized Brigade Headquarters response cells. We continue building partner capacity by soliciting participation from partner nations around the European theater.

Combined Endeavor

During Combined Endeavor 10, our premier communications and electronics interoperability exercise, delegates came together from 40 nations (24 NATO and 16 Partnership for Peace countries) to strengthen partnerships, increase communication interoperability, and enhance the capabilities and capacities of partner nations.

American and Italian technicians work to establish network connections during exercise Combined Endeavor 2010

This marked Combined Endeavor's 16th year building partnerships and featured the participation of Iraq and Afghanistan as observer nations. Both nations committed to increased involvement and a dedication to interoperability between their national forces and NATO/Partnership for Peace nations. Combined Endeavor continues to build bridges across Europe and Eurasia and supported the preparation of coalition forces for regional and global operations. In particular, Canada and the United Kingdom tested and trained on the command and control systems they will be using during their upcoming deployments to Afghanistan, and validated operational functionality and interoperability with the same partners with whom they will operate downrange.

Additionally, two new training events were incorporated into Combined Endeavor. Cyber Endeavor leveraged the 102d Information Warfare Squadron, from the Rhode Island Air National Guard, to focus on improving the information assurance competencies and network defenses of our European partners, while Supreme Headquarters Allied Power Europe (SHAPE) held Exercise Steadfast Cobalt to focus on command, control, communications, and computers in preparation for NATO response force deployment and to maximize interoperability with other European nations.

Flexible Leader

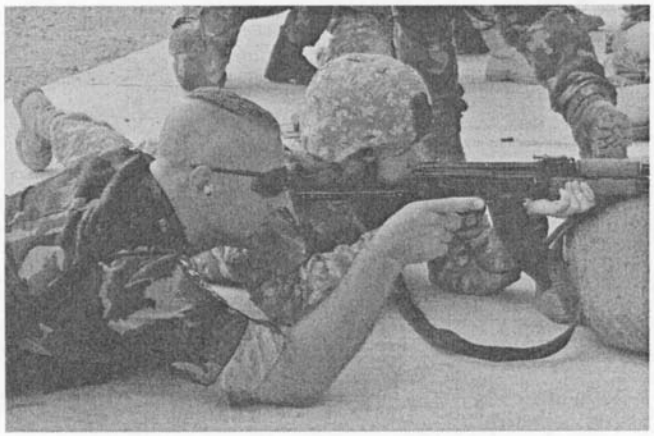
This year's flexible leader tabletop exercise and senior leader seminar leveraged lessons learned from the Haitian earthquake disaster, and helped validate newly revised plans which EUCOM planners have written for comparable contingencies. Extensive representation was present from several U.S. Embassy staffs, other U.S. Government agencies, and EUCOM's Service components. Flexible leader highlighted the extensive work and progress that has been accomplished in foreign consequence management and humanitarian assistance planning, and also identified many courses of action that will improve EUCOM's ability to respond to a crisis situation quickly and effectively.

Patriots to Poland

As stated in the August 2008 Declaration on Strategic Cooperation, and in an effort to strengthen the important strategic partnership between the Republic of Poland and the United States, the United States performs quarterly rotations of patriot batteries to Poland, enhancing U.S.-Poland air and missile defense cooperation. These rotations continue to familiarize Polish Armed Forces with the Patriot Missile System and have permitted U.S. Forces to share related tactics, techniques, and procedures on missile defense. Of benefit to both U.S. and Polish forces, U.S. Patriot crews have improved their individual tasks and crew drills including operations during deployment, rail activities, and missile transport, storage, and security. Since May 2010, there have been three rotations to Poland for training and exercise purposes only. Although initially focused on one location—Morag, Poland—the last rotation took place in Torun, Poland. A fourth deployment is currently underway.

State Partnership Program

The State Partnership Program accounts for 45 percent of EUCOM's military-to-military engagement. Founded in 1993, the State Partnership Program was originally designed to link National Guard States and territories with former Soviet bloc countries for the purpose of fostering mutual interests and establishing long-term relationships across all levels of society. EUCOM currently benefits from 21 partnerships, we are currently finalizing the protocols for a State Partnership Program with Kosovo, and there is potential for 1 or 2 more partnerships over the next couple years. The true value of this program is the enduring relationships that have been built over time, as many of EUCOM's state partnerships are approaching their 20-year anniversaries. Perhaps the greatest example of how critical these relationships are is that, in 2010, National Guard personnel deployed to Afghanistan together with five partner nations as members of Observer Mentor Liaison Teams and other forces training and fighting side-by-side.



Hungarian army Sgt. Major Laszlo Pasztercsak instructs U.S. Army Sgt. Mika Putz, of Bismarck, N.D., in the use of the AK63D rifle during a State Partnership Program multinational marksmanship event at Camp Bondsteel

European Command Organization

EUCOM Headquarters takes a "whole of society" approach to maintaining security and stability while shaping existing structures to adjust to the security environment. These changes will be accompanied by a 15 percent manpower reduction as we eliminate lower priority missions and identify missions in which EUCOM can prudently accept additional risk. At the same time, we are increasing emphasis on emerging mission sets such as ballistic missile defense (BMD), military partnering, counter-trafficking, and cyberspace. To further embrace a "whole of society" approach to the security environment, the command is expanding its J9 directorate to focus on interagency partnering and the use of whole-of-government/society solutions to strategic challenges. Additionally, EUCOM has internally resourced a J7 directorate to provide independent assessments and analyses of strategic and operational processes and products. The command has also internally resourced a Joint Interagency Counter-Trafficking Center (JICTC)-Europe to focus on the critical counter-trafficking mission across the theater.

We have also established a Military Partnering Center of Excellence to accelerate our efforts to expand the command's international military partnering engagement activities. The Center will be a virtual, web-based partnering hub for U.S. and European partners to share best practices and lessons learned through military partnering collaboration, networking, and information sharing. The center will reside on a public web portal linked to existing DOD centers of excellence, most notably the Center for Disaster Management and Humanitarian Assistance, as well as

to educational and partnering organizations like the George C. Marshall Center in Garmisch, Germany. We plan to have the center fully operational by summer 2011.

Russia Fire Fighting

EUCOM also continues to stand ready to provide theater-wide rapid response capabilities for Humanitarian Assistance and Disaster Response missions. This past August, under conditions of severe drought and in the midst of one of the hottest summers on record, a series of destructive wildfires broke out across Russia, prompting President Medvedev to declare a state of emergency in several areas. In response to Russia's request, and in coordination with the Department of State (DOS), EUCOM planners, logisticians, and airmen rapidly identified and airlifted over 36 tons of valuable firefighting supplies and equipment on four U.S. Air Forces in Europe C–130 cargo aircraft to assist Russia in their emergent response to this destructive event. It is precisely this kind of rapid and agile response capability—to a neighboring nation in need—that illustrates the "Smart Power" combination of military capacity and in-stride diplomacy uniquely available to the Nation's leadership from its overseas combatant commands.

Israel Fire Fighting

Similarly, this past December, a series of wildfires broke out across Israel threatening to engulf lives, homes, critical infrastructure, and valuable natural resources. At Israel's request, and in coordination with DOS, EUCOM planners, logisticians, and operators rapidly dispatched five C–130 cargo planes loaded with 60 tons of critical fire-retardant materials necessary to extinguish the blaze. This effort—led by U.S. Air Forces in Europe—played an important role in the international response to Israel in its time of need, and supported our enduring mission to support and promote regional stability and security. It serves as yet another example of our ability to work together to support each other in times of crisis, demonstrating the value of cooperation among neighbors, allies, and partners, as well as the enduring strength of the U.S.-Israeli relationship.

Efficiencies

While striving to achieve our mission and vision, we are very mindful of today's economic realities. This is why, in support of the Secretary of Defense efficiencies initiative, EUCOM has taken concrete steps to streamline our operations and move toward a more efficient and effective organization. The command will retain traditional J-staff codes because of their applicability across DOD. However, we are also executing an internal staff rebalance without incurring any growth and leading to a 15 percent decrease in required manning and budget. We have been taking a close look at all permanent billets and essential mission sets to ensure proper alignment and distribution of resources, and are actively seeking areas where efficiencies may be gained.

"We must find ways to operate government more efficiently and at a lower cost to taxpayers. Secretary Gates understands the tough economic and fiscal situation facing our nation and I support his efforts in doing everything possible to make every tax-payer dollar count."

Sen. John McCain, Senate Armed Services Committee hearing on DOD efficiencies initiatives, September 2010

We have focused our mission sets to accommodate our envisioned security environment, based on an analysis of strategic guidance, to include the Unified Command Plan, the Joint Strategic Capabilities Plan, and the Global Employment of the Force. Areas in which we believe we can harvest efficiencies, either through the focusing of missions or by willingness to prudently accept increased mission risk include: personnel management; General/Flag Officer and Senior Executive Service numbers and seniority; General/Flag Officer support; information technology; experimentation; planning, programming, and budgeting system participation; intelligence support; and logistics support. All decisions will be made with careful consideration of their effect on mission readiness.

EUCOM Components

Except when conducting joint operations or participating in joint exercises, EUCOM forces are assigned to, trained, and equipped by our Service-specific headquarters. U.S. Army in Europe (USAREUR), U.S. Marine Forces Europe (MARFOREUR), U.S. Naval Forces Europe (NAVEUR), U.S. Air Forces in Europe

(USAFE), and Special Operations Command Europe (SOCEUR) provide the forces for all military-to-military engagements with our partner nations, provide a deterrence function in the region, and serve as deployable units for contingency operations. Understanding these commands is the key to understanding EUCOM, as they conduct the majority of our day-to-day activities.

U.S. Army in Europe—Heidelberg, Germany

Introduction and Overview

With 42,000 Active Duty and Reserve servicemembers operating from six enduring Army communities, USAREUR serves as the key coordinator of activities by theater-assigned and rotational ground forces. The integration of these forces across the full spectrum of operations places responsibilities on the USAREUR ranging from the tactical and operational to the strategic level. With V Corps' intermediate tactical headquarters capability deployed in support of ISAF efforts in Afghanistan, USAREUR directly oversees capacity building activities throughout EUCOM's area of focus, including efforts in support of U.S. Africa Command (AFRICOM). It also maintains critical logistical lead component duties in support of NATO's Kosovo operations. The USAREUR translates strategic directives from the command and the Department of the Army into executable tactical orders for subordinate units, including planning for and executing key tasks in support of our European partners and Israel.

Under these circumstances, USAREUR provides key tactical and operational forces, to include full spectrum combat units and strategic enablers, for global employment. As the U.S. military land component provider on the continent, USAREUR leads the ground effort in building partner capacity in support of global requirements. These efforts continue to be instrumental in supporting the ISAF commander's requirement for improving the effectiveness of coalition ground force deployments, by training and preparing U.S. and European forces for operations in Iraq and Afghanistan.

Major Accomplishments

With over 25 percent of its assigned forces deployed in support of operations in Iraq and Afghanistan, USAREUR continued to support the Secretary of Defense's commitment to improving the capacity of coalition partners and allies by conducting

a robust training and exercise program designed to build partner capacity and increase coalition interoperability.

Building Partner Capacity

In 2010, USAREUR provided 755 soldiers from 10 nations with lifesaving drivers' training on Mine Resistant Ambush Protected (MRAP) vehicles. It trained an additional 422 soldiers from 9 nations to counter improvised explosive devices. Supporting U.S. national security objectives, this training enabled the command to prepare full-spectrum capable forces for global employment while improving partners' and allies' survivability and effectiveness during deployments. Additionally, in support of the ISAF commander's top priority to train Afghan soldiers and police, USAREUR trained 50 Operational Mentor-Liaison Teams (OMLT) and Police Mentor-Liaison Teams (POMLT) for deployment to Afghanistan.

Critically, USAREUR has worked to advance defense institutional transformation. One example of this was its assistance to Romania in the development of the country's tactical, operational, and strategic military doctrine. USAREUR also promoted U.S./partner interoperability through its joint exercises and exchange programs, recently having conducted leader exchange programs with Israel in the areas of aviation, ground maneuver, training, reconnaissance, and military intelligence. Additionally, USAREUR enhanced capacity for maintaining regional stability—evidenced by its support to Poland—executing the first three Patriots-to-Poland rotations.

Both on and off the continent, USAREUR planned for and exercised ground capabilities to support key NATO partners and Israel in defending against potential threats. It has worked with Israel to significantly improve their ballistic missile early warning capability and has enhanced bilateral air and missile defense training exercises in coordination with our partner. In addition to this assurance to

Croatian and Minnesota National Guard soldiers prepare to clear a room during an Operational Mentoring and Liaison Team training exercise at the Joint Multinational Readiness Center

allies and deterrence of potential aggressors, its ability to provide foreign consequence management and foreign humanitarian assistance ensured that USAREUR was, and continues to remain, prepared to support the United States' Article IV and V commitments to our NATO partners. Finally, as part of the larger U.S. efforts to reset our relations with Russia, USAREUR included Russian military leaders as observers for three major exercises.

Exercises

Exercises continue to enhance the pre-deployment training of U.S. and coalition forces for current contingency operations, and serve to prepare these same forces for future coalition operations. This past year, USAREUR participated in 21 major exercises (including 3 mission rehearsal exercises) conducted in 11 countries with 28 participating nations. Among these exercises was Juniper Falcon 11, an Israeli-led Joint Task Force-level exercise focused on improving Israeli Defense Force command and control and logistical capacity. Supporting America's continuing partnership

Joint Task Force-level exercise focused on improving Israeli Defense Force command and control and logistical capacity. Supporting America's continuing partnership with Turkey, Cooperative Resolve 10 was a battalion-level Command Post Exercise conducted in Turkey meant to enhance interoperability. As a final highlight, Rapid Trident 10 was a peacekeeping exercise involving 16 countries conducted in Ukraine to support its NATO interoperability goals through NATO's Annual National Program.

Humanitarian Assistance

As part of our Humanitarian Assistance program, the Command also provided enabling support to AFRICOM for MEDFLAG 10, a medical skills exchange exercise conducted in the Democratic Republic of Congo by U.S. and African militaries.

Way Ahead

USAREUR will provide combat power to support global operations while at the same time continuing to build partner capacity. Together, these efforts will help advance the long-term process of defense institutional transformation of U.S. partners and allies. As USAREUR trains and prepares for deployment alongside coalition partners in the coming year, it will continue to foster the residual effects of increased training effectiveness among friendly militaries—from improvement in counterinsurgency operations and incorporation of interagency concerns, to the updating of U.S./NATO interoperability doctrine. Specifically, in support of the President's introduction of the European Phased Adaptive Approach (EPAA), USAREUR will train with and provide assistance to European forces to ensure their ability to defend against ballistic missile threats. As part of a separate mission, USAREUR will provide similar assistance to Israel through bilateral agreements. As a whole, the engagements by USAREUR will continue to focus on improving relations, enhancing interoperability, focusing on mission success of both in- and out-of-area operations, and ensuring access to facilities and infrastructure throughout the theater.

"Where possible, our strategy is to employ indirect approaches – primarily through building the capacity of partner governments and their security forces."

Secretary of Defense Robert Gates

Marine Forces Europe—Stuttgart, Germany

Introduction and Overview

In 2010, MARFOREUR, with approximately 150 personnel assigned, focused on building partner capacity through combined activities and utilizing expeditionary forces to reassure allies, deter potential adversaries, and remain ready to respond rapidly to crises in the region. The U.S. Marine Corps' expeditionary nature drives MARFOREUR to a primary orientation on security cooperation activities with our newest NATO allies and partners in the Caucasus, Black Sea, Balkan, and Baltic regions.

Major Accomplishments

With only a small Service component headquarters, MARFOREUR very effectively leveraged the capabilities of the Marine Corps in support of EUCOM objectives. MARFOREUR's activities focused on building partner capacity to contribute to collective security in Europe and out-of-area operations, such as support to the ISAF, through targeted security cooperation and combined exercises.

Building Partner Capacity

Georgia Deployment Program-International Security Assistance Force: This U.S. Marine Corps-led joint program is successfully training and deploying Georgian infantry battalions to fight alongside NATO forces in the volatile Helmand Province in Afghanistan. Through an intense partnering concept with the marines, the Georgian Armed Forces have significantly increased their institutional capacity to plan and conduct training for units preparing to operate in a full spectrum counter-insurgency environment.

U.S. Marine Corps Black Sea Rotational Force: During the summer of 2009, the U.S. Marine Corps provided a Special Purpose Marine Air—Ground Task Force to conduct security cooperation in support of EUCOM's theater objectives. Forward deployed and operating out of the temporary Task Force East facilities at MK Airfield in Romania and the Novo Selo Training Area in Bulgaria, the Black Sea Rotational

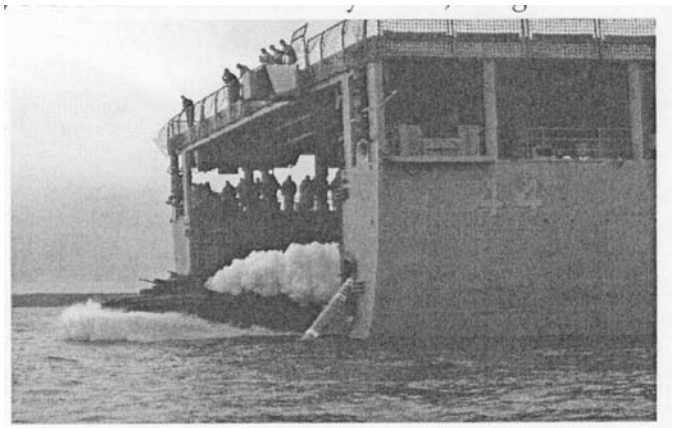
Force conducted numerous and diverse targeted multi-national security cooperation activities with 12 partner and allied nations in the Black Sea, Balkans, and Caucasus regions to enhance partner military capabilities, expand U.S. and NATO access to strategic regions, and promote regional stability.

Exercises

In 2010, MARFOREUR, in coordination with U.S. Naval Forces Europe (NAVEUR), effectively reassured allies and deterred potential adversaries by exercising combined maritime expeditionary capabilities and improving EUCOM's and NATO's ability to rapidly deploy and assemble expeditionary forces in the region during several historic exercises. In total, MARFOREUR participated in 13 exercises to include joint, multilateral, and bilateral exercises in 2010.

Cold Response 10 was a Norwegian-hosted 14-nation exercise conducted north of the Arctic Circle and focused on maritime/amphibious operations and interoperability. U.S. Marine Corps, under the Tactical Control of the United Kingdom's 45 Commando Battalion of the Royal Marines and embarked on Her Netherlands Majesty's Ship Johan De Witt, participated in a brigade-sized beach assault.

As part of Baltic Operations 10, U.S. Marine Corps and Navy forces, along with our Baltic State allies, conducted both a Maritime-Prepositioning Force offload and onward movement of combat equipment in Ventspils, Latvia, and a combined amphibious landing in Estonia during this EUCOM and-sponsored Partnership for Peace Exercise. The overwhelmingly positive response by our Baltic allies once again validated the unique and critical role of Maritime-Prepositioning Forces' ability to rapidly respond to crises and support our allies.



U.S. Marines amphibious assault vehicles embarked aboard the USS Gunston Hall (LSD 44) depart the well deck during the start of a simulated amphibious assault. The combined U.S., Estonian amphibious landing was part of a demonstration of the interoperability between the two forces.

Humanitarian Assistance

As part of the Marine Corps Prepositioning Program-Norway, MARFOREUR works with the Norwegian Defense Staff, EUCOM, and Headquarters, U.S. Marine Corps, to develop and refine plans that enhance access to prepositioned equipment ashore for U.S./NATO operations and crisis response, Theater Security Cooperation, and Humanitarian Assistance/Disaster Relief.

Way Ahead

Although it achieved successes with its current force posture, MARFOREUR will continue to seek greater Amphibious Ready Group/Marine Expeditionary Unit presence to satisfy the consistent demand by global core partners such as the United Kingdom and France for bilateral combined-arms and amphibious training. This type of training has largely been absent in the EUCOM theater since 2003. Resum-

ing a sustained presence in the EUCOM region would serve to deter adversaries and assure allies and partners of our commitment to stability in Europe.

MARFOREUR will continue to build partner capacity in theater through ongoing support to the Georgia Deployment Program-ISAF and the Black Sea Rotational Force, deploying in 2011 to support scheduled engagement and security cooperation activities with 14 partner nations. The Black Sea Rotational Force is expanding its activities to include preparing partner nations for deployment to Afghanistan and conducting noncommissioned officer development.

U.S. Naval Forces Europe—Naples, Italy

Introduction and Overview

With approximately 8,000 Active Duty and Reserve servicemembers operating from 4 main installations supporting rotational air, surface, submarine, and expeditionary forces, NAVEUR conducts the full range of maritime operations and Theater Security Cooperation in concert with NATO, coalition, joint, interagency, and other partners in Europe. NAVEUR continues to perform Navy Component Commander functions which support day-to-day fleet operations and Joint Maritime Commander/ Joint Task Force Commander missions in support of EUCOM. Its presence not only strengthens relationships with enduring allies, it also develops maritime capabilities with emerging partners, particularly in the EUCOM's southern and eastern regions. NAVEUR is enhancing maritime security in these regions through the development of maritime domain awareness, trained professionals, maritime infrastructure, response capabilities, regional integration, and a comprehensive approach for planning and execution.

Major Accomplishments

In 2010, NAVEUR met all warfighter mission requirements and maintained certification as Joint Force Maritime Component Commander, Europe. Additionally, the component focused energy and resources on Theater Security Cooperation activities to enhance interoperability between allies and the maritime capabilities of partner nations. These activities developed partner capacity through multiple events, exercises, and operations in order to promote maritime domain awareness, security, and sea control. Always ready to respond to crises in the European theater, NAVEUR also contributed to global efforts, such as Operation Enduring Freedom and anti-piracy operations off the coast of Africa by delivering trained forces, strengthening international relations, and increasing the efficiency of our interactions with our allies and partners.

Theater Submarine Operations

The stable presence and patrolling of U.S. Submarine Forces in the European theater defends U.S. national security forward, even as it enhances the security of our allies and key partners. Our submariners are engaging in vital missions that contribute directly to EUCOM's core missions of transatlantic security and building partnership capacity. U.S. submariners have fully leveraged deployment time in theater, honing their skills and contributing to the command's capacity to conduct critical intelligence, surveillance, and reconnaissance operations, anti-submarine and anti-surface warfare, undersea dominance, close proximity strike, high-value unit protection, and free and unfettered access to the vital sea lines of communication. In building our partners' capacity, EUCOM has also facilitated the participation of Allied submarines, submariners, and associated staff in a vigorous series of theater Anti-Submarine Warfare exercises with U.S. submarines, exercises that all parties have leveraged to improve their warfighting proficiency and—importantly—their interoperability.

These factors and opportunities are increasingly important as we observe a highly capable Russian submarine fleet whose pace, scope, and sophistication have risen dramatically in recent years. The Russian Navy has four new classes of submarines in development or near delivery. The next-generation *Kilo*-class submarine—the *St. Petersburg* class—is nearing completion. Available for export, it represents a significant improvement in both capability and quieting. The EUCOM area of focus is also the stage for the most sensitive Russian submarine operations and advanced weapons testing. Just this past October, Russian submarines successfully fired three submarine-launched ballistic missiles over a period of 2 days. These operations reveal a renewed Russian focus on the undersea arena.

Intelligence, Surveillance, and Reconnaissance

NAVEUR expanded EUCOM's intelligence, surveillance and reconnaissance in support of allies through Operation Nomad Shadow, Operation Spring Offensive, and the first-ever ship-based Unmanned Aerial Vehicle missions in the Black Sea.

It also expanded the capability of naval bases in Rota, Spain, and Sigonella, Italy, to support intelligence, surveillance, and reconnaissance assets in support of both the EUCOM and AFRICOM.

Members of the visit, board, search, and seizure team from the guided-missile destroyer USS Forrest Sherman (DDG 98) return to Forrest Sherman after participating in a boarding training exercise during BALTIC OPERATIONS

Building Partner Capacity

Partnership and security cooperation events conducted by NAVEUR include:

Eurasia Partnership Capstone

NAVEUR's flagship initiative throughout the Black and Caspian Sea regions was designed to integrate disparate regional efforts by all maritime partners into a global maritime partnership for Eurasia. This year's October event drew 110 senior enlisted and junior officer attendees from 9 partner nations: Azerbaijan; Bulgaria; Georgia; Greece; Lithuania; Malta; Poland; Romania; and Ukraine. Courses were held at the Maltese Navy Training Facilities. Topics included: maritime interdiction operations; visit, board, search, and seizure procedures; search and rescue procedures; maritime law; and environmental protection.

USNS Grapple

In August, a Navy auxiliary salvage ship and embedded Mobile Diving and Salvage Company removed and scuttled six sunken and decaying patrol boats in Sarandë, Albania. These boats were towed to another location near the harbor and used to make an artificial reef, which is expected to boost the local economy through tourism. More importantly, the pier at the auxiliary naval base is now clear and can be handed over for use by the local fishing fleet, reducing unnecessary defense overhead involved with support of this area.

Exercises

In 2010, NAVEUR participated in nine Joint Chiefs of Staff exercises and numerous NATO and EUCOM exercises. Baltic Operations 10 involved 11 European and NATO nations (including Russia), 32 ships, 200 vehicles, and over 3,000 personnel across a 1,000-square kilometer operating area in the Baltic Sea region. This annual exercise promotes mutual understanding, cooperation, confidence, and interoperability among forces and personnel of participating nations. Sea Breeze 10 was co-hosted by Ukraine and the United States, involving 11 European nations, 24 ships, 13 aircraft, and over 2,000 personnel across the Black Sea and Ukraine. This exercise enhanced the maritime capability of Black Sea and Partnership for Peace nations by exercising collective maritime safety, security, and stability actions. Breeze 10 was co-hosted by the Bulgarian Navy, involved six European nations, and culminated in the NATO Response Force certification of Bulgarian and Romanian ships.

Humanitarian Assistance

Naval Forces Europe provided platforms, personnel, and resources to support Humanitarian Assistance/Disaster Relief for Russian wildfires, the Ethiopian Airlines crash off the coast of Lebanon, and flooding in Portugal and Albania. The U.S. Navy routinely provides foreign humanitarian assistance in times of crisis, in cooperation and collaboration with many nations around the world.

Way Ahead

While responding to crises in the European theater will take precedence over all other activities in 2011, NAVEUR will also continue to build the maritime capacity of our allies, as well as new and emerging partners in a cost-effective and responsible manner with the desire of advancing all parties toward full interoperability and participation with our forces. NAVEUR will continue to improve information assurance and cyber system security of Command and Control/Information Systems. Interoperability with NATO Allies and achievement of NATO standards by new NATO partners, including preparing Strike Force NATO for the NATO Response Force 2012 rotation, will be important goals. The BMD capability, both afloat and ashore, will continue to develop and expand. Our forces will focus on the priorities of maritime safety, security, cooperation, and crisis response with the overall goal of advancing U.S. interests in the region.

U.S. Air Forces in Europe—Ramstein Air Base, Germany

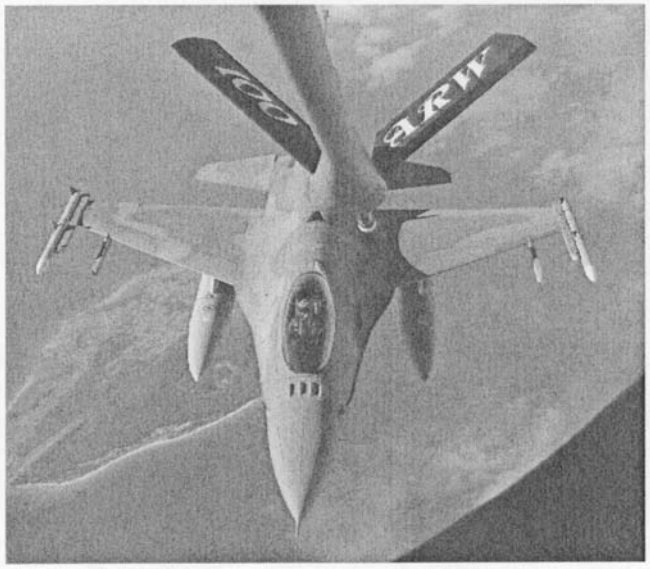
Introduction and Overview

With just under 26,000 Active Duty, Guard, and Reserve servicemembers operating from 5 main operating bases supporting 9 wings and many geographically separated locations, U.S. Air Forces in Europe (USAFE) is a key force provider of forward-based, full-spectrum airpower in support of EUCOM and DOD objectives. This posture enables simultaneous support to ongoing global operations, ensures global strategic access, assures allies, deters aggression, and remains the key to building partnerships.

Major Accomplishments

During 2010, USAFE supported ongoing contingency operations and worked daily with our NATO allies and partners to ensure security in the European theater and defend our homeland forward. Supporting contingency operations, 2,800 USAFE personnel were deployed at any given time throughout 2010. In Afghanistan, our fighters flew 23,500 combat hours, representing 39 percent of the total U.S. Air Force fighter hours flown. In addition, one of two Control and Reporting Centers assigned to USAFE was continuously deployed, providing constant air battle management and control. We contributed vital data links for world-wide communications, unmanned aerial system command and control, intelligence collection, and space operations. USAFE supported the treatment and movement of over 12,000 patients to and from Landstuhl Regional Medical Center. Finally, USAFE continued to maintain critical en route infrastructure. This system of bases supported global air operations to three geographic combatant command theaters and smooth transit of over two-thirds of air mobility missions.

Supporting contingency operations at the same rate as U.S.-based forces, USAFE simultaneously conducted EUCOM operational requirements. In addition to flying Combat Air Patrols in support of NATO's Baltic Air Policing mission, USAFE continue to conduct intelligence, surveillance, and reconnaissance missions in the greater Levant region, as well as participate in the Georgia Deployment Program.



A Polish Air Force F-16 receives fuel from a US Air Force KC-135 over the skies of Latvia during a NATO Baltic Air Sovereignty Training event

In support of the EPAA, USAFE led a U.S. and NATO BMD Task Force. This Task Force developed a concept of operations which significantly contributed to NATO's recent decision to adopt this critical mission. USAFE began laying the foundation for BMD integrated command and control architecture in line with NATO Summit agreements, and led U.S. and NATO data-sharing integration efforts, which resulted in the development of clear strategic ballistic missile defense requirements and a demonstrated capability to exchange information between U.S. and NATO systems.

Building Partner Capacity

When not supporting combat operations, USAFE units serve in a permanent role of building partnerships and partner capacity. In 2010, USAFE conducted 767 building partnership engagements with 39 participant nations. Two-thirds of these events contributed to partner interoperability for Afghanistan operations. Nearly 100 events in the Baltics, Poland, Bulgaria, and Romania focused on interoperability of NATO standards and equipment. As a result, these particular events fostered effective mobility operations and ensured strategic access to ranges, airspace, and airfields.

In Poland, USAFE units helped develop capability to deploy and employ Polish F–16 and C–130 aircraft. USAFE conducted numerous tactical exchanges with Polish F–16 and C–130 pilots, providing training in all manner of combat and air mobility operations. As a result of these efforts, the Polish Air Force is advancing towards its goal of passing its first NATO tactical evaluation in 2011.

In Romania, USAFE units assisted Romanian units across the full spectrum of air mobility operations. Both nations jointly exercised tactics and procedures to improve airfield planning and operations, combat search and rescue, and aircrew management procedures to improve Romanian air capabilities. As a result, the Romanian military is now a self-deployable force using its C–130s to move to, and conduct operations in, Afghanistan.

Our engagement efforts also highlight the intrinsic value of noncommissioned officer development. Each of our in-country engagements highlights the need for empowered junior officers and noncommissioned officers, who serve as the backbone of effective military operations.

These efforts serve to improve the defensive development of our allies and partners, and directly improve interoperability of forces engaged in combat. USAFE

trained with 28 nations to provide over 100 joint terminal attack controllers, highly-trained airmen providing the key link between airborne assets and supported ground combat units. As a result, Joint Terminal Attack Controllers from 15 nations now fight alongside their American counterparts in Afghanistan. Furthermore, training at USAFE's Warrior Preparation Center provides tangible and continued assurance of the U.S. commitment to allied security while developing capabilities actively employed in ISAF operations.

Exercises

In 2010, USAFE participated in 60 Joint Chiefs of Staff, NATO, and EUCOM exercises. Ten nations, including Armenia, Azerbaijan, Georgia, Macedonia, Serbia and Ukraine, exercised to develop peace support operations, provide medical training, and foster interoperability. Likewise, 40 nations from North America, Europe, and the Middle East exercised to improve computer network and communication capabilities necessary for effective responses to natural disasters. During Exercise Brilliant Ardent, 60 aircraft from 6 nations, operating from bases in Germany, the Czech Republic, France, Poland, and the United Kingdom, validated the responsiveness and capabilities of the NATO Response Force.

Humanitarian Assistance

USAFE answered the call for assistance several times in 2010 with humanitarian airlift. This summer, we delivered over 36 tons of equipment to fight wildfires in Russia. In December, we airlifted 60 tons of fire retardant materials for wildfire relief near Haifa, Israel. In one of our building partnership capacity success stories, the Heavy Airlift Wing (HAW) at Papa Air Base, Hungary, executed several humanitarian relief missions. During Operation Unified Response, HAW C–17s delivered 34 Swedish aid workers and 135 tons of aid to Haiti. In July, following the devastating flooding in Pakistan, the HAW delivered over 42 tons of medical supplies to Karachi, Pakistan. In April, the HAW repatriated the remains of the victims from the Polish air tragedy near Smolensk, Russia. Through continued training and commitment, the 12 nations of the C–17 HAW flew over 2,800 mishap-free hours in its second year of existence.

Way Ahead

As we move forward into 2011, USAFE will continue its focus on operating efficiently and effectively, maximizing its strategic location to support current operations while simultaneously expanding its building partnership portfolio. The command will continue to support the EPAA. Working closely with NATO, USAFE will deliver an Operational Level Concept, develop requirements for effective information sharing with allies, and establish the necessary venues for effective education and training in this mission area critical for the security of the United States, our allies, and partners.

U.S. Special Operations Command Europe—Stuttgart, Germany

Introduction and Overview

SOCEUR is a joint command comprised of more than 1,500 Active Duty and Reserve personnel operating from 2 main forward-deployed locations: Stuttgart, Germany and Mildenhall, England. It has three assigned components: 1st Battalion, 10th Special Forces Group (Airborne); Naval Special Warfare Unit-2; and the 352d Special Operations Group. SOCEUR continues to contribute significantly to the development of partner Special Operations Forces and stands ready to defend against transnational threats and rapidly respond to unforeseen contingencies within the European theater.

Major Accomplishments

In 2010, SOCEUR remained heavily engaged, conducting 25 joint combined exchange training events, 6 bilateral training activities, 46 Partnership Development Program events, and 2 bilateral counter-narcoterrorism training events. The command augmented this effort with numerous key leader engagements and staff visits to further develop partner Special Operations Forces' organizational, institutional, and staff capabilities. Finally, SOCEUR deployed Special Operations Forces company-sized elements to both Afghanistan and Iraq, as well as smaller Joint Planning and Advisory Teams and staff augmentation to support partner Special Operations Forces in Afghanistan. Focus areas for 2010 included building partnerships, supporting operations in Afghanistan, and countering transnational threats, all of which directly support EUCOM's core mission of international military and interagency partnering to enhance transatlantic security and defend the homeland forward.

Building Partner Capacity

The command's effort to build partnerships focused on enhancing allied and partner Special Operations Forces' interoperability and validating capabilities through the Partner Development Program and multilateral special operations exercises. The Partner Development Program is focused on training partner and allied Special Operations Forces in military assistance operations and is a proven strategy for building the capacity of allied and partner Special Operations Forces capacity, primarily for the ISAF. With adequate sustainment, it will also provide long-term Special Operations Forces' capacity for future conflicts and out-of-area operations. Since its inception in 2007, and its initial funding as a program of record in 2009, European Special Operations Forces' participation in the ISAF has increased nearly 500 percent. Poland, Romania, Hungary, Lithuania, and the Czech Republic have increased their investment and commitment of Special Operations Forces in Afghanistan with exceptional results. With military assistance being the primary special operations mission in Afghanistan today, and the continued focus on developing Afghan security forces, participation in this program will likely remain an important mission in the future.

Over the past year, the Partner Development Program has also focused on increasing collective Special Operations Force rotary-wing aviation capacity among our allies and partners. Special Operations Force rotary-wing assets, deployed in support of the ISAF, will continue to be a high-demand requirement for future contingency operations. Training allied and partner aircrews and helping to upgrade their airframes, such as the MI–17, is an efficient solution for increasing rotary-wing capacity and capability to support contingency operations. For example, the cost to upgrade five MI–17s and train the crews and maintenance personnel to the basic standard required to support Special Operations Forces is roughly equal to the cost of one new U.S. CH–47G helicopter, not including training or maintenance. Additional helicopter capacity is not only efficient; it also decreases the deaths and serious injuries caused by improvised explosive devices, by limiting road movements and increasing medical evacuation capacity. Thus, additional helicopter capacity could lead to potential increased troop contributions among these nations.

While successful, the Partner Development Program has not reached its full potential. The program is hampered by cumbersome resourcing processes. Lack of focused Special Operations Forces resourcing to create a strategic capability makes it difficult to build enduring Special Operations Forces capacity.

Exercises

SOCEUR supported the annual international theater-wide Special Operations Forces capstone exercise, Jackal Stone 10. This year's exercise was hosted by Poland and Lithuania and brought together approximately 1,100 Special Operations Forces servicemembers from 7 nations: Poland, Lithuania, Ukraine, Latvia, Croatia, Romania, and the United States. As a key element of the Partnership Development Program, Jackal Stone provides Special Operations Forces the opportunity to train together and build mutual respect while sharing doctrinal concepts, training concepts, and various tactics, techniques, and procedures.

Coalition special forces wait for the MH-47G Chinook to land so they can extract their high value target during the opening ceremony for Jackal Stone 10

Support Operations in Afghanistan

Since 2007, SOCEUR has supported the ISAF through the continued deployment of a U.S. Army Special Forces Company and three U.S. Navy SEAL Joint Planning and Advisory Teams, which deploy and operate with our partner Special Operations Forces. We also continue to provide staff officers as rotational augmentees to the NATO Special Operations Forces Fusion Cell, a strategic element for building interoperability among partner Special Operations Forces.

Way Ahead

Looking to 2011 and beyond, SOCEUR will continue to increase allied and partner Special Operations Forces' capabilities and capacity, both on the ground and in the air. It will seek to increase strategic understanding and partnerships as the European Distributed Special Operations Forces Network develops. SOCEUR will also continue its close partnership with the NATO Special Operations Headquarters and its ISAF partners. Support and enablement of ISAF's Special Operations Forces will continue to be a high priority, as will efforts to counter transnational threats in order to protect our homeland.

CHALLENGES AND OPPORTUNITIES

In a theater as large and dynamic as EUCOM's, the opportunities to initiate positive change are abundant, as are the ways in which security can regress unless we remain alert and attentive to negative trends. Every challenge in the region presents an opportunity for engagement and cooperation.

Afghanistan

Of the 49 nations besides the United States that have contributed 45,000 forces to the ISAF, approximately 80 percent of them (37 nations) come from the European theater. Together, these 37 nations have contributed nearly a third of the military personnel serving in Afghanistan. They have suffered, with hundreds killed in action. Supporting the ISAF has given EUCOM the opportunity to deepen its relationships with our allies and partners, using our expertise and experience to inculcate an expeditionary mindset and train deploying partner nation forces in irregular warfare.

The contributions and sacrifice of Eurasian and European nations in Afghanistan have demonstrated the credibility, legitimacy, and effectiveness of our international military cooperation. The scale of allied and partner force contributions to the ISAF has allowed the hand-over of significant responsibility for regional operations to coalition partners. NATO's Operational Mentoring and Liaison Team (OMLT) program directly supports the development of the Afghan National Army, and the Police Operational Mentoring and Liaison Teams (POMLT) program supports the expansion of the Afghan National Police. Under these programs, European allies and part-

ners are currently providing approximately 50 percent of the number of teams required to train Afghanistan's security forces.

> *"Having Afghans lead these operations is the Taliban's worst nightmare, because it gives the lie to the Taliban propaganda that portrays Western troops as hostile occupiers. Afghans themselves will be more effective than our troops in winning the trust of the Afghan people."*
>
> *Sen. Carl Levin, Chairman of the Senate Armed Services Committee, at the Council on Foreign Relations, October 2010*

Additionally, at any point in time, there are approximately 10,000 U.S. personnel, assigned to EUCOM, that are deployed to Afghanistan making vital contributions on a daily basis. However, within the European theater itself, EUCOM's focus is to support other nations as they seek to contribute to security and stability efforts in Afghanistan.

Many nations are making particularly large force contributions and have suffered high casualty rates relative to their populations. Our partners understand the importance of this mission, and they are willing to send their sons and daughters in harm's way alongside our own to bring peace, security, and prosperity to the people of Afghanistan. Within the European theater itself, EUCOM lends whatever support it can to these nations as they seek to contribute to security and stability efforts in Afghanistan. Within the framework of contributing to international efforts in Afghanistan, and within the boundaries and authorities set by law, regulation, and international agreements, this support involves providing training, equipment, logistical assistance, and personnel augmentation.

The Balkans

The United States' continuing support to NATO's Kosovo Force and Operation Joint Guardian helps maintain stability in Kosovo and advances security progress alongside our NATO and EU partners. EUCOM has participated in NATO operations in Kosovo since 1999. EUCOM supports Kosovo Force through our land component, USAREUR, and leverages National Guard Bureau forces to source mentors and advisors for Task Force Falcon (Multinational Task Force-East), Regional Mentoring and Liaison Teams, NATO Training Teams, and elements of the Kosovo Force Headquarters, as well as to augment the Kosovo Force Military-Civilian Advisory Division. NATO presence was reduced from a peak of 14,000 in 1999 to 10,000 in January 2010, when it began reductions to a strength of 5,000. Kosovo remains stable and secure, as demonstrated in the peaceful conduct of elections in December 2010.

EUCOM has played a significant role in Bosnia's progress since the 1995 implementation of the Dayton Accords. At the height of Operation Joint Endeavor in 1996, more than 20,000 U.S. servicemembers served in Bosnia. The September 2009 deactivation of Task Force Dayton, the last U.S. entity operating in Bosnia, marked a significant milestone for EUCOM. Less than 40 U.S. personnel now remain in Bosnia assigned to the NATO Headquarters-Sarajevo and the United States Balkans National Support Element. EUCOM continues building partnership capacity with Bosnia through focused security cooperation initiatives, to include International Military Education and Training, Foreign Military Financing, and the State Partnership Program with Maryland's Army National Guard.

In a show of its increasing capacity, Bosnia assumed a key leadership role during EUCOM's 2009 Combined Endeavor exercise, involving 40 countries and 1,200 personnel. EUCOM remains focused on Bosnia's defense reform efforts and its entry into NATO, so that Bosnia can finally prosper, contribute more fully to coalition operations, and complete its path to Euro-Atlantic integration. Due to progress made, Bosnia was able to consistently contribute to the coalition efforts in Iraq between 2005 and 2008, and now has over 50 personnel deployed to ISAF. Despite some remaining challenges, we have achieved quite a lot given what was happening in Bosnia just 15 years ago.

Russia

The complexities of establishing and maintaining a military-to-military relationship with Russia are many. On one hand, there are many areas of potential cooperation and partnership, including Afghanistan, arms control, counterterrorism, counter-piracy, counter-narcotics, and missile defense. Continued open dialogue can lead to additional opportunities for cooperation and openness, such as EUCOM's response to assist Russia during last year's wildfires. On the other hand, some of our

allies and friends in the region remain concerned about Russian actions, including the conflict in Georgia in the summer of 2008 and Russia's continuing suspension of implementation of the Conventional Armed Forces in Europe Treaty.

Admiral James Stavridis, SACEUR, during an Honor Guard Ceremony in Moscow, Russia.

Working with Russia is about balance and seeking to find the potential for cooperation, while maintaining an open and honest dialogue about all aspects of our relationship, including where we disagree. While a great deal of engagement with Russia is handled by either the State Department, in the diplomatic realm; or directly by the Joint Staff and the Office of the Secretary of Defense, we at EUCOM are ready to pursue military-to-military communication, engagement, and even joint training and operations with Russia, where and when appropriate.

In 2009, for example, EUCOM authored a framework document to resume military-to-military cooperation with Russia in an equal, pragmatic, transparent, and mutually beneficial manner. The framework not only addresses crisis response and consequence management operations, but also seeks to promote interaction and ensure mutual support in conducting counterterrorism and counter-piracy operations; peacekeeping missions; ballistic missile defense; and search and rescue. This framework document, signed by the Chairman of the Joint Chiefs of Staff and the Russian Chief of Defense at the 2009 Presidential Summit in Moscow, began to rebuild a structure for our bilateral defense relationship that allows wide-ranging and candid engagement on all issues of concern. This effort is then supported by EUCOM's lead in developing the annual military-to-military work plan, which defines the events and activities that we aim to accomplish together over the next year.

Russian amphibious ship, the RFS Kaliningrad, sailing alongside the USS Mount Whitney as parts of the BALTIC OPERATIONS exercises in the Baltic Sea

In working the bilateral military-to-military relationship with Russia, however, EUCOM will work with NATO and other partners to implement an integrated and inclusive security cooperation architecture beneficial to all participants that does not come at the expense of our allies and partners.

Israel

The political/military environment in which Israel exists is volatile and uncertain. Israel faces frequently voiced threats from Hezbollah, Hamas, Iran, and others in the region. Iran's aggressiveness and negative rhetoric could also pose serious security challenges to the region broadly, to the United States, and to other allies. In addition, conflicts such as the Lebanese conflict of 2006, the Gaza hostilities of 2008, or the cross-border shooting in August 2010 with Lebanon, could erupt at any moment. Conflict could result from instigation by Iran or its proxies, notably Hezbollah, or from miscalculation.

EUCOM's engagement with Israel continues to strengthen our relationship with this key regional ally. We conduct multiple headquarters and component-level theater security cooperation events annually with Israel and chair four bilateral, biennial conferences spanning planning, logistics, exercises, and interoperability. The United States and Israel routinely conduct training exercises that build partnership and work toward regional stability. This exercise portfolio includes eight major recurring exercises. The continued success of the exercise program improves interoperability, understanding, and cooperation between the Israeli Defense Force and U.S. military forces. EUCOM leadership and staff maintain uniquely strong, recurring, personal, and direct relationships with their counterparts in the Israel Defense Force.

Turkey

Turkey remains a strong ally and partner in the region and continues to grow in importance in the Middle East and Eurasia regions. Turkey will continue to play an important role in the fight against extremism, maintaining regional security and access, deterring common threats, and supporting NATO out-of-area operations, such as those in Afghanistan and Kosovo. As our presence in Iraq draws down, Turkey's concern with possible volatility on their border may grow, driving them to play a larger role in regional stability. We have continued to develop new and productive ways to increase our engagement with Turkey in military-to-military areas, and as part of U.S. interagency efforts to help this important and centrally-located ally face the challenges posed by 21st century threats.

Ukrainian marine 1st and 2nd divisions stormed the beaches of Tenrda island from amphibious assault ships and helicopters to simulate landing on an island over run by pirates during a combined and joint maritime exercise in the Black Sea

As part of that effort, SOCEUR continues to engage in a highly productive program of tactical exchanges and training events with Turkish Special Forces, and has focused part of this outreach program to develop, enhance, and convey lessons learned by U.S. Special Operations Forces over the past 8 years in the effective fusion of intelligence, operations, and interagency coordination.

Also this year, EUCOM initiated Exercise Cooperative Resolve, a new bilateral exercise between USAREUR forces and Turkey Land Forces Command, focused at the battalion-level to share best practices and emerging concepts for command post operations, command and control functions, and other associated tactics, training, and procedures.

On another front, EUCOM's new JICTC-Europe, an information-sharing, internally-resourced collaborative enterprise, is working closely with our Turkish partners to assist and enhance the capabilities of Turkish agencies to combat illicit trafficking and terrorism, two often-interrelated and interdependent activities that threaten the security of our partners, our theater, and our homeland.

Finally, EUCOM continues its highly successful Turkish/U.S. officer exchange program in which each country selects a group of promising, young field-grade officers for travel and exposure to each other's military headquarters and facilities, building vital relationships on a personal level that will continue to pay dividends as these officers progress to higher ranks and greater levels of responsibility.

Terrorism in Europe. Our contribution to the ever-evolving fight against transnational and indigenous terrorism continues to be one focused on intelligence sharing and partner-building. Across Europe, the threat of terrorist attack and the presence of terrorist support networks remains a serious concern. Violent-minded extremists seek to exploit vulnerabilities to radicalize local populations and logistically support jihadist war-zones such as Iraq and Afghanistan. The European continent remains a priority target for directed attacks from al Qaeda and allied terrorist groups who believe that lethal attacks will weaken the resolve of our partner nations to continue supporting the ISAF.

The terrorist attack in Stockholm on December 11, 2010 and the late-December arrests of terrorist suspects in the United Kingdom and Denmark, among others, are indicative of a continuing threat.

The threat from al Qaeda associated elements remains high, particularly in Germany, Denmark, France, the United Kingdom, and Belgium. Notably a recent study by the Danish Institute for International Studies found that between 2004 and 2008, 84 percent of terrorists detained in Europe had a Western upbringing, and only 28 percent had links to foreign militant groups. This is indicative of the rise

of "home-grown", self-motivated terrorists who, despite their exposure to Western values, chose to learn jihad over the internet and act without direct guidance by al Qaeda senior leadership.

European countries continue to improve their capacity to counter the terrorist threat by strengthening counterterrorism legislation, expanding international cooperation, and successfully prosecuting and jailing terrorist actors. To support this progress, EUCOM increases intelligence sharing at every opportunity. For instance, one of our projects disseminates evidence and information obtained by coalition allies on the ground in Iraq and Afghanistan to International Criminal Police Organization (INTERPOL) member countries' police forces worldwide in order to strengthen their counterterrorism efforts. This project has assisted investigations in more than 70 countries.

Ballistic Missile Threat

There is an existing and expanding threat from ballistic missiles to the EUCOM's area of focus. The continued development of missile technologies by states such as Iran and Syria, coupled with the transfer of rocket and missile capabilities and technologies to non-state actors such as Hizbollah, present the most significant combination of capability and intent into realized threat to EUCOM's interests in Europe and the Levant. Iran in particular, with its growing inventory of ballistic missiles, views its conventionally armed missiles as an integral part of its strategy to deter, intimidate and retaliate against forces in the Middle East, Southeastern Europe, and Central Asia.

Combating Weapons of Mass Destruction

Nuclear weapons in the hands of a terrorist or violent extremist would represent a grave threat to the United States and our allies. The threat of a deliberate attack with a biological weapon, or the spread of nuclear weapons programs are threats that have far-reaching, destabilizing consequences. Al Qaeda and other groups aspire to incorporate weapons of mass destruction into their attacks. Special nuclear materials and the majority of the world's nuclear weapons are located in the EUCOM area of focus.

To succeed in preventing the spread of weapons of mass destruction (WMD) and their precursor materials, we must pursue a vigorous, comprehensive strategy sustained by a whole-of-government approach and strong international partnerships. The security of the weapons and these materials is a significant aspect of the command's efforts to counter WMD. We must support partner and allied efforts to build capacity that detects and interdicts the movement of WMD materials, facilitates information-sharing arrangements, and, if an attack occurs, ensures a swift effective response that includes consequence management. Recent concerns over attacks in Europe truly underscore the importance of working with our partners and allies to prevent a catastrophic attack involving WMD on their soil and our homeland.

"Whether it is ensuring our capabilities for strategic missile defense, which provides assurance to allies and deterrence to adversaries, or making the necessary investments in defending against cyber attacks; we must be able to look towards the future and see likely security challenges that we will face and meet them head on."

Chairman Howard P. "Buck" McKeon, House Committee on Armed Services

Cyber Security

Cyber security is a vital function for EUCOM, and we have made progress in securing our part of cyberspace during the past year. We have joined the efforts of other combatant commands, including the leadership of the U.S. Strategic Command and its sub-unified command, U.S. Cyber Command. The establishment of U.S. Cyber Command is a great step forward for DOD and all combatant commands. We are exploring the paths to more closely fuse our internal efforts in cyberspace, and have named a Cyber Integrator on our headquarters staff to build on our established Cyber Fusion Center. As the number and sophistication of attempts to penetrate our network increase daily, we must continue to meet that threat with innovation and expertise because we cannot afford more manpower.

As we gain operational experience in cyberspace, we look for opportunities to provide bridges between industry, academia, government, and our military partners with the goal of increasing mutual awareness and security. There are many chal-

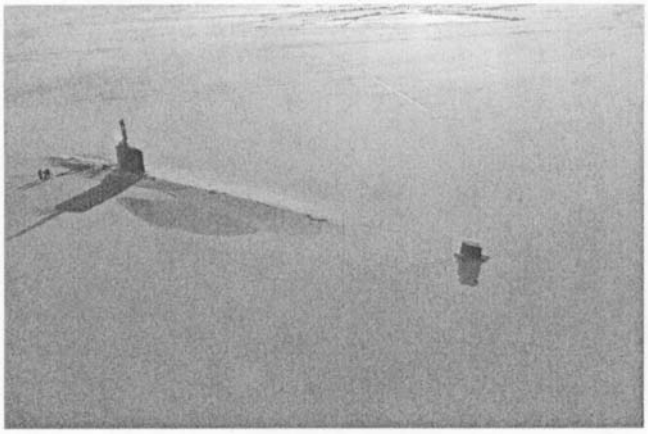
lenges in this new domain and several of our friends throughout Europe have been the subject of cyber harassment (disruption of cyberspace functions) coincident with international disputes. As we look for answers and solutions to the evolving challenges in cyberspace, we synchronize frequently with our partners at various exercises and conferences, to include Exercise Combined Endeavor 10, which brought together forty nations focused on enhancing common awareness, building common understanding, and developing operational trust, as well as a 2011 European Cyber Conference Symposium hosted at the George C. Marshall European Center for Security Studies. We have several other visits and exercises planned in 2011.

As we move forward, we are looking to leverage our existing EU and NATO relationships in concert with the newly formed U.S. Cyber Command to increase our shared security. With NATO's desire to develop an infrastructure to meet the cyber security threat with a coordinated combined response, we are moving forward now to lay the groundwork for what we anticipate will be our role in this combined action.

The Arctic

The Arctic maritime domain is changing, and nations are responding by enacting policies to address anticipated challenges in the region. From environmental impacts to commercial enterprise, the prospect of unprecedented access to natural resources and northern shipping routes has raised related security concerns. Promoting regional stability in the Arctic is EUCOM's primary objective for the Arctic. This is best accomplished through the use of open international forums to ensure stable, predictable management of the Arctic area.

In areas of safety, security, resource management, and conflict resolution, we support multinational governance and the international rule of law. Development of peaceful and successful maritime domain awareness is essential, not only to the security of the region, but also to the safety of the mariners, workers, and tourists who will populate this vast expanse. EUCOM is committed to a future that includes collaboration with our partners, NATO members, and Russia on international search and rescue exercises, Arctic training, and transparent operations and diplomacy that fully respect territorial claims.



U.S. Submarine surfacing in the Arctic

Addressing environmental security in the Arctic region will require close cooperation with a wide range of Arctic stakeholders. Of particular note, we see Russia as a key potential partner in this area; one with substantial capabilities to respond to unforeseen emergencies and a clear willingness to protect the region from environmental disasters. We look forward to working with Russia and our other Arctic partners as we seek areas of mutual interest.

Energy Security

Our strategic national interests are served by fostering global economic development. A growing and open global economy enables the growth of the American econ-

omy, and that growth forms the backbone of our national security. Most of our major European partners are heavily dependent upon foreign energy sources for their oil and natural gas. This reliance can have a destabilizing effect on European economic development. Russia is one of the most important suppliers of crude oil and natural gas to Europe, accounting for 33 percent of oil imports and 40 percent of gas imports (87 percent for Italy; 81 percent for Spain; 61 percent for Germany; and 51 percent for France). Russia's energy leverage represents a key factor in European and Eurasian energy security. Europe will continue to need Russian energy, as supplies from Russia are useful alternatives to reliance on the Persian Gulf for hydrocarbons and the pipeline infrastructure to transport it is already in place.

EUCOM supports DOS objectives regarding European energy security, and we work with our interagency partners, NATO allies, and partner nations to support these objectives: diversification of energy transportation routes in Europe; greater intra-Europe integration of existing supply systems; the development of new, renewable, and alternative energy sources in Eurasia; and demand-side efforts to promote energy efficiency. Within EUCOM, we are proposing a joint concept for energy security to achieve these same objectives, ensure access, and decrease vulnerabilities within our own forces. Our J9 Interagency Partnering Directorate continues to employ a whole-of-government approach to collaborate with our partners and like-minded allies to develop frameworks for addressing major energy security issues.

"Our relationship with our European allies remains the cornerstone for U.S. engagement with the world and a catalyst for international action."

National Strategy, May 2010

INITIATIVES

Effective pursuit of U.S., allied, and partner interests depends ultimately on our ability to innovate and find new and better ways of achieving our objectives.

Support to NATO, especially in Afghanistan.

Today, EUCOM's largest contributions to support NATO lie in our efforts to train and equip partner nations to deploy alongside our own troops in Afghanistan. We have multiple lines of effort to support these activities.

Joint Multi-National Readiness Center

The Joint Multi-National Readiness Center supports EUCOM and Central Command (CENTCOM) operations by providing predeployment training to Europe-based U.S. forces and NATO Operational Mentoring and Liaison Teams slated for deployment to Afghanistan. Currently, the center provides enduring observer/controller support to the U.S. Security Coordinator Israel to train the Palestinian National Security Forces. Joint Multi-National Readiness Center observer/controllers were also instrumental in the successful pre-deployment training of the Jordanian 2nd Ranger Battalion for operations in support of Afghanistan's national elections. We have trained almost 4,000 soldiers to date and, through these efforts, EUCOM has enabled partner nations to make significant contributions to operations in Afghanistan.

Georgia Deployment Program-International Security Assistance Force.

MARFOREUR directly supports the Republic of Georgia's 2-year program to deploy Georgian forces alongside U.S. Marine Forces to Afghanistan. The Georgia Deployment Program-ISAF will deploy four rotations of a Georgian battalion with a Marine Corps Marine Expeditionary Brigade to Afghanistan. As capabilities improve, Georgian forces will be able to operate independently. By using Georgian shadow instructors, MARFOREUR will create a Georgian training group that will largely take over the Partnership Training Program by their fourth rotation. Over this past year, this program trained two battalions that deployed to Afghanistan.

Georgian soldiers from the 31st Battalion establish security during a cordon and search scenario as they train for an upcoming deployment in support of International Security Assistance Forces in Afghanistan

Interoperability

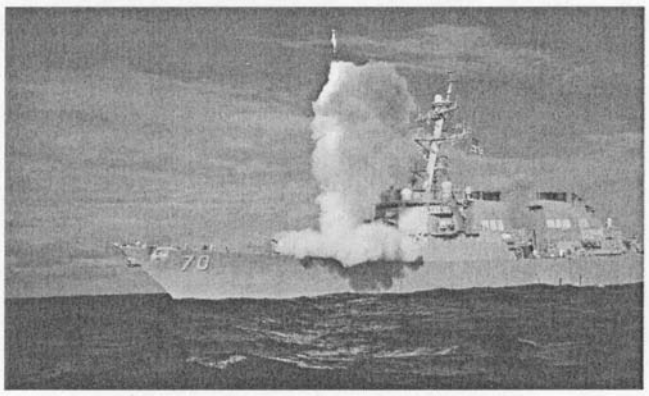
EUCOM has significantly enhanced the ability to communicate with NATO and NATO member nations at the Secret level. The U.S. Battlefield Information Collection and Exploitation System (BICES) network is used for planning, exercising, and operating with our NATO partners in this theater. We exercised that capability in Austere Challenge 10, Jackal Stone 10, and a NATO Cyber Defense Exercise. As we leverage these opportunities to hone our ability to work together, we will continue to determine the capability requirements and develop the tactics, techniques, and procedures to ensure that BICES meets our NATO interoperability needs.

In another area, the United States became a full participating member in the Military Engineering Center of Excellence. Through this body, our engineers have the opportunity to develop interoperability and relationships with engineer forces at all levels of command. We are able to provide expertise to other NATO countries and help them prepare for NATO operations. Through these engagements, our Nation also benefits by learning new engineering methods, and gains access to the resources of the Center of Excellence.

Ballistic Missile Defense

The concentrated efforts by our adversaries to illicitly procure ballistic missile technology, develop increasingly sophisticated missiles, and actively refine their abilities to employ those missiles against friends and allies have not abated.

As we work to provide defenses for our deployed forces, families, friends and allies, EUCOM continues the extensive and active cooperation necessary to implement the EPAA to Missile Defense. Together with our partners in the DOS, DOD, Missile Defense Agency (MDA), and many others we are fully supporting the coordinated international engagement of the United States.



A Standard Missile - 3 (SM-3) is launched from the USS Hopper (DDG 70) in a Missile Defense Agency (MDA) test in conjunction with the U.S. Navy

Our coordinated efforts are bearing fruit, with NATO declaring at the Lisbon Summit that it will develop a missile defense capability to provide full coverage and protection for all NATO European populations, territory, and forces. NATO reiterated its longstanding invitation for Russia to cooperate with the Alliance in this endeavor. We are also working with Poland and Romania who have agreed to host elements of our missile defense systems. As part of these efforts, EUCOM is working with both the MDA and the Commander, Naval Installations Command, to ensure that facility infrastructure will be ready to go when the system is activated.

In order to provide for Communication, Collaboration, Coordination and, potentially, Command and Control of U.S. and NATO Missile Defense forces, EUCOM's J6 directorate has aggressively deployed BICES (NATO SECRET) workstations throughout EUCOM's Headquarters and our Service components. These workstations are supported by theater collaboration services for secure voice, chat, and information-sharing as well as the Battle Command Systems—providing U.S. and NATO forces with all the tools necessary to execute this mission successfully. This spring, EUCOM will add U.S. ships afloat to the BICES architecture, further integrating our sensors, shooters, and platforms within theater.

At the same time, EUCOM is preparing for the arrival of the initial assets that will operationalize the EPAA. As we work together with our partners and allies to field an operational capability this year, I maintain my firm belief that the capabilities delivered will serve as a catalyst to develop a cooperative solution with our allies and partners in the region.

Joint Interagency Counter Trafficking Center

This past August, EUCOM stood up the JICTC to support interagency efforts across the theater to counter the growing transnational trafficking threat. Transnational trafficking is a multi-faceted U.S. national security concern which has potential to undermine U.S. and international efforts to protect public health and ensure regional security. Transnational organized criminal activity contributes to weakening the rule of law, and fosters other forms of illicit activity such as terrorism, insurgency, organized crime, weapons trafficking, money laundering, human trafficking and piracy. Left unchecked, this activity can continue to spread and metastasize, threatening the stability and legitimacy of key states, as well as the U.S. Homeland.

EUCOM's trafficking center will complement DOS's interagency programs and assist the international community and European national efforts to build self-sufficient border management skills, competencies, and capacity among partner nations. The vision is that we will stand up a truly international, interagency organization focused on counter-trafficking. Though loosely modeled on Joint Interagency Task Force (JIATF)-South in Key West, our trafficking center will have important differences. Unlike JIATF–South, the JICTC will not directly participate in detection, monitoring, and interdiction operations on land or at sea. Instead, it will provide depth and capacity to our interagency partners and, by doing so, will provide an-

other layer to regional security and the defense of our homeland. EUCOM is also leveraging opportunities to link U.S. Government agencies through information systems by building a common, user-friendly information technology portfolio that facilitates information-sharing and cross-cooperation. We are developing agreements on information-sharing standards with partner military, police, and civilian organizations to support counter-trafficking and exploitation activities. Our main focus will initially be on counter-narcotics, but will ultimately integrate other aspects of the transnational trafficking threat. No additional resources are needed to stand up the JICTC, and we plan to be fully operational by September 2011.

Whole-of-Government / Whole-of-Society Approach

Interagency partnering remains the heart of the enterprise for this command, and is critical to how we approach security challenges in our theater. Building on the interagency cooperation that presently exists at our U.S. Embassy Country Teams, we have also grown the interagency presence at EUCOM to best effect interagency collaboration at the regional/operational level.

Since I last addressed you, we have welcomed additional representatives to EUCOM headquarters from U.S. Customs and Border Protection, the Department of Energy, and the Department of Justice's Drug Enforcement Administration who wish to coordinate their activities with the U.S. military. This is in addition to representatives already in place at the headquarters from the DOS, Department of the Treasury, Federal Bureau of Investigation, and Immigration and Customs Enforcement. Additionally, we are actively working with the U.S. Agency for International Development (USAID) to once again secure their representation at EUCOM. Finally, the Department of Justice will soon add their prosecutorial and rule of law expertise to our team as, together, we seek to build partner capacity in Europe and Eurasia and, in so doing, better defend our homeland forward.

We have also introduced the DOS Coordinator for Reconstruction and Stabilization into our Combined Endeavor exercise. This infusion of interagency participation facilitates cross-cooperation, coordination, and information sharing between DOD and DOS in the context of whole-of-government operations within the European theater. This reinforces the command's commitment to building stronger partner capacity, not only among our internal U.S. Government agencies, but also with NATO and European partner government agencies as well. We look to integrate with both U.S. interagency organizations and those of NATO and our partner nations by coupling the U.S. whole-of-government approach with the comprehensive approach functions of our partners.

We have also established a J9 Interagency Partnering Directorate, the first new directorate at EUCOM since 1967. In addition to working with interagency partners, it also engages and collaborates with international and nongovernmental organizations, academia, the private sector, think tanks, and military academic organizations. In the private sector, for example, we have gained many new insights by partnering with numerous organizations. As part of our efforts to engage leading European professionals, we have instituted the European Partnership Program to both listen to European business professionals and leaders and to speak directly to them about our mission in Europe and Eurasia. In addition, our new Academic Outreach function has leveraged the knowledge and fresh thinking of military and civilian academic institutions to help us in our military planning processes.

Interagency, academic, public, and private partners of the U.S. European Command

Public Private Cooperation

EUCOM has begun work to leverage the expertise and other assets of the private sector to achieve its objectives as well as support the efforts of NATO Allied Command Operations. We are currently working with private businesses as well as nonprofit nongovernmental entities. For example, in collaboration with CENTCOM, we organized a public-private workshop on further development of the Northern Distribution Network and the potential for building a "silk road," or commercial transportation network for commerce between Europe and Eurasia through Afghanistan. The participants included officials from the U.S. Transportation Command, Defense Logistics Agency, CENTCOM, USAID, the Asian Development Bank, the International Road Union, the National Defense Transportation Association, and other business executives, who agreed on recommendations for further action on developing and implementing a silk road strategy as a component of the U.S. transition strategy for Afghanistan. We are also looking at ways to incorporate this kind of collaboration for issues like cyber security, assessments, and humanitarian assistance.

Humanitarian Assistance Programs

EUCOM's Humanitarian Assistance programs directly benefit the Nations where they are executed, and consist of: the Humanitarian and Civic Assistance Program; the Humanitarian Assistance-Other Program; and the Humanitarian Assistance Program-Excess Property. Projects funded through these resources complement USAID efforts, enhance regional security cooperation, and advance U.S. interests throughout the region. They also bolster a country's own capability to respond to disasters, thereby diminishing the need for future U.S. involvement, and provide an example of the value of a military in times of peace.

While the EUCOM Humanitarian Assistance budget is relatively small, it has a disproportionately high and positive impact. Last year, the command executed $17 million in Humanitarian Assistance Project funding for 145 security assistance related projects across 18 countries. One example of a Humanitarian Assistance project that was carried out in an interagency and public-private manner to gain efficiencies and maximize impact was our contribution to a nursing school in Georgia. We contributed through training to the construction of the facility, while Emory University staffed it and the USAID equipped it.

Another example was EUCOM's partnership with the USAID, an engaged nongovernmental organization, and the Albanian Ministry of Health in an integrated effort to establish telemedicine capabilities throughout Albania. This past December, 6 of 14 telemedicine centers were connected to enhance basic health care, disaster management and emergency response across the country. While EUCOM training assisted in renovation of the facilities, the impact of the combined effort provides a higher level of health care and continued medical education nationwide.

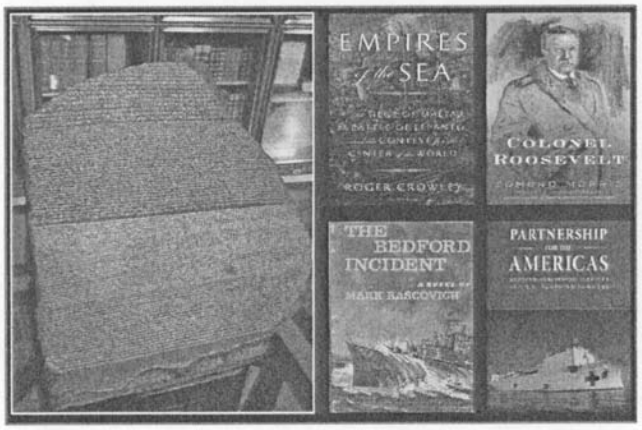
"Innovation distinguishes between a leader and a follower."

Steve Jobs, Co-founder and CEO of Apple

Innovation

Implementing new ideas and innovations is vital to achieving success in today's complex and adaptive security environment. Indeed, success may well be determined in our labs, think tanks, and centers of innovation. The original discovery, development, and rapid implementation of technology and ideas are imperative for staying ahead of our adversaries who are continuously adapting and innovating as well.

Acting as a catalyst and accelerant, and working in close collaboration with the Office of the Secretary of Defense, the Services, the U.S. Interagency, industry, and our partner nations, our Innovation Cell has achieved tangible results in furthering unique and innovative technologies. Results include discovery and enhancement of a unique human detection technology, a cross-domain solution for collaboration with our allies, and acceleration of a system to support space-based wireless internet access to remote regions. Each of these successes has been achieved by partnering with and leveraging the unique technologies of our allies. The command has enabled access and connected unique partner nation technologies to counter improvised explosive devices, piracy, and smuggling. Future innovative projects planned are in the realm of information technologies to support population-centric counter-insurgency tools.



The Rosetta Stone and books that U.S. European Command has featured in its Command reading list, a project designed to enhance cultural understanding

Cultural Understanding and Language Study

I have often talked about the power that comes from understanding a country's culture. At EUCOM, we are always trying to find ways to increase our understanding of European culture throughout our organization as we continue the important work of building and strengthening our relationships with partner nations. One example is our Next Generation Advisory Panel, a body of up-and-coming civilian leaders from several European countries with whom we engage on a regular basis to seek their unique perspective on a variety of issues. Another is our notable author series, which brings prolific writers and thinkers to the command whose books add important historical context into an open forum for engagement and discussion with our staff. Our Academic Outreach Division recently brought an expert on Rus-

sian and Central European security issues to the command as part of the EUCOM Forum for International Affairs Speaker Series. Additionally, EUCOM's Strategic Languages Program has joined our headquarters in Stuttgart with the Defense Language Institute in order to provide foreign language training for our staff members.

OUR MOST IMPORTANT RESOURCE

None of the activities described in these pages would be possible without the people that make up EUCOM. We have a responsibility to our people and their families to ensure the readiness and health of our force and provide quality of life support to the families. Being stationed overseas presents unique challenges and opportunities for our force. Maintaining a balanced and efficient overseas force posture, however, is critical to the defense of the United States.

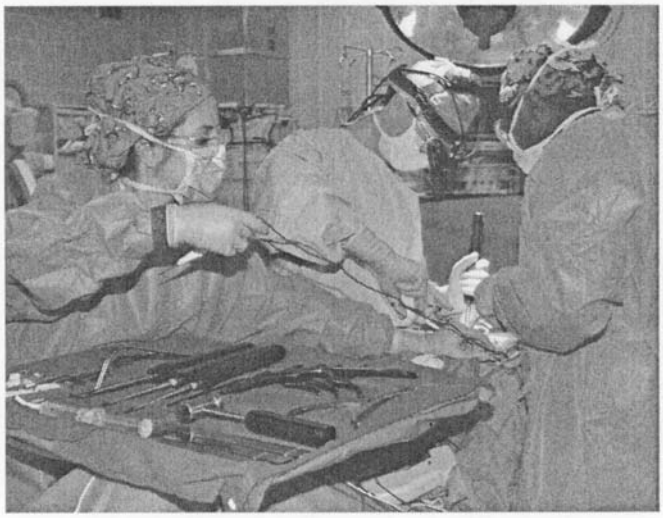
Deployment, Behavioral Health, and Compassionate Fatigue and Family Support

Protracted combat operations and multiple deployments have placed significant stress on our servicemembers and their families. Several organizations and studies within DOD have identified an urgent need for sustained behavioral health services to support these warriors and their family members. As we continue to maintain mission readiness, it is imperative that our dedicated military men and women, and their families, have access to these vital programs and services without stovepipes in a stigma-free environment. A 360-degree review of these programs, with an analysis of the connection between at-risk indicators and catalysts, is needed to eliminate gaps in support. The goal is alignment of focused caregiver teams with corresponding indicator data systems to ensure the health of our force and family. We will also continue to work with the Office of the Secretary of Defense to develop a working definition for resilience, while determining initial measures for baseline assessments to address at-risk indicators.

Additionally, we must also care for our vital caregiver teams. Last year, I testified on the state of EUCOM's community caregivers, who themselves have shown signs of stress, burn-out, and compassion fatigue. At that time, I briefed you on our comprehensive compassion fatigue program, entitled "Providing Outreach While Enhancing Readiness—Caring for the Caregiver," which focuses on providing caregivers with tools and strategies to prevent and mitigate the risk of stress, burn-out, and compassion fatigue. 2010 was the first year of execution for this initiative; one we plan to continue and one that is showing promising results. Lastly, we continue to support ongoing efforts to improve complex care management and the medical portion of the disability evaluation process, which will result in improvement of wounded, ill, and injured warrior benefits.

Theater Infrastructure

Thanks to strong and continued congressional support, previous annual military construction authorizations and appropriations have enabled EUCOM to address a balanced mix of our most pressing mission, mission support, quality of life, and housing requirements. The goal of our fiscal year 2012 military construction program is to support ongoing force posture initiatives, consolidation efforts, and infrastructure recapitalization projects including the Kaiserslautern Military Community Medical Facilities Recapitalization and Consolidation project. As always, when there are opportunities to leverage NATO common funded investments, we do so. Where required, we pre-finance our projects to reserve a future opportunity to recapture a portion of our investments through the NATO Security Investment Program. At enduring locations, we continue to sustain and recapitalize our infrastructure through responsible use of both the Sustainment, Restoration, and Modernization program and the military construction program. At non-enduring locations, we are optimizing use of all available resources to ensure these installations remain fully mission effective until the installations are removed from the inventory. To that end, EUCOM's footprint currently includes approximately 350 distinct real estate sites (ranging in size from small unmanned communication sites to Ramstein Air Base), which collectively make up the present command footprint, down from 1,200 during the Cold War. Anticipated changes, some of which are planned within enduring installations, will result in the return of approximately 100 of these sites to host nations soon. We are constantly reviewing requirements across the current and new mission, quality of life, and agency portfolios to work towards joint solutions where appropriate. EUCOM's future requirements will appear in our Theater Posture Plan and military construction requests. The sites are all tax and rent free and receive much host nation support.



A surgical team from Landstuhl Regional Medical Center, Germany, operates on a Soldier injured in combat operations

We are pleased that the Department of Defense Education Activity (DODEA) is planning and executing a $2.1 billion investment into DODEA's Europe school infrastructure that has been in need of support for many years. Many of our schools are converted barracks from the 1950s and will benefit tremendously from this investment. At the end of this 7-year program, all failed or failing infrastructure will be recapitalized, providing concrete proof of our priority to take care of our people and their families. Additionally, we will continue to address and pursue improvements to our military family housing and barracks/dormitories in the 2012 military construction program to improve the living conditions of our families.

Force Posture

The presence of U.S. forces in the European theater serves many important functions. It fosters relationships and deepens partnerships with individual countries as well as an entire region of significant importance to U.S. global strategic interests, as evidenced by the overwhelming number of ISAF troop-contributing nations that come from this theater. This continuous presence and partnership allows EUCOM to train alongside our allies and partners to build their capacity as well as our own, and increase interoperability. U.S. forces stationed in Europe today act to assure our allies even as they deter and dissuade our adversaries, and are the most visible indication of the ongoing U.S. commitment to the NATO Alliance. EUCOM's footprint also enables the projection of U.S. power globally. Sites and installations in Europe provide superb power projection facilities for the support of coalition operations and overseas contingency operations.

As we consider U.S. presence overseas, we must consider the security environment in which we are currently operating. As the post-Cold War security environment changed, the size of our forces saw a corresponding change. The number of Active Duty U.S. personnel in Europe has gone from over 400,000 during the Cold War to approximately 80,000 today. With ongoing activities in Afghanistan and Iraq, we assess that we should maintain our asset levels to maintain our current levels of effort in the immediate future, to include deployment rotations and partner training schedules. As our engagement requirements change, we will also look to adjust our asset levels. As the Secretary of Defense has said, "Based on our review, it is clear we have excess force structure in Europe. We are looking closely at alternative courses of action, but none would be implemented before 2015 or without consulting our NATO allies." In doing so, we not only look at pure numbers of troops when examining force posture, but also at capabilities and force mix. As the mission in Afghanistan begins to draw down, we may begin to reduce in the area of combat

troops. However, as our ballistic missile defense mission develops in the near future, we will also evaluate the force posture needs associated with that growing mission.

There are five significant force posture initiatives that EUCOM is undertaking to support building the capability and capacity of partner nations in Europe, increase expeditionary capability from Europe, support other combatant commands, and achieve basing efficiencies.

The first initiative is in direct support of the EPAA. The EPAA is the U.S. voluntary national contribution to NATO missile defense. This will be an integral component of NATO's mission to provide full protection and coverage for all NATO European populations, territory, and forces as well as enhance the defense of the U.S. Homeland.

The second initiative is an Unmanned Aerial Systems Center of Excellence at Naval Air Station Sigonella, Italy. The synergistic impact of combining U.S. Air Force Global Hawks, U.S. Navy Broad Area Maritime Surveillance, and NATO Alliance Ground Surveillance unmanned aerial systems programs at one location within close proximity to three geographic combatant commands is a prime example of how the EUCOM is maximizing our efficiency within the European Theater.

The third initiative is the timely stationing of the Joint Strike Fighter (JSF) into theater. The proper timing of the JSF bed-down ensures that the U.S. maintains its leadership role within the NATO Alliance.

The fourth initiative is developing a U.S. Transportation Command requirement for a Black Sea/Caucasus enroute location to further U.S. expeditionary capability. The EUCOM will meet this requirement while maximizing our basing efficiencies.

The final initiative, is providing direct support to AFRICOM, which is located in Europe. The EUCOM, because of our global strategic location, is properly positioned for other combatant commands and interagency partners to leverage our resources. We consider it our responsibility to maximize efficiency in the theater.

NATO/SHAPE

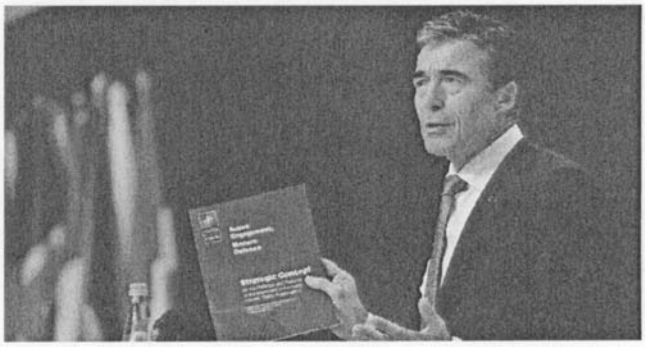
"Europe and North America have known more than six decades of peace and stability. But this has not come for free. It has required political vision and courage. It has required an enormous, sustained investment – in both political and financial terms – to defend not just our territories, but also our values. And it has required – above all – strong transatlantic solidarity."

NATO Secretary General Anders Fogh Rasmussen, Speech given at NATO Lisbon Summit, November 2010

NATO has been the anchor of Trans-Atlantic security for more than 60 years, ensuring the security of its members, enhancing peace and stability throughout Europe, and countering threats across the globe. In November 2010, the heads of state and government of the alliance approved a new NATO Strategic Concept at the Lisbon Summit and mandated a series of actions to modernize and enhance the Alliance's capability to address the complex challenges of this era. The summit was a pivotal event in the alliance's history, framing its future and demonstrating the political will of its members to strengthen our individual and collective readiness and capabilities for the full range of security challenges.

New Strategic Concept

NATO's new Strategic Concept, the first in 10 years, is titled "Active Engagement, Modern Defense". The Strategic Concept reconfirmed the bond between all members to defend one another against attack, including against new threats to the safety of our populations. It committed the alliance to prevent crises, manage conflicts, and stabilize post-conflict situations, including by working more closely with our international partners, most importantly the U.N. and the EU. It offers NATO's partners around the globe more political engagement with the alliance, and a substantial role in shaping the NATO-led operations to which they contribute. It restates the alliance's firm commitment to keep the door to NATO open to all European democracies that meet the standards of membership, because enlargement contributes to the goal of a Europe whole, free and at peace. The Strategic Concept also commits NATO to continuous reform towards a more effective, efficient, and flexible alliance. The Strategic Concept reaffirms the fundamental purpose of the NATO alliance and defines three core tasks for the alliance: Collective Defense; Security through Crisis Management; and Cooperative Security through Partnership.



NATO Secretary General Anders Fogh Rasmussen unveiling the new Strategic Concept at the NATO Lisbon Summit

Collective Defense

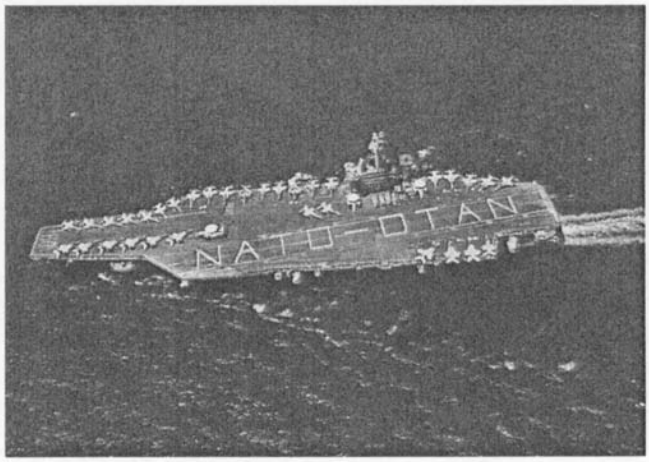
On Collective Defense, the new Strategic Concept reaffirms the alliance's core mission of mutual defense as set out in Article V of the Washington Treaty. This Article V commitment remains firm and binding. NATO will deter and defend against any threat of aggression, and against emerging security challenges where they threaten the fundamental security of individual allies or the alliance as a whole. The Strategic Concept mandates the maintenance of alliance deterrence, based on an appropriate mix of nuclear and conventional capabilities, and reaffirms deterrence as a core element of our overall strategy. The alliance also agreed to pursue missile defense as a core element of alliance defense and deterrence.

Crisis Management

Concerning Crisis Management, the new Strategic Concept commits the Alliance's unique and robust set of political and military capabilities to address the full spectrum of crises—before, during, and after conflicts. It recognizes that crises and conflicts beyond NATO's borders can pose a direct threat to the security of alliance territory and populations. The Strategic Concept and the Lisbon Summit Declaration highlight the importance of a "Comprehensive Approach to Crisis Management."

NATO will engage, where possible and when necessary, to prevent crises, manage crises, stabilize post-conflict situations and support reconstruction. NATO will actively employ an appropriate mix of political and military tools to help manage developing crises that have the potential to affect Alliance security before they escalate into conflicts, to stop ongoing conflicts where they affect Alliance security, and to help consolidate stability in post-conflict situations where that contributes to Euro-Atlantic security.

A modernized and comprehensive approach to crisis management will involve engaging actively with other international actors before, during, and after crises to encourage collaborative analysis, planning, and conduct of crisis management activities. It also requires a capability to monitor and analyze the international environment to anticipate crises and, where appropriate, take active steps to prevent them from becoming larger conflicts. The role accorded to Crisis Management in the Strategic Concept also reaffirms NATO's unique and essential role as a transatlantic forum for consultations on all matters that affect the territorial integrity, political independence, and security of its members as set out in Article IV of the Washington Treaty.



The USS Dwight D. Eisenhower Carrier Strike Group crew spells out NATO on the deck

Cooperative Security and Partnership

With respect to Cooperative Security and Partnership, NATO's new strategic concept recognizes that the alliance is affected by, and can affect, political and security developments beyond its borders. This concept mandates NATO to engage actively to enhance international security: through partnership with relevant countries and other international organizations; by contributing actively to arms control, nonproliferation and disarmament; and by keeping the door to membership in the alliance open to all European democracies that meet NATO's standards. In particular, the Strategic Concept highlights the importance of enhancing collaboration with the EU and U.N. It also stresses the priority accorded to forging a true, strategic partnership with Russia. In particular, the alliance will pursue cooperation with Russia in the sphere of Missile Defense as well as enhance our cooperation in counterpiracy, counternarcotics, counterterrorism, and ongoing ISAF operations.

In Lisbon, the NATO Heads of State and Government Summit Declaration contained many taskings related to implementing, or operationalizing, the new Strategic Concept. In particular, Crisis Management, Comprehensive Approach, Partnership, and Missile Defense will be focus areas for NATO Headquarters, Allied Command Operations, and Allied Command Transformation. The Lisbon Summit also tasked continued reforms for NATO in many spheres related to reducing costs and delivering efficiencies and effectiveness. NATO will continue to implement these important Lisbon decisions simultaneously and we will continue to conduct operations of high importance to our collective security.

"All of the things that we've been working on for the last two years came to fruition in an extraordinary way in Lisbon."

Secretary of Defense Robert Gates, November 2010

NATO-European Union Relations

The EU is another potential partner for NATO in its Comprehensive Approach and, although slight, some progress has been made in the areas of cooperation and coordination between these two entities. In land operations, tactical coordination continues and, in Afghanistan in particular, there has been a growing willingness on both sides (ISAF and EU Police Mission Afghanistan) to coordinate efforts. This will hopefully lead to a more complementary approach, combining resources and capabilities to build ANSF capacity. In the fight against piracy, NATO and the EU

have agreed to share tactical information for increased situational awareness and synergy. There have been other examples of tactical cooperation such as a recent incident during which an EU ship refuelled a NATO ship at sea. This common use of logistics support is an area that offers potential for further cooperation between the EU and NATO.

Afghanistan

NATO's operation in Afghanistan continues to provide the alliance a catalyst for change to ensure timely and relevant support to our combat forces. America's allies in NATO have shared the risks, costs, and burdens of this mission from the beginning. They have contributed to the ISAF and the ANSF and have made significant non-military contributions as well.

The situation in Afghanistan today is complicated and deeply challenging, as external pressures are balanced with internal recovery from 30 years of warfare. As we proceed in this campaign, the successful transition of security responsibilities remains the key issue. Much has been achieved in the past 12–18 months. The troop surge of 30,000 U.S. and 10,000 allied troops has had a significant impact on the ground, especially in southern Afghanistan. More importantly, the restructuring of the headquarters, including the activation of the ISAF Joint Command and NTM–A, have provided the ISAF Commander the leadership capacity to implement a counterinsurgency campaign focused on securing the Afghan population, developing the ANSF, and engaging the Afghan Government as a catalyst of change. We have largely halted the expansion of the insurgency, and are beginning to show signs of progress toward Afghan security self-reliance. These strategy reviews and increased attention on Afghanistan are welcomed by our allies and partners as we move forward. Our allies have already contributed a great deal to this war, fighting, bleeding, and dying side-by-side with our own troops.

Afghan National Police and Afghan National Army personnel receive technical training on night vision goggles and thermal cameras by a Turkish officer

There are four areas in which we must succeed in order to win in Afghanistan, and some progress has been made across all four. The first is to achieve synergy between our civilian and military efforts. To help accomplish this, NATO has reinforced the Senior Civilian Representative position with Ambassador Mark Sedwill. His efforts, in parallel with the U.N. Assistance Mission in Afghanistan, have shown exceptional progress in governance and development. Ambassador Sedwill and his team are providing the necessary balance to the military work being done by General David Petraeus, the Commander of U.S. and NATO forces in Afghanistan. The Senior Civilian Representative's efforts cannot be taken in isolation. Additional civilian expertise is still required to mentor, coach, and guide the Afghan Government to take active visible steps to show that it is stamping out corruption, improving efficiency, and delivering necessary services to its people effectively.

The second area critical to the Afghanistan counterinsurgency effort is that the Afghans themselves must be at the center of this effort. In this aspect, the restructuring of the headquarters and the Senior Civilian Representative have provided the leadership capacity to engage appropriate Afghan leaders and move towards independence. The Afghan people, through village and district elders and shuras, have begun to assume responsibility for the well-being of their country and are showing growing confidence in their own government's ability to provide basic security and services without corruption and tribal favoritism.

A third important key to success in Afghanistan is effective strategic communication. A continuous flow of information that serves to bolster our actions is essential to assuring the Afghans, as well as our enemies, that the United States and our allies are committed to a secure and stable Afghanistan. We have work to do, but are improving.

Fourth and finally, as has been reaffirmed time after time by the alliance, the most important role that the military can play in Afghanistan is to increase the size and capability of the ANSF through training and mentoring so that they may be able to take lead responsibility for securing their country. This is—and remains—the top resourcing priority in Afghanistan. Although the progress of NTM–A and the increase in capacity and capability of the ANSF has been described as miraculous, trainers and mentors are still needed. Progress has been exceptional. Watching the enthusiasm as record numbers of recruits train at the Kabul Military Training Center definitely perpetuates optimism.

Recent polls have shown positive indications that progress is being made in Afghanistan. Almost 60 percent of Afghans believe their country is heading in the right direction.[1] Afghans are 83 percent confident that the Afghan National Army can provide security in their area and 75 percent confident in the Afghan National Police.[2] Thousands of insurgents are being captured or killed and hundreds of improvised explosive devices have been recovered. These are all indicators that validate our effort to put the Afghan people at the center of the equation in Afghanistan. We need to continue giving the Afghan people hope that they are not destined to live under the yoke of tyranny, and offer them every opportunity to live in a future Afghanistan worthy of their sacrifices.

Kosovo

Today, approximately 8,000 troops, including 800 U.S. soldiers, from NATO's Kosovo Force are deployed in Kosovo, working alongside local authorities to increase self-reliance in a multi-ethnic environment. The Allies decision to continue force reductions while developing internal security forces is the best declaration of this safe and secure environment. Operations remain challenging as tensions have potential to flare quickly but, by March 2011, planned force levels will be reduced to about 5,000 as 5 sites of historical and political importance have already transferred from allied security to local authorities without incident. Following Kosovo's declaration of independence in February 2008, the alliance reaffirmed that the Kosovo Force shall remain in Kosovo on the basis of U.N. Security Council Resolution 1244. NATO and the Kosovo Force will continue to work with the authorities and assist the U.N., EU, and other international actors, as appropriate, to support the further development of a stable, democratic, multi-ethnic, and peaceful Kosovo.

NATO and Iraq

At the Istanbul Summit in June 2004, the Allies agreed to be part of the international effort to help Iraq establish effective and accountable security forces. The outcome was the creation of the NATO Training Mission in Iraq (NTM–I), which to date has trained over 14,000 Iraqi security sector personnel. NTM–I is involved in police training, establishing and mentoring Iraq's military academies, and facilitating substantial equipment donations and regular out-of-country training hosted by NATO Allies. All NATO Allies contribute to the training effort through deployment of trainers, provision of equipment, or NATO's financial contribution. The Government of Iraq regularly praises NTM–I, and continues to request its continuation and expansion.

Active Endeavor

Under Operation Active Endeavor, NATO ships are patrolling the Mediterranean and monitoring shipping to help detect, deter, and protect against terrorist activity. The operation evolved from NATO's immediate response to the terrorist attacks

[1] The Brookings Institution, The Afganistan Index, http://www.brookings.edu/foreign-policy/afghanistan-index. aspx, 31 August 2010, 36.

[2] The International Council on Security and Development (ICoS), Afghanistan: The Relationship Gap, July 2010, 14.

against the United States on September 11, 2001, and, in view of its success, is continuing. As the alliance has refined its counter-terrorism role in the intervening years, the experience that NATO has accrued in Active Endeavor has given the alliance unparalleled expertise in the deterrence of maritime terrorist activity in the Mediterranean Sea. NATO forces have hailed over 100,000 merchant vessels and boarded 155 suspect ships.

By conducting these maritime operations against terrorist activity, NATO's presence in these waters has benefited all shipping through the Straits of Gibraltar. Moreover, this operation is also enabling NATO to strengthen its relations with partner countries, especially those participating in the Alliance's Mediterranean Dialogue.

Supporting the African Union

Well beyond the Euro-Atlantic region, the alliance continues to support the African Union in its peacekeeping missions on the African continent. Since June 2007, NATO has assisted the African Union Mission in Somalia (AMISOM) by providing airlift support for African Union peacekeepers. Following renewed African Union requests, the North Atlantic Council has agreed to extend its support by periods of 6 months on several occasions. NATO also continues to work with the African Union in identifying further areas where NATO could support the African Standby Force. NATO's continuing support to the African Union is a testament to the alliance's commitment to building partnerships and supporting peacekeeping and humanitarian efforts beyond the Euro-Atlantic region.

Ocean Shield

Building on previous counterpiracy missions conducted by NATO beginning in 2008 to protect World Food Program deliveries, Operation Ocean Shield is focusing on at-sea counterpiracy operations off the Horn of Africa. Approved in August 2009 by the North Atlantic Council, the current operation, working with almost 40 ships from allies and partners in the context of the Contact Group on Piracy off the Coast of Somalia, continues to contribute to international efforts to combat area piracy. This operation challenges normal paradigms, with information-sharing and coordination as the keys to success. These operating forces, from four different task forces under different mandates, have had an impact coordinating efforts through NATO's shared awareness and de-confliction efforts. These efforts, along with the commercial shipping industry's strong encouragement of best management practices, have

Danish warship, HDMS Esbern Snare, stops and boards a suspected pirate vessel in the Gulf of Aden as part of Operation OCEAN SHIELD

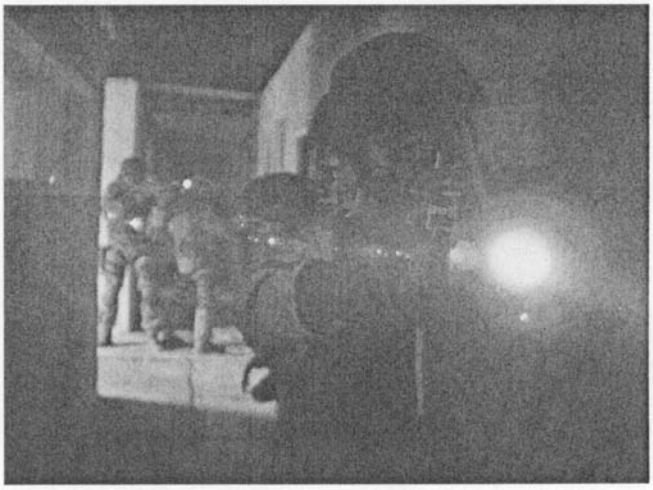
forced changes in the way the pirates operate; they have adapted by moving farther out into the Indian Ocean, and we must adapt accordingly. Although piracy in the Gulf of Aden has been somewhat reduced, the overall number of hijackings has increased, as have the number of hostages held by the pirates. It is clear that, a longer-term strategy to build regional counter-piracy capacity is required, including clarification in international law of jurisdiction for pirates apprehended in international waters, as well as responsibility for their trial and incarceration if found guilty. This is under discussion among the allies.

national waters, as well as responsibility for their trial and incarceration if found guilty. This is under discussion among the allies.

NATO Special Operations Forces

The U.S.-led NATO Special Operations Forces (SOF) Coordination Centre was officially rechristened and activated as the NATO Special Operations Headquarters in November 2010. The NATO Special Operations Headquarters, projected to be fully operational in 2012, has already had a significant impact coordinating, supporting, training, and enabling functions for NATO SOF, and it continues to develop Alliance crisis response options. The evolution of this headquarters will better synchronize SOF across the Alliance, enhance NATO SOF unity of effort, and provide Allied SOF with a multi-national out-of-area command and control capability.

The NATO Special Operations Headquarters Communications Network underpins allied and partner SOF collaboration by providing an unprecedented vehicle for command, control, communications, and intelligence-sharing for networked operations. The Headquarters' SOF Fusion Cell, in Kabul, Afghanistan, demonstrates this operational impact among allied and partner Special Operations Forces. This stakeholder-run enterprise, manned by 40 personnel from 11 nations and several agencies, focuses on garnering information from a multitude of allied and partner sources, and fusing that information with operational requirements to produce and disseminate actionable intelligence to ISAF SOF Special Operations Task Groups and our Afghan partners.



NATO SOF Forces conduct nighttime training

The NATO Special Operations Headquarters is building enduring operational capabilities, collaborative policies and procedures, and networked command, control, and communications mechanisms among NATO SOF. Collaborative training and exercises reinforce this framework to ensure allied and partner Special Operations Forces are interoperable in order to operate more effectively in designated combined operations well into the future.

NATO Noncommissioned Officer Initiatives

The first ever NATO Noncommissioned Officer Bilateral Strategic Command Strategy and Recommended Noncommissioned Officer Guidelines was published in October 2010. This first examination of alliance-wide Noncommissioned Officer Corps utilization defines critical gaps based on listed assumptions and implications, and delivers recommendations on how best to address them. It also outlines desired leadership qualities required in a multi-national environment, addresses NATO noncommissioned officer education, and explores the use of Command Senior Enlisted Leaders to assist the commander in the professional development of the Noncommissioned Officer Corps in order to better meet the demands of working in the NATO Alliance. Additionally, our Command's Senior Enlisted Leaders have led NATO ef-

forts to assist partner nations with Noncommissioned Officer reform in several countries this year through their involvement with initial assessments. We are working to tie these NATO initiatives into EUCOM's theater campaign plan to assist our partners with their Noncommissioned Officer transformation. We believe these efforts will result in the more effective use of the Noncommissioned Officer Corps—an essential component to achieving success in a multi-national environment.

"This reflects an enduring truth of American foreign policy – our relationship with our European allies and partners is the cornerstone of our engagement with the world, and a catalyst for global cooperation…Neither Europe nor the United States can confront the challenges of our time without the other."

President Barack Obama, New York Times, November 2010

CONCLUSION

The soldiers, sailors, airmen, marines, and civilians of EUCOM and Allied Command Operations contribute to our national security everyday through their professional engagement with our allies and partners across the European theater. As we look forward to continued success, I ask for your continued support of these extraordinary men and women and their families to ensure they receive the care and benefits they deserve.

Operationally, we will continue to seek and use flexible authorities and funding mechanisms to build the capacity of those partner nations willing to contribute to current operations. This has become increasingly important because of the surge of activities in Afghanistan and the need to get our allies and partners more involved. Your continued support for authorities like NDAA Section 1206, Foreign Military Financing, the International Military Education and Training program, and Coalition Readiness Support Program has been pivotal in addressing our strategic needs in the European theater, not only for partner-nation forces deploying to Afghanistan, but for all of our other allies to help build partner capacity. These programs allow us to provide them with equipment and training necessary to achieve interoperability with our own forces, and better prepare them to handle the responsibilities to which they commit their forces.

Furthermore, our efforts to fulfill this short-term task of building enduring capability are vital to ensuring the long-term stability and security of Europe. In addition to increasing the contributions of our allies and partners to operations outside Europe, building partner capacity allows us to make significant progress toward achieving EUCOM's strategic objectives. For example, we have been able to conduct security sector reform assessments in Albania, an interagency effort critical to integrating Balkan countries into the European community. We also have numerous programs targeted at countering the proliferation of WMD throughout the theater such as the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism. But we cannot stop there. We are also supportive of efforts to pool DOS and DOD resources for the purpose of funding more robust, comprehensive security sector assistance programs to respond to emergent challenges and opportunities, as originally proposed by Secretary Gates. This would greatly aid our efforts to ensure interoperable, deployable NATO forces. Realizing the vision of the Lisbon Summit, a NATO with robust interoperable Article V and expeditionary capabilities requires U.S. support with training and equipment for newer NATO allies and partners. With greater flexibility, these authorities can achieve greater strategic goals in support of our theater and national objectives.

EUCOM and Allied Command Operations continue to serve as a transatlantic bridge that unites the United States and our partners in Europe. We are building and strengthening relations with our European partners that will help ensure the security of the United States at home and abroad. As President Barack Obama said at the recent NATO Summit, "Our relationship with our European allies and partners is the cornerstone of our engagement with the world, and a catalyst for global cooperation." Indeed, we are truly

"STRONGER TOGETHER".

Chairman LEVIN. Thank you very much, Admiral Stavridis. General Kehler.

STATEMENT OF GEN. C. ROBERT KEHLER, USAF, COMMANDER, U.S. STRATEGIC COMMAND

General KEHLER. Chairman Levin, Senator McCain, and members of the committee, thanks for the opportunity to present my view on STRATCOM's missions and priorities. As you've noted, I'm privileged and humbled to appear today for the first time as the Commander of STRATCOM.

I'm also pleased to appear today with Admiral Jim Stavridis, the commander of EUCOM and, of course, a great colleague that I'm looking forward to getting to know better and work with in the coming years.

No question, Mr. Chairman, today's national security landscape is marked by protracted conflict, constant change, and enormous complexity. We're facing a significantly different operating environment than those we have experienced in the past.

Of the threats we face, weapons of mass destruction (WMD) clearly represent the greatest threat to the American people, particularly when they are pursued or possessed by violent extremists or state proliferators. To deal with the environment today demands faster and more comprehensive awareness, strategic thinking, flexible planning, decentralized execution, rapid innovation, and unprecedented information-sharing.

STRATCOM's mission remains clear: to detect, deter, and prevent attacks against the United States and to join with the other combatant commands to defend the Nation should deterrence fail. STRATCOM's first priority is to deter nuclear attacks on the United States and our allies. As we implement the New START treaty, we are committed to maintaining a safe, secure, and effective nuclear deterrent. We are also the strongest possible advocates of the investments that are needed to sustain and modernize the nuclear triad and the nuclear weapons complex that underpins it.

While nuclear deterrence is our number one priority, STRATCOM also has broader responsibilities in the 21st century. Ongoing operations demand our full commitment as well. In partnership with the other combatant commands, our next priority is to improve our plans, procedures, and capabilities to address regional problems, especially where those problems or where the capabilities are to address issues cross regional boundaries.

On that note, STRATCOM also is a supporting command to AFRICOM. You mentioned that we provided B–2s early in the Libya operation for AFRICOM's use. We are also taking steps and have taken steps to make sure that they have the space capabili-

ties that they need, to make sure that the networks are there and operational, have sufficient capacity and are secured, and have also provided planners to AFRICOM on a variety of issues that STRATCOM had expertise on.

We are engaged as a supporting command in ongoing operations there, as well as our long-term engagement in other regions of the world in support of other combatant commanders. Our activities primarily in that regard are synchronizing planning and capabilities for things like missile defense, intelligence, surveillance, and reconnaissance, electronic warfare, and combating WMDs. All of these synchronization efforts are helping to bring unity-of-effort to regional operations and increased effectiveness to the capabilities that we can bring to bear.

Another one of our priorities is to improve our capabilities and operating concepts in the important civil and national security areas of space and cyberspace. Space, of course, is increasingly contested, congested, and competitive, and its importance to the United States goes far beyond national security. Ensuring uninterrupted access to space, space-based capabilities, improving our awareness of objects and activities in space, and enhancing the protection and resilience of our most critical systems are all essential objectives.

Achieving those objectives demands continued investments to improve space situational awareness and to sustain our critical space capabilities, while we also pursue increased opportunities with allies and commercial partners.

Our greatest challenge in cyberspace is to improve our ability to operate and defend the DOD network at network speed, to make sure our critical activities can continue even in the face of adversarial attempts to deny or disrupt them. STRATCOM and its subunified command U.S. Cyber Command (CYBERCOM) are working hard to improve our organizations and relationships, enhance our network situational awareness and protection, increase our technical capacity, and to develop the human capital we need as we look to the future.

We have much to do, but we also know today's fiscal environment demands that we must maximize both mission effectiveness and taxpayer value. We'll continue our efforts to identify every possible place where we can become more efficient as we work to become even more effective.

Finally, we're committed to taking care of our warriors, our government civilians, and their families. To this end, STRATCOM fully supports the efforts of the Services to properly train, equip, support, and care for our men and women. We will work diligently to ensure that they have a safe and a positive work environment.

Mr. Chairman, great challenges lie ahead, but so too do great opportunities. The men and women of STRATCOM perform their difficult missions with remarkable skill and dedication every minute of every day. I'm proud to be associated with them and look forward to working with you and the committee as we address these important national security issues.

Thank you again for this opportunity and I look forward to your questions.

[The prepared statement of General Kehler follows:]

PREPARED STATEMENT BY GEN. C. ROBERT KEHLER, USAF

Chairman Levin, Senator McCain, and members of the committee, thank you for the opportunity to present my views on U.S. Strategic Command's (STRATCOM) missions and priorities. Today marks my first appearance before you as the Commander of STRATCOM. I have occupied this position for a short time, but I have been involved with STRATCOM's missions for much of my career. I was privileged to spend 2 years as the Deputy Commander, and most recently I served as one of STRATCOM's Service component commanders. STRATCOM's Active Duty, Reserve, and civilian members, who are standing watch this very minute at locations across the country and around the globe, exemplify the best of today's joint force. I am privileged to lead this remarkable team, and I look forward to working with you to assure our Nation's security.

America's strategic forces proudly continue their longstanding role as the foundation of our national security posture. The President of the United States has assigned STRATCOM the responsibility to detect, deter, prevent, and defeat attacks against the United States, its territories, possessions and bases, and to employ appropriate force to defend the Nation should deterrence fail. The command's specific mission responsibilities include planning, synchronizing, advocating, and employing capabilities to meet the Nation's strategic deterrence, space operations, cyberspace operations, information operations, global strike, missile defense, intelligence, surveillance, reconnaissance (ISR), and combating weapons of mass destruction (WMD) objectives. We conduct these activities in close coordination with other combatant commands around the world. Today, I would like to describe the strategic context in which we operate and STRATCOM's priorities for addressing our many challenges.

STRATEGIC CONTEXT

The national security landscape continues to be marked by protracted conflict, constant change, and enormous complexity. While war remains a difficult struggle between human beings, today's operating environment is significantly different than those we experienced in the past. The number and type of actors (state, non-state, terrorist, criminal) are rapidly changing, and the distinction between combatants and noncombatants is less clear. Friend and foe alike can span global distances in seconds through space and cyberspace, and technological advances allow adversaries to cross traditional geographic and military boundaries with ease. Adversaries seek advantages by using asymmetric means to find and exploit our vulnerabilities and to defeat our advanced capabilities in air, sea, space, and cyberspace. At the same time, these adversaries wield hybrid combinations of capabilities, strategies, and tactics and operate in the shadows to present us with ambiguous indications and situations. Rapid technological evolution and the wide civil availability of formerly advanced military capabilities have also reduced "entry costs," making available completely new weapons and enabling actors to access capabilities that would not have been available to them in the past without significant investment. Indeed, surprise may be our deadliest foe, because it can make our plans ineffective, our training irrelevant, and, therefore, our organizations vulnerable.

The need to foster strategic stability and deter strategic conflict, ensure uninterrupted capabilities from and access to space and cyberspace, respond to traditional and non-traditional threats, and deal with surprise in an era of rapid technological advances presents STRATCOM with significant challenges. Of the threats we face, weapons of mass destruction clearly represent the greatest threat to the American people, particularly when pursued or possessed by violent extremists or state proliferators. The potential of nuclear uncertainties in unstable regions adds special significance to this concern.

At the same time, today's fiscal environment will pose additional challenges regarding the means and manner with which we address the difficult global, strategic landscape. Last year, Secretary of Defense Robert Gates challenged us to foster an efficient "culture of saving" throughout the Department of Defense (DOD). The resulting review emphasized our responsibility to maximize both mission effectiveness and taxpayer value. STRATCOM's exhaustive assessment of our missions identified some functions that we could reduce, consolidate with other DOD organizations, or eliminate in favor of higher priority operational requirements. We are now evaluating these initiatives with the DOD leadership and will realign resources as directed at the conclusion of this assessment.

In summary, the challenges are great, the choices are hard, and there is no textbook solution.

PRIORITIES

The 21st century security environment demands fast, comprehensive awareness, strategic thinking, flexible planning, decentralized execution, rapid innovation, and an unprecedented emphasis on sharing information. In this environment, STRATCOM has been uniquely organized and positioned to shape and employ global capabilities to deter, enable, and, when needed, join with the other combatant commands to fight and win the ever changing joint fight.

First and foremost, we must guarantee a safe, secure, effective, and ready nuclear deterrent force. As affirmed by the 2010 Nuclear Posture Review (NPR), sustaining and modernizing the nuclear weapons complex, the triad of nuclear forces, the human capital, and key supporting command, control, and communications (C3) and ISR capabilities is essential to retain confidence in the deterrent's long-term credibility, provide tools to combat proliferation, and assure our scientific and innovation edge.

Next, in full partnership with the other combatant commands, we must improve our plans, procedures, and capabilities to address transregional problems. Ongoing operations demand our full commitment, and STRATCOM's activities both enable and support joint operations around the world. The command's work to synchronize and advocate for missile defense, ISR, electronic warfare, and combating WMD plans and capabilities helps bring unity of effort and flexible capabilities to transregional operations. Whether providing space-based communications or position, navigation, and timing information, rapidly transmitting data around the world, or ensuring tested, capable missile defenses or other globally significant capabilities are developed, positioned, and optimally managed, STRATCOM is instrumental in winning today's dynamic joint fight.

Finally, we must continue to improve our capabilities and operating concepts in the important civil and national security areas of space and cyberspace. Ensuring uninterrupted access to space and space-based capabilities, improving our awareness of objects and activities in space, integrating their effects with all operational phases, improving space access, protection, and resilience, and expanding our planning and implementation for partnership operations requires that we continue our investment and that we demand acquisition results. For cyberspace, we must enhance network protection and mature our organizations, capabilities, workforce, and partnerships to ensure effective operations.

STRATEGIC DETERRENCE

In today's complex security environment, the concept of strategic deterrence must encompass strategies to deter adversaries and dissuade competitors across the full range of their capabilities. We must consider actors and capabilities in aggregate, not in a vacuum, a need that highlights the importance of a better understanding of adversaries' values, motivators, capabilities, intentions, and decisionmaking processes. Not every potential adversary has or seeks nuclear weapons, and modern deterrence requires broad coordination, tailored strategies, effective capabilities, international cooperation, and focused capabilities like conventional prompt global strike (PGS).

Still, STRATCOM's first priority is to deter nuclear attack on the United States, our allies, and our partners. Last year, the Quadrennial Defense Review (QDR), the NPR, and the New Strategic Arms Reduction Treaty (START) discussions produced an important national consensus that affirmed the necessity of the United States' nuclear deterrent and the funding required to sustain it. The President has pledged that the United States will maintain a safe, secure, and effective nuclear deterrent as long as nuclear weapons exist. STRATCOM is now committed to implementing the New START treaty and to advocating for planned investment in the deterrent force. The updated "1251 Report" submitted in February of this year outlines both DOD and Department of Energy nuclear funding requirements through fiscal year 2021. While budget estimates will be refined as major program baselines evolve, these important investments must begin immediately. Congress approved the first of these increases for the National Nuclear Security Administration (NNSA) in initial fiscal year 2011 continuing resolutions, and I strongly urge full funding in fiscal years 2011 and 2012.

Nuclear Enterprise

The fiscal year 2011 and 2012 budget requests reverse several years of downward trend in nuclear enterprise funding. These budgets provide investments in the facilities, equipment, and personnel dedicated to sustaining and managing the Nation's nuclear weapons, as well as to dismantling weapons no longer needed. To emphasize the importance of this investment and to better understand the conditions, urgent

needs, and impending challenges across the complex, I plan to visit each lab and production facility during my first 60 to 90 days in command.

The men and women of America's nuclear weapons complex perform uniquely difficult, highly technical, and demanding work. As our stockpile ages well beyond each weapon's originally designed lifespan, robust stockpile surveillance and assessment programs will enable strategic deterrence and stability at the New START treaty force levels. Weapon safety, reliability, and performance may change in ways we cannot fully predict, and surveillance activities permit confidence and continued stockpile certification without nuclear testing. Dedicated surveillance and life extension studies constitute the best means of informing the President and Congress of our nuclear weapons' health, status, and requirements. The NPR's case-by-case approach to studying and selecting from the full range of life extension options (refurbishment, reuse, and, if needed, replacement) ensures the best future for our stockpile.

Today, a narrow window is available to synchronize weapon sustainment efforts for the W76–1 and B61 (full scope) life extension activities—cost-effectively introducing improved safety and security features, avoiding a second B61 nuclear refurbishment in the 2020s, and potentially reducing the stockpile by consolidating four legacy B61 variants into a single weapon. In addition, a Nuclear Weapons Council study of W78 intercontinental ballistic missile (ICBM) and W88 submarine launched ballistic missile (SLBM) life extension program options will examine opportunities to use modular fuze components and develop a possible common warhead, potentially reducing costs and supporting long-term capability sustainment. These and future actions that evaluate ways to reduce warhead numbers and types through stockpile commonality and flexibility offer the opportunity to continue accomplishing our strategic deterrence mission while also achieving the goal of a smaller, more efficient stockpile.

Strategic Delivery Vehicles

The NPR also affirmed the continuing need for the nuclear triad, which provides the President with multiple options for a variety of scenarios. The value of the triad lies in its flexibility and responsiveness to the changing world environment and in its ability to hedge against technical failure, geopolitical change, or a breakthrough in another nation's capabilities. America's strategic forces require continued investment to ensure their future capability, and STRATCOM is actively engaged with our Service partners to define and advocate for necessary nuclear force modernization and recapitalization programs.

Intercontinental Ballistic Missiles

The widely dispersed and responsive Minuteman III ICBM force provides high readiness, low operating costs, and sovereign basing with multiple aim points that complicate adversary targeting. The Air Force is successfully concluding decade-long efforts to enhance safety and security and to sustain the Minuteman force through 2020. The Air Force is also evaluating requirements to sustain the force through 2030. STRATCOM supports these programs and is working with the Air Force on a capabilities based assessment and pre-analysis of alternatives (AoA) activities that begin to define options for a follow-on land-based strategic deterrent beyond 2030.

SLBMs

Ohio-class ballistic missle submarines (SSBNs) provide an assured and highly survivable response capability, and the highly accurate Trident II D5 strategic weapon system continues to exceed the demanding operational reliability standards established almost 30 years ago. By the time they begin to retire in 2027, the *Ohio*-class SSBNs will have served for more than 40 years. The Navy completed an *Ohio*-class follow on platform AoA and, with STRATCOM, continues to refine specific replacement requirements. STRATCOM fully supports Navy efforts to maintain the current fleet, fund the necessary research and development for its replacement, and sustain the Trident II D5 ballistic missile and associated infrastructure to satisfy future deterrent requirements. For example, current infrastructure at Naval Base Kitsap-Bangor, WA, lacks sufficient Explosive Handling Wharf (EHW) capacity to meet growing missile handling requirements. A second Pacific EHW wharf at Naval Base Kitsap-Bangor, WA is essential to long-term SSBN readiness.

Bombers

America's B–2s and B–52s ensure that the President has visible and flexible conventional and nuclear global strike and deterrence options. Affirming their critical deterrent role, the nuclear-capable bomber force transitioned to STRATCOM's day-to-day operational control in 2010. STRATCOM now has a far stronger voice in balancing this unique, dual-capable nuclear and conventional bomber force's day-to-day

readiness, training, and operational employment. While the Air Force continues to sustain mission-critical systems, it will also soon begin developing a new long-range, dual-capable penetrating bomber. Coupled with the development of a new bomber, two additional capabilities will ensure the viability of the air-breathing leg of the Triad for decades to come. Air Force investments will sustain the Air Launched Cruise Missile through 2030 (or until a suitable replacement is fielded), ensuring standoff capability for the long term. Further, the bomber force must be supported by a fleet of new aerial refueling tankers to extend their range and assure the bombers' strategic and extended deterrence roles. STRATCOM supports Air Force progress toward ensuring the long term health of the airborne component of our strategic capability.

Nuclear Command, Control, and Communications

A reliable, assured C3 capability from the President to the nuclear forces is fundamental to an effective strategic deterrent. National leaders, commanders, ISR assets, and strategic forces must share assured linkages to confidently understand and effectively address nuclear mission demands. Current systems require investments to ensure reliability and address looming capability gaps in our National Leadership Command Capability.

A new Strategic Command and Control Complex and Nuclear C3 node at Offutt Air Force Base, Ne, is at the center of our nuclear C3 plans. The fiscal year 2012 budget seeks a first increment of $150 million to begin replacing the aging and fragile Curtis E. LeMay building and colocated facilities. Today's building, command center, and computer systems took shape long before the IT revolution and now lack the capacity to support current mission demands. The buildings' systems strain to support numerous computer and communication systems, and the spaces occasionally experience serious heating and cooling problems, electrical failures, and other outages. For example, in December 2010 and January 2011, two water pipe ruptures caused significant system outages and dislocated staff for several days, although the Command remained capable of performing its missions due to extraordinary workarounds and the remarkable efforts of the dedicated staff and a small army of outside emergency help.

Prior to defining the current requirement, STRATCOM—in consultation with the Army Corps of Engineers and the Air Force—evaluated sustaining the status quo, renovating the existing facility, or engaging in new construction. The evaluation concluded that new construction offered the most operationally efficient solution to support STRATCOM's missions, operations, and nuclear C3 needs. The new facility will ensure an electro-magnetic pulse-protected, flexible, sustainable, reliable, and collaborative environment with an infrastructure that meets the security challenges of today and tomorrow.

Conventional Prompt Global Strike

A limited, credible, conventional PGS capability would provide the President with an important deterrent option in some strategic scenarios. Today, we still lack the ability to rapidly deliver conventional effects against fleeting or geographically isolated targets, allowing a potential adversary to establish a sanctuary using mobility and strategic depth. Research, development, test, and evaluation projects continue making progress, and I ask you to continue supporting these PGS efforts.

International Engagement

Deterring and dissuading nuclear threats in today's national security environment also requires careful attention to international relationships. While the specter of global nuclear war may be more remote than decades ago, the possibility for miscalculation between nuclear-armed states remains a perilous threat to global security. As noted in the NPR, "Enduring alliances and broad-based political relationships are the foundation of strategic stability and security." Indeed, many nuclear-armed states are important partners in combating proliferation. New START lowers the maximum number of U.S. and Russian strategic offensive arms, restores an important, confidence-building verification regime, and provides opportunities to continue military-to-military engagement. China's willingness to consider and study Secretary Gates' proposal for a strategic security dialogue represents an important avenue for growth between our two militaries in this area as well. STRATCOM will continue to support DOD, Department of State, and geographic combatant command activities to develop stable and cooperative relations with other responsible nuclear powers and will be prepared to provide advice on other arms control measures that could encompass a greater range of weapons.

SPACE

Throughout the 20th century, the United States and other countries developed and exploited the space domain's extraordinary potential, including changing how we navigate, communicate, and understand our world. However, the domain is increasingly congested, contested, and competitive. Guaranteeing mission assurance through adequate Space Situational Awareness (SSA), resilience, and critical-asset protection is essential. The new National Space Policy, signed by the President, and the National Security Space Strategy (NSSS), co-signed by the Secretary of Defense and Director of National Intelligence, emphasize the need to continue developing resilient capabilities which will improve our ability to satisfy combatant commanders' requirements for uninterrupted ISR, expanded military satellite communications, and position, navigation, and training support. Implementing the NSSS will position the national security space enterprise to shape and strengthen the space domain's safety, stability, and security; to maintain and enhance U.S. advantages in space; to energize the U.S. industrial base by engaging a broad range of partners; to prevent and deter aggression; and to improve sustainability, acquisition, and flexibility of U.S. space capabilities.

Situational Awareness

SSA is central to mission assurance and increasingly important. As part of its SSA mission, STRATCOM now tracks more than 22,000 orbiting objects. Approximately 1,100 of these objects are active satellites, but the remaining debris litter a variety of orbits and threatens both critical systems and human spaceflight. While space surveillance is improving, we do not yet have robust, assured, and real-time situational awareness of the orbital domain. Current and future investments should expand data integration, sharing, and exploitation; improve object detection, identification, and tracking; and advance our ability to characterize potential collisions (conjunctions). Notably, the proposed Space Fence promises to expand detection capacity more than tenfold from just two or three locations outside the continental United States and to construct a more comprehensive orbital picture. Increasing the number of objects tracked will be largely useless, however, without corresponding improvements in data integration and exploitation technologies. As part of its SSA mission, the Joint Space Operations Center (JSpOC) must also be prepared to identify and attribute purposeful space system interference and provide timely recommendations to address the interference. Without SSA of the orbital domain, link segment, and supporting ground infrastructure, any plans for resilience, mission assurance, augmentation, and reconstitution will have a weak underpinning. STRATCOM fully supports funding for both the JSpOC Mission System and planning and design work for a modern JSpOC facility that will facilitate a generational leap from static displays to automated, real-time visual conjunction analyses—improving our ability to protect critical space-based assets and maintain our free access to and use of space. In addition, technology will soon allow us to link multiple sensors together in a single network that will meet the needs of many users.

Cooperation

As a global domain, space and space-based capabilities operate irrespective of geographic or military boundaries. As more nations join the space-faring ranks each year and the number of objects in earth orbit grows, the need to establish norms of behavior and to improve the cooperation and collaboration among responsible space users grows as well. Our objective is to sustain a safe, stable, and secure space domain while maintaining the national security advantages space systems provide. U.S. efforts to share SSA data represent an important step toward greater international space cooperation, which should eventually help to integrate sensors and data from allies and partners worldwide and ultimately move towards a combined space operations center.

Today, the STRATCOM SSA sharing community includes more than 41,000 users in 141 countries. Our efforts promote the safe and responsible use of space by providing satellite operators with highly accurate predictions of close approaches between space objects for every satellite operator. Since the Secretary of Defense delegated his authority to enter into agreements with commercial entities to the STRATCOM commander last September, we have concluded 19 agreements and are processing others. Each partner and each agreement signifies an operational relationship that can yield important exchanges, perhaps someday leading to a broad, international partnership for SSA. STRATCOM fully supports expanded planning and implementation for space partnership operations among allies, coalition partners, and commercial interests and will work with our partners in the DOD and elsewhere to help review proposals to establish normalized behavior.

Space-Based Capabilities

Enabling better situational awareness will improve the overall U.S. space posture; however, long-term, uninterrupted capability from space requires equal dedication to protection, resilience, augmentation, and reconstitution of assets in space, supported by timely design and development, cost-effective acquisition, and high-confidence space launch. Today's operating forces rely on space capabilities throughout the kill chain and beyond. Putting already stressed space capabilities that allow the joint force to navigate, communicate, see the battlefield, and strike under all conditions in the kill chain places those same valuable capabilities on any potential adversary's target list. STRATCOM fully supports DOD efforts to improve resilience and increase the protection of key space assets.

Launch

Reliable space capabilities also require an assured ride to orbit. Evolved Expendable Launch Vehicles are the DOD's primary launch vehicles and the sole U.S. vehicles for much of the national security manifest. STRATCOM supports further Air Force investments in this and other programs that will assure our access to space. Additionally, improvements in manifest and scheduling processes and investments designed to sustain and ensure national launch facilities' availability for future demand will maximize synergies between launch management and national priorities.

Industrial Base Concerns

Beneath our national security space requirements lies the need for a stable, responsive, and innovative national industrial base. Since the space age began, we have rarely been so reliant on so few industrial suppliers. Many struggle to remain competitive as demand for highly specialized components and existing export controls reduce their customers to a niche government market. Careful interagency planning that more tightly defines and oversees requirements, supported by stable budgets and production rates will help sustain a national industrial base essential to commercial users, military space, and the strategic deterrent. The retirement of the Space Shuttle and other changes at the National Aeronautics and Space Administration (NASA) also injected significant concern into the solid rocket motor industrial base—an industry we cannot afford to lose. Substantial weakening of this capability would impede current strategic system sustainment and follow-on development. While industry adjustments are inevitable, DOD is developing a plan in consultation with NASA to sustain the solid rocket motor industrial base to ensure we retain right-sized, cost-efficient, and viable design, development, and production capabilities. STRATCOM supports these important DOD efforts to improve program stability, increase the quantity and quality of the acquisition workforce, strengthen clarity and articulation in the requirements process, and stimulate scientific and technological advancements.

CYBERSPACE

Last fall in Foreign Affairs, Deputy Secretary of Defense William Lynn noted that, "Every day, U.S. military and civilian networks are probed thousands of times and scanned millions of times." Like space, cyberspace capabilities have rapidly become critical but also increasingly vulnerable. Cyberspace's pervasive presence, high importance, difficulty of attribution, and low cost of entry highlight some of our challenges. Combined with a growing, global reliance on cyberspace and its hosted capabilities, this constant evolution challenges mission assurance efforts—particularly as the threat moves from exploitation to disruption. Ensuring reliable, sustainable networks, freedom of access, and freedom of maneuver is not just a DOD problem. This is a national security problem. Assuring access demands sustained, resilient, and flexible approaches to maturing our defense capabilities, our capacity, and our cooperative relationships within and beyond the U.S. Government.

Capabilities

The most important asset any commander can have is robust, up-to-date situational awareness. Cyberspace is dynamic, and specific threats require specific countermeasures. The Maginot Line failed because it was static and the defense failed to anticipate and address technological and tactical changes. After the fact, detection and attribution don't work in cyberspace today either. The offense always has a strong advantage, overwhelming, subverting, or defeating static defenses. Continued advances in system and organization teamwork, coupled with the development and deployment of information-based capabilities and intelligence-driven sensors that "see" intrusions and can respond at equivalent speed is essential. Driven by strong, capable organizations, dynamic, agile, and informed capabilities that com-

prehend the network and mitigate threats at the boundary will significantly strengthen defense of DOD networks.

In response to the growing threat, last year the DOD established U.S. Cyber Command (CYBERCOM) at Fort Meade, MD as a sub-unified command to STRATCOM. STRATCOM delegated responsibilities to CYBERCOM to coordinate, plan, synchronize, and execute cyberspace operations in order to better defend DOD networks and to support other combatant commanders. We must accelerate the acquisition of comprehensive, shared cyber awareness tools to expand opportunities to secure critical information, reduce points of vulnerability, and develop responses to ensure warfighter access to essential information systems.

Capacity

Today, operators at CYBERCOM and its subordinate Service components work to defend against and attribute numerous information network intrusion attempts. The cyber workforce is growing, but our organizations and capabilities must also grow to keep pace with ongoing operations. STRATCOM is working with CYBERCOM to improve the cyber awareness of every DOD member with access to an information system, strengthen organizations, resolve roles/responsibilities, expand partnerships, build technological and human capacity for full-spectrum cyberspace operations, and integrate cyber capabilities into every commander's plans and operations. Recruiting adequately trained and equipped cyber warriors is challenging, but fortunately young Americans grow up learning and adapting to new technological platforms from a young age. Service cyber career paths are still being developed, and these critical, technical skills need both time to develop and sustained investment to prevent their atrophy. Sustained force development emphasis and investment is essential. The United States is also home to the world's premier educational and commercial information technology entities. We must continue to capitalize on this capacity and partner with these organizations on our requirements and to spur domestic math and science interest. Doing so will help develop, expand, and sustain a base of cyber expertise and adapt DOD personnel processes to attract, develop, and retain the cyber professionals necessary to protect critical DOD infrastructure and preserve U.S. freedom of action in cyberspace.

Cooperation

Cyber defense must include a wide range of partners. After all, this is truly a national security issue, making interagency and allied partner engagement and information sharing essential to a robust defense. Military operations depend on the broader U.S. information technology infrastructure, and defending military networks will net fewer benefits if the wider civilian infrastructure remains at much greater risk. The Department of Homeland Security (DHS) is ultimately responsible for coordinating the protection of the ".gov" and domestic ".com" domains, but DOD has much to offer in terms of intelligence and technical support. The DOD-DHS Memorandum of Understanding signed last fall lays important groundwork for enhanced cooperation, mutual support, and synchronized operations.

WINNING TODAY'S FIGHT

In strategic deterrence, space, and cyberspace, STRATCOM both operates forces and supports the full range of military operations. The broad scope of our responsibilities and trans-regional capabilities is clearly woven into the fabric of today's operations. Winning the fight, whether we are either a supported command or are supporting the geographic combatant commands, is something our team strives to do each and every day. However, STRATCOM also has responsibilities to integrate, synchronize, and advocate for other capabilities with trans-regional impact, and we are dedicated to partnering with other combatant commands to improve the warfighting effectiveness of these capabilities.

Information Operations

Consistent with our mission to improve strategic joint capabilities, STRATCOM participated in a 2010 Secretary of Defense directed strategic communication and Information Operations Front-End Assessment, designed to evaluate and recommend improvements for DOD roles, missions, definition, management, and resources for strategic communication and information operations. As a result of the assessment, STRATCOM will reorganize the Joint Information Operations Warfare Center (JIOWC) at Lackland Air Force Base, TX. Existing JIOWC resources and missions not specific to electronic warfare will be realigned to the Joint Staff, and STRATCOM will remain the DOD lead for electronic warfare.

Electronic warfare

The electromagnetic spectrum spans almost every modern technological convenience. While operational plans normally assume unfettered spectrum access, this assumption is not assured. Changing industry standards, global growth of civilian devices, military bandwidth requirements, and disruptive or destructive adversary electronic warfare capabilities all threaten to pinch or sever the shrinking electromagnetic links between national security platforms and the operating forces that rely on them.

Recognizing future threats, potential limitations, urgent warfighter needs, and the need for unified DOD advocacy, JIOWC completed several Joint Requirements Oversight Council (JROC) tasks to examine capability gaps and solutions for emerging electromagnetic spectrum threats. The National Defense Authorization Act for Fiscal Year 2010 required DOD to develop an electronic warfare strategy, submitted to Congress last year. That electronic warfare strategy concluded that we must move beyond the traditional understanding of electronic warfare by combining it with other kinetic or non-kinetic capabilities to increase U.S. combat effectiveness and achieve electromagnetic spectrum superiority. STRATCOM is planning to establish a Joint Electronic Warfare Center to advocate for and support DOD Joint electronic warfare capability requirements, resources, strategy, doctrine, planning, training, and operational support.

Missile Defense

The Ballistic Missile Defense System (BMDS) exists to meet combatant commands' theater defense needs and to provide for the limited defense of the United States. Working with geographic combatant commands and the Missile Defense Agency, our efforts focus on building tailored, regional missile defense architectures using the concept of a Phased Adaptive Approach (PAA) and on meeting urgent warfighter capability needs. STRATCOM's work provides a comprehensive assessment of the fielded BMDS's suitability and effectiveness and combines warfighter needs for air, cruise missile, and ballistic missile defense capabilities to inform programmatic actions and guide future R&D investment priorities.

At the 2010 Lisbon Summit, North Atlantic Treaty Organization allies affirmed the PAA for missile defense as a means to address the continued qualitative and quantitative growth of global ballistic missile programs. The Allies also invited the Russian Federation to participate in missile defense cooperation. As a strategy, PAA applies to several geographic combatant commands, and STRATCOM's current challenge is to make sound, analytically-based recommendations to balance limited BMD assets worldwide. The European PAA's four phases of increasing capability are designed to defend against existing and near-term threats posed by short- and medium-range ballistic missiles and to build up defenses against long-range ballistic threats over time as those threats mature. As stated during the New START treaty debate, the United States will not agree to any ballistic missile defense limitations or constraints and indeed intends to continue developing and deploying systems consistent with U.S. interests. The U.S. missile defense program is not designed to counter the strategic forces of Russia or China, but rather to address limited ballistic missile threats such as those posed by Iran and North Korea.

As various regional PAAs develop, STRATCOM will continually re-evaluate the standing Global Integrated Missile Defense Concept of Operations and other acquisition, deployment, basing, and employment plans for missile defense capabilities between and across all areas of responsibility. Our analysis will ensure that the joint warfighters' requirements receive deliberate management and readiness structures to ensure timely, flexible deployment, employment and redeployment of tested, understood BMD capabilities during and after crises. Consistent with the Ballistic Missile Defense Review, new advancements and allied technologies must be made interoperable with existing systems, including required improvements in discrimination capabilities essential to the efficient employment of limited missile defense resources.

Intelligence, Surveillance, and Reconnaissance

Timely, useable situational awareness and intelligence analysis is essential to all military operations. Airborne, submarine, and space-based ISR capabilities all provide key indications and warning information to commanders facing an array of traditional adversaries, non-traditional threats, and challenging intelligence problems. For the past decade, ISR efforts focused primarily on meeting the expanding demand in the CENTCOM area of responsibility. As overseas contingency operations change, DOD must carefully examine force requirements to ensure we organize, train, and equip a balanced force across the range of requirements, including anti-access environments and the New START treaty verification. An objective, multi-

domain, capabilities-based architecture that improves the ability to identify requirements across geographic boundaries and the range of potential threats is essential to appropriately balancing risk against necessary programmatic, budgetary, and acquisition decision points.

STRATCOM's ISR efforts achieved significant resource efficiencies and shaped ISR capability decisions through initiatives like the ISR Force Sizing Construct project, the High Altitude Transition study, the Synoptic Operational Area Reconnaissance Study, and the Mobile Nuclear Air Sampling Study. STRATCOM also successfully advocated for a critical CENTCOM ISR capability—designed and executed in approximately 30 months and at a lower cost than traditional acquisition processes. The Services and Intelligence Community must continue to strive for better integration in order to reach greater efficiencies—not only for the collection platforms themselves but also across the still-limited processing, exploitation, and dissemination architecture needed to transform collections into actionable intelligence.

Combating Weapons of Mass Destruction

Another mission area requiring sustained attention is combating WMD, since the pursuit of WMD by violent extremists and their proliferation to additional states remains the primary threat to the United States, our allies, and our partners. STRATCOM received the responsibility to synchronize DOD combating WMD activities in 2005 and has made discouraging, detecting, deterring, and, if necessary, defeating these threats a priority for theater operations and strategic deterrence. Some actors seek nuclear, biological, or chemical weapons to coerce their neighbors or to deter U.S. intervention in regional conflicts. Others may seek such weapons to use them in terrorist attacks or as weapons of war. Diffuse networks of non-state entities, secretive state sponsors, shell corporations, and terrorist-financed transactions challenge our intelligence organizations to develop comprehensive, accurate, and actionable assessments that enable global combating WMD. STRATCOM continues to pursue further national combating WMD capability improvements with interagency partners to coordinate combating WMD objectives, plans, and activities.

Among current and future combating WMD enhancements are technological improvements to detect, analyze, and assess WMD developments. The 2010 QDR affirmed the need to enhance National Technical Nuclear Forensics capabilities to increase nuclear threat attribution and to deter those considering nuclear weapons transfer or use. In the past year, the STRATCOM Center for combating WMD (SCC WMD) embedded Proliferation Security Initiative activities within U.S. Africa Command, CENTCOM, and U.S. Southern Command exercises and supported planning and funding efforts to expand exercise participation and training synchronization across geographic combatant commands. Finally, SCC WMD collaboratively operates the Interagency Combating Weapons of Mass Destruction Database of Responsibilities, Authorities, and Capabilities (INDRAC) System with the Defense Threat Reduction Agency. INDRAC provides a strategic level information reference resource to inform combating WMD operations, planning, advocacy, training, and exercises across the government.

In the 2010 QDR, the Secretary of Defense directed DOD to establish a Joint Task Force Elimination Headquarters to "better plan, train, and execute WMD-elimination operations . . . with increased nuclear disablement, exploitation, intelligence, and coordination capabilities." Last December, Secretary Gates tasked STRATCOM to execute this task and stand up a Standing Joint Force Headquarters for Elimination of WMD with "standing exploitation and intelligence cells in order to plan, train for, and execute global WMD elimination operations." STRATCOM is currently analyzing the requirements necessary to implement the Secretary's direction.

CONCLUSION

Great challenges lie ahead of the United States and STRATCOM, but so too do great opportunities. The command is dedicated to being an effective steward of taxpayer resources while maintaining a strategic force structure ready and able to deter aggression, preserve U.S. freedom of action, and defeat adversaries when necessary. The uncertainty inherent in today's complex, multi-domain security environment requires that we summon our best efforts to develop and deploy the plans, systems, and forces needed to sustain America's deterrent, ensure unfettered access to and through space and cyberspace, and win the dynamic joint fight. I look forward to working with Congress as we pursue these priorities together, and I appreciate your support and counsel in the months and years ahead. Thank you again for the opportunity to be here today.

Chairman LEVIN. Thank you very much, General.

Let's say a first round of 7 minutes for questioning.

Admiral, let me start with you. Do you agree that it was important to secure international support and participation, including a U.N. resolution and support by Muslim countries, before commencing military operations against Libya?

Admiral STAVRIDIS. Senator, any time the United States can operate in a coalition environment is to our advantage. Afghanistan is a good example, with 49 partner nations. I would agree with that.

Chairman LEVIN. From a military perspective, what difference does it make to have that international support in place?

Admiral STAVRIDIS. It makes a very significant difference in a wide variety of ways. Let me name three. One is the simple addition of resources. Taking Afghanistan as an example, as I mentioned earlier, 45,000 non-U.S. troops are there, and 98,000 U.S troops. Which are significant resource contributions.

Chairman LEVIN. Is that true in Libya as well?

Admiral STAVRIDIS. It certainly is. In Libya, for example, and you mentioned in your opening statement, today there are roughly 40 ships operating in general support of that operation. Only about 12 of those are U.S. ships. That addition of resources is first and very primary.

Second, you get the exchange of ideas. When we have 28 NATO nations and Arab nations coming together, both in Afghanistan and in Libya today, we have different views of looking at things. That can at times create friction, but I would argue over time it creates better ideas, because not one of us is as smart as all of us thinking and working together.

Third, I would say access. To do an operation like Libya or Afghanistan requires overcoming the tyranny of distance and geography. We do that best with allies, because international air space and the high seas aren't everywhere.

Those would be three things I would say off the top of my head.

Chairman LEVIN. As to the decisionmaking process that lies ahead of us, what will happen if Qadhafi's forces appear to truly stop fighting? Who would make the decision as to whether or not that was real and then what the response should be? Is that a military decision in the field? Is that a political decision by NAC? Who makes that decision?

Admiral STAVRIDIS. Sir, it would begin in the field with an on-the-ground assessment. Of course, as we can appreciate, in the last 5 weeks of this operation I've heard personally at least five different ceasefires announced by Qadhafi's forces, none of which have been true. It would have to begin with an on-the-ground assessment.

It would be backed up by higher level intelligence assessments. That data would then be flowed into the joint task force commander for NATO, Canadian General, Lieutenant General, Charlie Bouchard. He's headquartered at Naples. It would be assessed there in an operational context, moved up to my headquarters in Mons, Belgium, where the Supreme Headquarters Allied Powers Europe (SHAPE) is located, and we would put a strategy view on it.

Mr. Chairman, it would then go to the NAC to be evaluated for whether there would be a shift in direction which would be given to us.

Chairman LEVIN. If the evaluation was that it was a real stoppage of war by Qadhafi against his own people, what's the effect of that?

Admiral STAVRIDIS. There would be another level that this discussion would have to go to, which would be the U.N., since the authority for NATO to participate in this operation is under the U.N. Security Council Resolutions 1970 and 1973.

Taking your hypothetical question, if there was an assessment by NATO that conditions had changed on the ground, then there would be, depending on the situation, a pause in activity while it was evaluated at a political level as to further steps to take.

Chairman LEVIN. In terms of arming the opposition forces, is there a consensus within NATO or the NAC as to whether to arm the opposition forces, have you made a recommendation or have you received one from General Bouchard?

Admiral STAVRIDIS. I have not made or received such a recommendation. Of course, we're at very early days at this point.

Chairman LEVIN. Do you have any recommendation on that at this point?

Admiral STAVRIDIS. I do not at this point.

Chairman LEVIN. Has NATO, or the NATO representative, engaged with the Libyan opposition forces?

Admiral STAVRIDIS. To my knowledge, there is not a NATO representative on the ground in Libya at this time.

Chairman LEVIN. Shifting to Afghanistan, Admiral, do you continue to support the beginning of reductions of U.S. forces from Afghanistan by July of this year?

Admiral STAVRIDIS. General Petraeus is evaluating that now and I'm awaiting his recommendations.

Chairman LEVIN. I believe in the past you've indicated that you do support the President's decision to begin the reductions in July, with the pace of those reductions to be determined by conditions on the ground?

Admiral STAVRIDIS. Conditions-based, I agree.

Chairman LEVIN. In terms of the pace of reductions.

Admiral STAVRIDIS. Yes.

Chairman LEVIN. Is that still your position?

Admiral STAVRIDIS. Yes.

Chairman LEVIN. During the committee's hearing on February 17, Admiral Mullen said the decision to begin reductions of U.S. troops in July of this year has given the Afghan leadership a sense of urgency that they didn't have before that decision was made. Do you agree with Admiral Mullen?

Admiral STAVRIDIS. I do. I would add that it has also energized their efforts in training the ANSF, which is central to whether or not we will be able to begin those reductions.

Chairman LEVIN. Do you support increasing the end strength targets for the Afghan Army and Police up to an additional 70,000 personnel by the end of 2012?

Admiral STAVRIDIS. I believe that additional ANSF will be necessary over time. I have not done the specific analysis of number

or timeline, but I believe our current target of 305,000 would probably be better served in the long-term to have an increase in that number, yes.

Chairman LEVIN. You made reference to the radar deployment in Europe this year. You've indicated that there's some progress being made, I believe, by that deployment. There's been some suggestion from Secretary Gates, who was recently in Moscow, that there's a possibility of a missile defense cooperation with Russia. President Obama and President Medvedev have discussed that as well by phone, apparently, and the White House statement was that President Obama affirmed why the U.S. believes that cooperation with Russia on missile defense could enhance the security of the U.S., Russia, our allies, and our partners.

As the combatant commander responsible for working with Russia through EUCOM and through NATO, do you agree that a missile defense cooperation with Russia, if done properly, could be in our interests? Do you believe it's possible that we could agree on cooperative measures with Russia?

Admiral STAVRIDIS. Yes, sir, it's possible. Several steps would have to occur for us to get to that point, beginning with getting our own security deployed, settled, and in place. Then that would have to be connected with a NATO system, because it's very important as we approach a missile defense relationship with Russia that it be done in a NATO-Russia context. The next step would be connecting the missile defense through the Active Layered Theater Ballistic Missile Defense and the Air Command and Control System.

Third, at that point you would have the possibility, as you mentioned, of finding a zone of cooperation that could provide a missile defense cooperation between the United States, in a NATO context, and Russia.

Chairman LEVIN. Thank you, Admiral.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

Admiral, do you agree that when the no-fly zone was implemented Qadhafi was basically in the suburbs or on the outskirts of Benghazi and, as the President stated, there would have been a massacre of very large proportions?

Admiral STAVRIDIS. Yes, sir. Everything about Colonel Qadhafi's history would tell us that.

Senator MCCAIN. Would you agree that if we had imposed a no-fly zone 3 weeks earlier, when the momentum was on the side of the anti-Qadhafi forces, that it's very likely that Qadhafi would have fallen then?

Admiral STAVRIDIS. It's hard to say if Qadhafi would have fallen then or not.

Senator MCCAIN. Isn't it very clear that the use of air power and armor is what reversed the tide against the anti-Qadhafi rebels?

Admiral STAVRIDIS. Yes, sir.

Senator MCCAIN. At least in the view of some of us, an opportunity was passed up by not invoking a no-fly zone 3 weeks ago, which would have then prevented Qadhafi from using his superior armor and air power to drive the rebels all the way back to Benghazi. There's an upside and a downside to seeking coalitions.

There is an argument to it that you should act in warfare when the opportunities present themselves.

Do you agree that air power is decisive in this conflict on the side of the anti-Qadhafi forces?

Admiral STAVRIDIS. It has been thus far.

Senator MCCAIN. The U.N. resolution, as I understand it, says we should take all necessary measures to prevent humanitarian disasters to befall the Libyan people, right?

Admiral STAVRIDIS. Yes, sir.

Senator MCCAIN. Lieutenant Bouchard just said that the goals of the air campaign remain the same, and I quote him: "to protect and help the civilians in population centers under the threat of attack." Do you agree with General Bouchard's statement?

Admiral STAVRIDIS. Yes, sir.

Senator MCCAIN. Does that mean that "protect and helping the civilian population centers" goes all the way to Tripoli?

Admiral STAVRIDIS. Any time there is a threat to the population of Libya we have sufficient rules of engagement to strike against forces that are demonstrating hostile acts or hostile intent against them.

Senator MCCAIN. There is hostile intent taking place in the city of Tripoli, wouldn't you agree, in suppression of anti-Qadhafi forces?

Admiral STAVRIDIS. Any Qadhafi forces that are demonstrating hostile intent against the Libyan population are legitimate targets.

Senator MCCAIN. Basically what's happening here is we're saying that we won't overthrow Qadhafi by force, but in the interest of protecting and helping the civilians and population centers under the threat of attack we are moving rapidly to the west.

The media is reporting that we are employing AC–130s and A–10s to provide more targeted close-in protection for civilians?

Admiral STAVRIDIS. That is correct, sir.

Senator MCCAIN. The only other question—I know this is a very tough one, but there are persistent rumors that Qadhafi really has very few friends and it's likely that at some point they will crack and he will either leave, be killed, et cetera. Is that something that you think is a pretty good possibility of happening?

Admiral STAVRIDIS. As I look at the situation in Libya, Senator, you can see a wide range of possibilities out ahead of us, that run from a static stalemate to what you just described, Qadhafi cracking. If we work all the elements of power, a more than reasonable chance, of Qadhafi leaving. The entire international community is arrayed against him. The events today in London, where 40 nations gathered to discuss this, would lend weight to the theory that, as Secretary Gates said in testimony or on a talk show, he probably doesn't need to be hanging any new pictures.

Senator MCCAIN. Clearly, we just want him gone, whether to live with Chavez, meet Hitler and Stalin, or be tried in a criminal court.

Admiral STAVRIDIS. The international community, virtually every world leader, has ascribed to a statement along the lines that Qadhafi should leave Libya.

Senator MCCAIN. A stalemate is not an acceptable solution. We learned that from the Iraqi experience after Operation Desert

Storm, that sanctions and no-fly zones don't succeed. Is there a lesson we could draw from that experience?

Admiral STAVRIDIS. A stalemate is not in anybody's interest.

Senator MCCAIN. Thank you.

Is the United States, at present, providing defensive weapons to Georgia or helping Georgia acquire such weapons?

Admiral STAVRIDIS. Sir, we are working with Georgia in training their security forces.

Senator MCCAIN. I'm asking about weapons.

Admiral STAVRIDIS. In terms of defensive weapons, at this moment we are not providing them with what I would term, high-end military defensive weapons.

Senator MCCAIN. It's hard for me to understand, since the Russians still occupy territory that is clearly Georgian territory and continue to threaten Georgia. Yet we're not even giving them weapons with which to defend themselves. It is not comprehensible.

Do you believe the Russian Federation is serious when its leaders say that they will withdraw from the New START treaty if the United States deploys all phases of the EPAA to missile defense?

Admiral STAVRIDIS. I'm not familiar with their making that dramatic a statement. I've seen other statements that would indicate they intend to continue a dialogue and discussion with us moving forward across the missile defense sphere.

Senator MCCAIN. General Kehler, does DOD have the necessary legal authorities it needs to respond to a cyber attack?

General KEHLER. Senator, it doesn't have all the authorities it needs. In fact, in some cases our role has been defined at this point, to defending and protecting the DOD network. The relationship outside that is being established with the Department of Homeland Security (DHS), which has the lead for protecting critical infrastructure across the United States. There are limits to what DOD can do today.

Senator MCCAIN. Would you please submit to the committee in writing what you think is necessary in order for us to give you the capability to defend this Nation against a cyber attack? A lot of us feel that this is the new battleground of the 21st century, and for you not to have all the tools at your disposal to protect this Nation's national security interests in the event if a cyber attack is an unacceptable situation.

We've been bouncing around between different committees: Intelligence, Armed Services, and Homeland Security. Everybody has a different idea. We would be well served if you would provide us, at least in your view, what is the absolute minimal necessity in order to defend the country.

[The information referred to follows:]

Senator, I understand your concerns. The threats we face in and through the cyberspace domain are forcing us to carefully consider what it means for the military to perform its traditional role of defending the Nation. This work includes developing an in-depth and shared understanding of what it means to conduct traditional military operations in this networked era. More specifically, we need to determine how the Department of Defense (DOD) will perform three different but related potential roles in and through cyberspace:

1. Defend DOD networks and conduct other traditional military operations.
2. When directed by the President, conduct full-spectrum cyber operations including defending the Nation when it comes under foreign cyber attack.
3. Provide military support to civil authorities, as directed.

Addressing the threats we face in the cyberspace domain and incorporating cyber operations into our broader military operations raise unique policy, legal, and doctrinal issues that we continue to work our way through.

DOD is working with the Department of Homeland Security (DHS) and the executive branch to develop a set of legislative proposals that will provide the U.S. Government with additional authorities required to protect the Nation through a whole-of-government approach against sophisticated cyber threats. While the specifics are still under development, we look forward to working with Congress to ensure necessary authorities are available.

In addition to legislative proposals to broaden U.S. Government cyber authorities, DOD continues to address additional issues related to cyberspace definitions, doctrine, and rules of engagement. These efforts build on steps already taken to establish the appropriate relationship between DOD and DHS, to form U.S. Cyber Command, and to improve our defense of DOD networks.

As in the case of the development of other new military activities, we will continue to identify new requirements as we go forward. I will work with other components in DOD and with the interagency to provide you with details regarding the administration's ongoing and follow-on legislative proposals, and will do so as soon as possible.

General KEHLER. Yes, sir. I would add one other point. DOD has reached out to industry at this point to do a pilot program to see, as we work through, what it would take and what additional authorities might be involved there. There are some additional steps being taken now and I will provide you my thoughts more later.

Senator MCCAIN. Thank you, General.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain, and we will share your answer in that regard with Senator Lieberman's committee; Senator Collins, the ranking member of that committee, are deeply involved in that, and a number of other committees as well. Legislative efforts are being organized to make sure that you and other agencies have all the authorities that they need, that they work together to make sure that there are no cracks in our defense, and that there's clarity in terms of the authority and responsibility for the response as well. We'll share that with Senator Lieberman and Senator Collins and the other committees.

Senator Lieberman.

Senator LIEBERMAN. Thank you, Mr. Chairman. Let me just pick up very briefly on what you've said, General Kehler. Your testimony states, which I know to be absolutely valid, that you don't have sufficient legal authority. I suppose in a time of crisis the President could invoke his constitutional authority as the Commander in Chief to direct the Pentagon to take the action it would have to take because we're not adequately defended from cyber attack today.

The fact is that DHS, which Senator Collins and I oversee in our committee, has been working much more closely on these matters with the Pentagon and the National Security Agency. We urgently need to get over classic Senate committee territorial turf battles and pass legislation this year to clarify authorities for protection of American cyber space, including, as you suggest, the majority of American cyber space, which is privately owned.

There was an encouraging meeting a couple of weeks ago which was convened by the two leaders, Senator Reid, Senator McConnell, the chairs, and ranking members of the relevant committees. We're on a course now to try to get legislation, before the Senate by the end of the spring. I appreciate what you've said.

I thank you both for your service. Admiral Stavridis, let me just come back to where we are in Libya now and the role of NATO. Your description of the line of authority was very helpful because now that the United States is turning over authority to NATO, it's very important for us to understand what NATO is. I'm glad NATO's involved, of course, because what's happening in Libya is not just a concern for America or a threat to America, it's a concern to most of the rest of the civilized world. Therefore it's very important that NATO and our allies in the Arab world be involved.

When the United States turns responsibility over to NATO, it's not like we're taking a hot potato and throwing it to somebody else. We're NATO. Not all of it is NATO, but we're at the heart of NATO. We're most of NATO. We have great allies with us there.

Just to go over this quickly, three missions are now moving to NATO control. The arms embargo, am I correct that that is now being overseen by an Italian officer?

Admiral STAVRIDIS. Yes, sir. Just to add to what I said earlier, there's an Italian three-star in Naples.

Senator LIEBERMAN. Right.

Admiral STAVRIDIS. Who has command of the maritime piece of this.

Senator LIEBERMAN. Okay.

Admiral STAVRIDIS. Then there's a Canadian three-star who is the joint task force commander, and the air piece of it will actually be run out of Turkey, out of Ismir, Turkey, by a NATO headquarters there, which has a U.S. three-star and a French three-star. You have Italian, French, Canadian, and American all in the chain of command.

Just to put a metric on it, of the 40 flag and general officers that are involved in this whole thing, only 5 of them will be American as we move forward.

Senator LIEBERMAN. The civilian protection mission, who's that under now?

Admiral STAVRIDIS. That's under Lieutenant General Bouchard.

Senator LIEBERMAN. The Canadian.

Admiral STAVRIDIS. The joint task force commander, executing through the other two officers I mentioned.

Senator LIEBERMAN. Let's follow that chain up. Who do they report to?

Admiral STAVRIDIS. They report to the NATO joint force commander, Naples, who is an American four-star, Sam Locklear, who was also the commander of the Joint Task Force Odyssey Dawn, which was the Libyan operation. There's good continuity in that as he fits in both of those operations.

Senator LIEBERMAN. We have continuity and another American officer there. Then does he report directly to you?

Admiral STAVRIDIS. He does.

Senator LIEBERMAN. You're a distinguished American Admiral and we're proud of you and thank you for your service.

Then you report to the NAC.

Admiral STAVRIDIS. I do. I would add that my report goes through a military committee headed by an Italian four-star admiral, Admiral Di Paola, who is actually the senior officer in NATO. That committee takes my advice, puts a military eye on it. Admiral

Mike Mullen is the American member of that 28-person body. It's all the chiefs of defense, we would say all the chairmen of the joint chiefs. Then the advice goes to the NAC.

Senator LIEBERMAN. Am I right that the NAC gives you, if I might put it in the term, general authority, but does it not have to approve every mission that you carry out?

Admiral STAVRIDIS. Yes.

Senator LIEBERMAN. For instance, if Qadhafi's forces are surrounding a town in Libya, you don't have to go back to the NAC to get approval in terms of protecting civilians?

Admiral STAVRIDIS. Correct.

Senator LIEBERMAN. Okay. I appreciate that.

Again I make the point that having NATO involved is critically important, for all the reasons the President said last night, but it's not like the U.S. is not involved. We're very centrally involved, and we should be.

Admiral STAVRIDIS. Yes, sir. Again, that chain of command that I just described is not dissimilar to the one that we used in Afghanistan from a NATO perspective.

Senator LIEBERMAN. Exactly.

We have taken a very forward-leaning understanding on the part of the U.N. resolution that talks about "all necessary measures" to protect the Libyan civilians, it's the right thing to do. Based on the U.N. mandate, we have effectively conducted a campaign of air strikes against Qadhafi's forces. This has not only protected civilians, but also paved the way, as General Carter Ham said yesterday for the rebels, freedom fighters, in Libya to advance.

I wanted to ask you whether you're confident that NATO is united in its interpretation of the civilian protection mission going forward, that there will not be a diminution of that mission in the days and weeks ahead with NATO in control?

Admiral STAVRIDIS. Sir, I'm confident I have the rules of engagement that I need to continue the campaign in the manner to which it's been conducted.

Senator LIEBERMAN. I want to ask you a final question. My time is running out. We're under grave budgetary pressure and there are already calls from some quarters to reduce the U.S. military footprint in the EUCOM area of responsibility. I'm struck by the fact that what's happening in Libya makes the argument for the continued importance of our military footprint in Europe and how its enabled our operations in North Africa.

I wanted to ask you if you'd just take a moment to respond to the point that's made that, World War II is long over, the Cold War is over; what the heck are we still doing in Europe?

Admiral STAVRIDIS. Senator, I always like to start answering that question by just putting some context to it. If we could, let's go back to the end of the Cold War, when there were 400,000 soldiers, sailors, airmen, marines, and 1,400 bases and sites around Europe. That was a big, muscular operation. We've now reduced that by about 75 percent. We're down to about 80,000 U.S. troops in Europe. We've come down to 17 main operating bases. We still have lots of little outlying sites, but we've reduced that overall footprint by 75 percent.

The European platform permits us to reassure allies, to deter and conduct military operations, as we're doing today in Afghanistan and in Libya. It also provides support for training and building of partnership capacity. Those are all vital functions.

I'm comfortable that we can take a little bit more out of that, a little bit more efficiency. We've looked very hard at that over the last year and we're very close to a decision that I think will make some minor reductions in EUCOM. Overall, we've seen the real value of this European footprint and I applaud the wisdom of Congress, which has supported it, for the four reasons I mentioned, it's a very valuable one for us.

Senator LIEBERMAN. Thank you, Admiral, and thank you, General.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

Most of the questions on Libya have been asked and I suspected that would be the case. But there's one other one that's a little bit sensitive, but somebody has to say it. There have been several reports about the presence of al Qaeda among the rebels, among those with whom we are associated. What are your thoughts about that?

Admiral STAVRIDIS. Sir, as you can imagine, we're examining very closely the content, composition, and the personalities, of the leaders in these opposition forces. The intelligence that I'm receiving at this point makes me feel that the leadership that I'm seeing are responsible men and women who are struggling against Colonel Qadhafi.

We have seen flickers in intelligence of potential al Qaeda, Hezbollah. We've seen different things. At this point I don't have detail sufficient to say that there's a significant al Qaeda presence or any other terrorist presence in and among these folks. We'll continue to look at that very closely as part of doing due diligence as we move forward on any kind of relationship.

Senator INHOFE. I don't say this critically of you, of course, because you didn't make this decision. Wouldn't that have been a good idea to find out before we took some of the steps that we're taking?

Admiral STAVRIDIS. From the moment this crisis has unfolded, there has been a great deal of intelligence applied to this, although General Ham as the AFRICOM commander would be in the best position to give you the details on that.

Senator INHOFE. I was planning on talking to him.

Let me carry on a little bit from what Senator Lieberman was saying. I was going to approach it from a little different perspective. Back in the 1990s, it was actually Jim Jones at the time was talking about the reduction of our presence, installations, and personnel in Western Europe. At that time one of the reasons was, this was particularly true in Germany, a lot of the problems existed at that time with the environmental movement, they were somewhat restricted in what our capabilities were going to be in terms of how many hours we can train, how many days a week, after hours, and that type of thing. That was one of the considerations at that time.

I'd like to ask you, first of all, has that changed? Second, I have another question to ask about our presence there.

Admiral STAVRIDIS. I would say that in my 2 years, roughly, as the commander of EUCOM, I have not felt any restrictions on my ability to do the kind of training maneuvers in Germany or in any of the other countries. In fact, Germany hosts Grafenwoehr and Hohenfels. I think you visited there, sir, our big training center there, probably a premier training facility. We've put 14,000 people there in the last year.

Senator INHOFE. A lot of that was before you arrived at that position.

Admiral STAVRIDIS. It was, sir.

Senator INHOFE. At that time I actually went over to Eastern Europe, Bulgaria, and Romania, places where they wanted us to come over and were willing to give us 24–7 and also do a lot of the billeting and other things. I just wondered where that was now.

Let me ask you this. There's a lot of criticism since the downgrade. I was shocked when I read your written testimony and found that it was down 80 percent from where it was in the 1990s. I didn't realize that. That being the case, there's still some military construction (MILCON) that is going on there, and I know a lot of people are critical of that. There are some parochial reasons for that back here also.

With that being the case, could you talk about any consolidation that's taking place that is going to justify any MILCON and how that works in our current position?

Admiral STAVRIDIS. Sir, we are doing a great deal to search for these efficiencies to consolidate our footprint and have been doing so over the last 5 years. In fact, I'm testifying in front of the MILCON subcommittee and will have a chance to lay that out. We have a reasonable plan that strikes a balance between what we need to do to support our families in Europe as well as maintain the headquarters that's undertaking the operations we're seeing today.

Senator INHOFE. Okay. I'm sure you will get asked a lot of questions about that when you are before the Appropriations subcommittee.

There are some 20 State partnership programs going on right now. I know that my State of Oklahoma has Azerbaijan. They have all kinds of good reports, but I'm wondering how you see it when you're looking at the whole thing. Is it time and resources well spent with our Guard activities?

Admiral STAVRIDIS. Sir, it is. We have 22 of these programs around. The one from Oklahoma, for example, does everything from prosaic military training, police training, to oil field training. We try to match up the State with the country. The presence, for example, of the Oklahoma State partnership program has been very helpful in Azerbaijan in maintaining our access through our transit routes because of the strong military-to-military relationship.

Multiply that by 22 all around Europe and you can see the bang for the buck here is really quite significant.

Senator INHOFE. That's good. That's what I'm getting from our people there, so I assumed that that was the case.

I just came back from spending some time in Israel and talked to Prime Minister Netanyahu for some length. His first comment was "Welcome to the earthquake" when we got over there. When you stop and think about it, everywhere over there, we've been talking about Libya, but you have Iran, Syria, and Egypt. Israel is our only one great friend there. Do you think we're doing enough to ensure the defense of Israel? Any comments you could make on that?

Admiral STAVRIDIS. I had the same conversation a week ago with Lieutenant General Benny Ganz, who is the chief of defense, the chairman of the joint chiefs, if you will, of Israel. We talked about the whole region. I think Israel is watching very closely these events on their periphery, as they should be.

Part of our job is to reassure them and continue to engage with them. From EUCOM, we're doing that across everything from missile defense, weapons systems, training, to intelligence exchanges. It's a good time for all of us to recognize exactly what you said, that Israel is in the middle of an earthquake zone, and from a military-to-military perspective we're working very closely with them.

Senator INHOFE. I was going to get into a couple other programs that I know you're enthusiastically supporting and have in the past, like the train and equip program, the Commanders Emergency Response Program, and Combatant Commanders Initiative Fund. Let me just mention, if there's no time to answer this, General, my concern has been, back when we took out the plans for a ground-based interceptor in Poland, with the necessary radar in the Czech Republic, by the time we would receive the same capability we were looking at a program that's not definite in terms of when it will come along.

What I'm talking about is the Standard Missile-3 (SM–3) Block 2B, the long-range program. Right now we don't have a date. It's still a concept. My feeling is that the others, like the SM–3 Block 2A and other programs, are good, they're coming along. We have the Aegis capability and all of that. For the record, since my time has expired, I'd like to have you share with me whether you share my concern over the fact that we would have had in my opinion that capability much sooner? When our intelligence gives us a range that Iran's going to have this capability that we all dread thinking about, somewhere between 2015 and 2020, to me that's what keeps me up at night. If you could for the record get into as much detail on that as possible, I would appreciate it.

General KEHLER. Sir, I'll provide that for the record.

[The information referred to follows:]

The European Phased Adaptive Approach is the right strategy for fielding an effective Ballistic Missile Defense System (BMDS) in Europe. Today's Ground-based Midcourse Defense, as part of a layered defense is protecting our Homeland from a limited intercontinental ballistic missile attack. We have the ability to stay ahead of the North Korean and Iranian threat with our overall BMDS plan. Even so, we are working closely with Missile Defense Agency and Office of the Under Secretary of Defense for Policy to ensure we have an adequate hedge strategy should our acquisition/deployment plan experience delays or emerging threat materializes sooner than predicted.

Senator INHOFE. Thank you very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Inhofe.

Senator Reed.

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

Gentlemen, thank you for your service and your testimony today. Admiral Stavridis, the President has quite rightly ruled out any ground forces entering Libya from the United States. At least looking ahead, there is the possibility that through many possible outcomes, the Qadhafi regime departing swiftly or rebels ejecting it, that there would be a need for some stabilization on the ground. Is that something that NATO is considering?

Admiral STAVRIDIS. Sir, I wouldn't say NATO's considering it yet. When you look at the history of NATO, having gone through this, as many on this committee have, with Bosnia and Kosovo, it's quite clear that the possibility of a stabilization regime exists. I have not heard any discussion about it yet, but that history is on everybody's mind as we look at the events in Libya.

Senator REED. These events are moving fast.

Admiral STAVRIDIS. I understand.

Senator REED. Let me ask another question which is related. As you pointed out in your opening testimony, a significant number of forces in Afghanistan are NATO forces or European allies. What effect, if any, has the current operation in Libya had on their ability to maintain their presence in Afghanistan?

Admiral STAVRIDIS. As I was saying to someone the other day, if you can be lucky in terms of how a crisis unfolds, one aspect of the Libyan crisis is that the types of forces, ships and aircraft principally, are the forces that are not in such high demand in Afghanistan. Afghanistan is a landlocked state, where the Taliban have no air capability. In that sense I'm confident that we'll be able to move forward and keep the resource balance both ways.

Again, I do want to say that the allies have been very forthcoming with ships and aircraft, as I pointed out in talking to the chairman, and I'm confident we'll have the forces we need to do this in both places.

Senator REED. I'm sure you once again want to, for the benefit of Senator Lieberman and I, point out the decisive role of submarines in conducting this operation.

Admiral STAVRIDIS. Senator Lieberman will be happy to hear that there are submarines involved in this, and they are part of the NATO force that is doing the arms embargo and are a stated requirement.

Senator REED. Also delivering land attack missiles.

Admiral STAVRIDIS. Indeed they are, 90 of them from U.S. submarines, for example.

Senator REED. Thank you.

I want to open this question up to General Kehler also, to talk about the emerging cyber dimension in warfare and our lack of preparedness. Senator McCain referred to it in his comments, and General Alexander's comments also. From your perspective as the NATO commander, Supreme Allied Commander in Europe, and yours from STRATCOM, General? I'll start with Admiral Stavridis.

Admiral STAVRIDIS. Thank you, sir. From a NATO perspective we're very aware of this. It's part of our strategic concept which just came out. NATO has two organizations that focus on this. One is the NATO Cyber Defense Center, appropriately, in Talinn, Esto-

nia, a nation that has suffered a cyber attack, and also the NATO Computer Incident Response Organization, which is part of my organization in the SHAPE headquarters.

Those two together work with General Alexander, and I would conclude by saying we are also pushing to engage with the European private sector. Just as General Kehler said a moment ago, this private-public nexus is so important in the world of cyber, and we're working very hard to engage the European private sector through the NATO piece, so that we can then connect with U.S. efforts through Keith Alexander and up to his boss, General Kehler.

Senator REED. Can I just follow up? You just appointed a special assistant for public-private partnerships. Is this the whole range of public-private partnerships?

Admiral STAVRIDIS. Exactly. I believe, Senator, that we have learned how to do joint operations. We are getting much better at interagency operations. A growth area in security is the private-public sector where those two things connect, and cyber is probably the prime example of it at this moment.

Senator REED. Are there any other commander in chiefs that are doing what you are doing?

Admiral STAVRIDIS. We're sharing that idea now and there's general interest in it, sir.

Senator REED. Thank you.

General Kehler, please. Any comments would be helpful?

General KEHLER. Senator, I would just add that you've hit on a key aspect here with the public-private partnership activity. Certainly here is a domain that is largely in the public domain. I don't think we have much of a challenge any longer convincing people how important cyber security is.

What we see here is a threat that is evolving from everything from the old nuisance hackers, the 13-year-old in the basement down the street, to exploitation, where people deliberately come in and steal things through cyberspace from the networks, to denial of services or other activities, to perhaps a place where they will go to destructive activities.

In every one of those cases, as you look at defining the role of government, the role of DOD, the role of private industry and others, the issue that is foremost on our plate these days, is making sure that we have put in place the right relationships, roles, responsibilities, and in some cases making sure that we have the right authorities, so that we can act at what our cyber experts would call network speed, which is a very tough challenge for us.

Most of the frustration that many of us have is that it seems like we're always closing the barn door after the horse is gone. We have to be in a position here where we can do better in terms of protecting ourselves. We've done a lot over the last couple of years to get DOD in a better place. It will not happen overnight. We started with this disparate collection of networks that we are trying to make behave as one network for DOD. That in and of itself is a challenge. But we are making some progress here.

The next steps that we have to take, though, is to have better situational awareness. That's a shared responsibility between the combatant commands, and broader than that, out into the public domain as well. We have to have better capacity and that gets to

our ability to recruit, train, and retain the right cyber experts. Then of course it gets to the authorities question, so that we have properly sorted out this balance between our constitutional protections and our need to act on behalf of the Nation, of course with the appropriate civil authorities in the lead.

Those are the challenges that we have today. Those are being worked very hard in many places. I'm confident that we're making progress, but we will return to all of you, as I was asked to do earlier today, with some specific suggestions.

Senator REED. My time has expired, but just a final comment. You may get back to me or just make it in a round of questioning. We've become so dependent on things like Global Positioning Systems (GPS). Do we ever train at NATO or at STRATCOM off-line, with a compass, which is a very challenging device, I can attest to. GPS is a lot easier—or, in a concept of installations, redundancy? That is, old systems that in an emergency you can get off line and use them?

My focal point would be, if a natural disaster can wreak the havoc in Japan, someone messing with their control systems electronically could produce the same catastrophic effect. We're at the verge of a whole new dimension in warfare, and I'm glad that you gentlemen are thinking thoughtfully about these issues. Thank you.

Chairman LEVIN. Senator Reed has raised such an important question. Would you get back to us on that issue, on the redundancy and the backups, including some of the old-fashioned types, in case our more modern technology are interfered with? Could you get back to the committee on that issue?

[The information referred to follows:]

General KEHLER. Senator, U.S. Strategic Command (STRATCOM) has established backup or alternate command centers capable of quickly assuming command and control of STRATCOM forces and ensuring continuity of our most critical mission functions should the primary command center be degraded or rendered inoperable. Additionally, STRATCOM component commands are dispersed throughout the country, which provides immediate redundancy of vital command and control functions for critical mission sets. All STRATCOM fixed and mobile command and control centers maintain a diverse range of satellite, high-bandwidth terrestrial fiber, and radio communication capabilities. The STRATCOM staff regularly trains with these systems so we understand the vulnerabilities and how to work around the loss of systems. When communications are too badly degraded, alternate facilities are trained to assume command of STRATCOM missions. STRATCOM conducts over 250 restricted or degraded communication exercises a year. We go to great lengths to ensure we can minimize the impact of any communications degradation.

As the command continues planning for construction of its new headquarters building, well-considered redundancies and backup systems will be incorporated to further reduce the risk to positive command and control.

Admiral STAVRIDIS. The U.S. European Command (EUCOM) Joint Operations Center (JOC) maintains a fully redundant and active facility at Kelley Barracks in Stuttgart, Germany. At this location, we maintain laptop workstations for all JOC positions. We also have Secret Internet Protocol Router Network (SIPRNET), Nonclassified (Unclassified but Sensitive) Internet Protocol Router Network, Secure Terminal Equipment (STE) voice communications, and Secure Video Teleconferencing (SVTC) capabilities. We monitor and upload roaming profiles for positional accounts and conduct operational checks on a weekly basis. In the event of a total loss of SIPRNET, the JOC will operate on a separate domain from EUCOM.

The North Atlantic Treaty Organization (NATO) has sufficient hardened and nonhardened headquarters installations spread over the territory of its member states. These command and control facilities are well connected to NATO, as well as national networks. Therefore a loss of effective command and control is highly un-

likely. The main and the alternate NATO network control centers are implemented in facilities protected against nuclear, chemical, and biological threats.

General KEHLER. Will do. The short answer is we're not as good as we need to be, but we are working on it.

Admiral STAVRIDIS. If I could add, this is an area in which coalitions are helpful, because many of our allies aren't at the same level of technical capability and we get a window into other ways of doing business. I will provide an answer as well, sir.

Chairman LEVIN. For the record, thank you.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman.

I'm just wondering if you both could comment on the level of disruption, if any, on those under your command caused by the continuing resolutions (CR) that we're dealing with?

Admiral STAVRIDIS. I'll start. Our principal concern at this point is twofold. One is the start of military construction projects. That's becoming more and more of an issue for us. Second there's a psychological overhang that is disruptive to the troops, although they know their pay and their essential services will continue, many of the functionalities that support them are vested with our civilian workforce, and that would be problematic as well. Those would be two things I would point to.

General KEHLER. I'll pick up on that, Senator, in that, first of all, we're in this interesting time period now where many of the combatant command headquarters are becoming over 50 percent civilian workforce. Civilians are concerned about what will happen here, will there be a government shutdown, and how this will impact them, I share their concern.

Second, I'm also concerned about some issues that are outside DOD's budget. Specifically what I'm interested in is making sure that we continue the investment plans that were laid down for the National Nuclear Security Agency because of the work that they are doing for us regarding the stockpile, and the anticipation that we have that they will need to provide additional investment so that we can restore the stockpile as we go forward and do the appropriate life extension programs.

I'm concerned about those two things and have been somewhat reassured that in the stockpile work I believe that we are okay to continue as it is. I am concerned as long as the CR process is going on, that those two things are okay.

Senator BROWN. I can tell you just for the record, and based on my personal dealings with our caucuses, no Republican is talking about shutting down the government. We're hopeful that we can come together and continue to not only address our budgetary concerns to move our country forward and give you the stability you need. I'm going to continue to work in that regard.

General Kehler, is it true that, and I believe it is, that the cyber attacks are growing? As we talked about for 17 minutes last April, DOD networks along with other government networks, were routed through China; is that accurate?

General KEHLER. Senator, I'll have to get back to you on that. That one doesn't jump into my mind, but let me find out and I'll get back to you.

Senator BROWN. If you could actually, because that has a great concern to me and many others. I know when you came before us and we confirmed you that was one of your concerns, was dealing with the cyber security and people, whether it's the everyday young hacker or established terrorist cells trying to gain access to vital security information.

I concur with the chairman. If there's something that you need that you don't have, I'd like to know about it. You talked about being reactive versus proactive, I, for one, would like to be very proactive.

General KEHLER. Sir, if I could, though, just add a point. I'll check and make sure that I understand the issue that you're asking about. However, having said that, one thing about the global Internet is that it's global, and the pathways that information takes through that Internet are sometimes interesting.

Having said that, though, for our critical information in DOD we take great care to make sure that that information is properly protected. We have, again, more work to do, but I don't want you to think that we're not taking steps to make sure that that information is protected.

[The information referred to follows:]

Senator, as noted in Director of National Intelligence Clapper's statement to the House Permanent Select Committee on Intelligence, it is accurate that in April 2010 a large number of routing paths to various Internet Protocol addresses were redirected through networks in China. This redirection was the result of a small Chinese network provider improperly asserting routing responsibility for over 50,000 networks from over 170 countries. This diversion of data affected traffic to and from U.S. Government and military sites, including sites for the Senate, Army, Navy, Marine Corps, Air Force, and the Office of the Secretary of Defense, as well as a number of Fortune 500 companies for approximately 18 minutes. Given the significant number of Internet protocol addresses, routing paths and network providers this type of occurrence is not unusual and is often attributed as accidental as a result of a single mistyped numerical digit. However, this incident highlights the fragile nature of the global Internet infrastructure and the potential capability of top-level Internet service providers to disrupt or degrade connectivity. In these cases and during the event last April, DOD network operators immediately identified the erroneous routing and remedied the routing path. The Internet's core protocols are susceptible to accidental and illicit modifications that could result in eavesdropping or wide-spread outages. Cooperative global research, development, and implementation of secure, robust, and resilient Internet protocols is necessary to ensure the stability and integrity of the Internet into the future.

Senator BROWN. No, I wouldn't think that. Thank you.

Admiral, I, like many others, have been wrestling with our involvement in Libya. On the one hand, I understand the need to protect innocent civilians and you draw a line in the sand when you recognize that enough is enough. I'm also wrestling with, and I've been asked the question, who's next? Under what circumstances do we do the same thing with other countries that are facing very similar circumstances? Are we now going to be the northern light for the entire region, to be there to address every concern of every country?

That's my first question, if you could comment on it. Do you have any thoughts on that?

Admiral STAVRIDIS. Senator, the President in his speech last night addressed that concern and did it very well, and the policy level at which a decision like that would be made is in the execu-

tive branch with the President, the Secretary of Defense, and the Secretary of State.

Obviously, at my level, my job is to provide options from a military context and then, when given a military mission, execute it. Our current mission, as we've talked about, is everything from the humanitarian, the arms embargo, the no-fly zone, and protecting the population. I'm comfortable with the mission I've been given. We're executing that. If and when there are decisions about other conflicts, then certainly we'll be prepared to do that.

Senator BROWN. I appreciate the job you're doing, and when they say jump, you say how far, I understand that. I, like many others, are concerned if there is a next incident.

Is it true that we have been flying virtually all of the military aircraft sorties into the region over the last couple of days?

Admiral STAVRIDIS. No, sir. I can give you just a rough idea of the numbers.

Senator BROWN. If you could, that would be great.

Admiral STAVRIDIS. Sure. We have flown the majority. In very round numbers, out of 1,600 sorties the United States has flown 980 of them. We've probably flown 60 percent of the sorties. As we now get NATO into the picture, you'll see that U.S. percentage go down significantly and you'll see the allied component of it go up.

For ballpark purposes, about 60 to 40 U.S.-allied. Just to give you one other number, if you don't mind, the actual strike sorties, the bomb dropping, we're roughly 50 to 50 U.S. and allied. The allied contribution has been reasonable and it'll increase a bit as we get NATO more involved.

Senator BROWN. In terms of submarines, Tomahawks, et cetera, we're the only ones.

Admiral STAVRIDIS. In terms of Tomahawk missiles, those were virtually all from the United States. There were a handful from the Brits, but for all intents and purposes the Tomahawks were a U.S. mission with a little bit of help from the Brits.

Senator BROWN. What's the cost per Tomahawk?

Admiral STAVRIDIS. I'll find out and get back to you, but I want to say $1.5 million.

[The information referred to follows:]

Each Tomahawk missile costs $1.5 million.

Senator BROWN. That's my understanding as well. How many did we drop?

Admiral STAVRIDIS. Two hundred.

Senator BROWN. That's some real numbers. I'm concerned about when we get into these conflicts. Here we are, we're wrestling with cutting billions and we're dropping billions on the other hand. Like I said, who's next, what's next? I'm a little concerned as to where we're going from here, but I'll deal with that in other measures.

I do appreciate you coming. I always find these very helpful to understand the whole picture better. Thank you.

Admiral STAVRIDIS. Thank you, sir.

Chairman LEVIN. Thank you, Senator Brown.

Senator Manchin.

Senator MANCHIN. Admiral, General, thank you so much, first of all, for being here and thank you for your service. I can tell you,

I've met the finest that America has to offer and they're in DOD, the Services, and all of our military.

Do you plan, either one of you can answer, to ask for supplemental appropriations from DOD or Congress to support the Libyan operations?

Admiral STAVRIDIS. Sir, a decision like that would come from the Secretary of Defense or elsewhere in the administration. That would not be something a combatant commander would precipitate.

Senator MANCHIN. Total cost has been quite high, as far as I know as Senator Brown just mentioned it, and we're all concerned about that, because we're going to be making some difficult decisions here, and the cost that we're spending elsewhere is concerning. The first week was approximately $600 million-plus?

Admiral STAVRIDIS. Sir, again I'm probably not the right person to give you a set of numbers. It's fair to say that the operation will be in the range of hundreds of millions of dollars. I'm not the right person to ask. I can certainly convey that to DOD and get you the right number.

Senator MANCHIN. Do you have an estimation on a timetable of how long you think we'll be there?

Admiral STAVRIDIS. Sir, it's very difficult to ascertain that.

Senator MANCHIN. Okay. Do you believe that any part of the coalition expects to put ground troops in Libya, or are there ground troops in Libya now?

Admiral STAVRIDIS. Sir, there are no ground troops in Libya now to my knowledge.

Senator MANCHIN. By any of the coalition or NATO?

Admiral STAVRIDIS. Not to my knowledge. I have heard no discussion of doing so at this point.

Senator MANCHIN. You don't know of any of the coalition planning on having ground forces? We've said that we will not put American troops on the ground in Libya.

Admiral STAVRIDIS. Right.

Senator MANCHIN. Is that still correct?

Admiral STAVRIDIS. It is correct, and it is also correct that in the conversations around NATO over the last number of weeks, as this was debated, there was no discussion of the insertion of ground troops by any other partner.

Senator MANCHIN. To both of you, General, maybe you can start this one off, why do you believe that the image of the United States is so poor in the Middle East? With all that we try to do and all the good that we try to do, why has the image of our country been so poorly received and is at all-time lows as I understand?

General KEHLER. Sir, I can't really speculate on why that is.

Senator MANCHIN. You've seen the polls. You know what's going on, right?

General KEHLER. I've certainly seen the press reporting that asserts that.

Senator MANCHIN. Okay.

General KEHLER. It's very difficult for me, not having responsibility for that region, to be looking at that information every day and having my own opinion on why that might be.

Senator MANCHIN. We have everybody's opinion that comes and everybody has a little different take on this. The bottom line is, as

I've always said, when you're an unwelcome visitor, you usually leave. We don't seem to be a welcome visitor or a welcome neighbor, if you will, to the Arab League, even though they might want us for certain areas. We don't seem to have the support of the people.

I can't figure that out. We're here trying to liberate. The greatest country in the world is the United States of America. We're the most generous country. For some reason, in the Middle East that doesn't transcend. I don't know if it's something that we're doing wrong from a military end of it or from our policy end.

Do you have any comment on that whatsoever, what we could do to improve our image?

Admiral STAVRIDIS. I would say, as to why the United States is challenged in parts of the Middle East, has to do with our overall operations in Iraq and Afghanistan, both Muslim countries which by and large have not been popular in that part of the world, our relationship with Israel, which is at odds with many of these Muslim states; and it's important, however, to make the point that we do enjoy positive relations with many of the Arab nations, certainly at the military-to-military level.

If I could, I'll give you two concrete examples of that. Both stem from my experience in NATO. One is the NATO engagement that's called the Mediterranean Dialogue, which its partners are Morocco, Tunisia, Egypt, Algeria, as well as Israel. It's possible by working diligently and finding zones of cooperation to improve these sort of relationships.

The other place I would mention from a NATO perspective and also an area in which the United States has good relations with Muslim countries would be in the Gulf, where the Istanbul Cooperative Initiative of NATO counts among its members essentially all of the Gulf states there. Of course, in the coalition that we're undertaking today, Senator, we enjoy the support of the UAEs and Qatar, both of whom are flying actual missions as part of this.

Your point is well taken, that we need to work on this, but all is not lost. I'd close by saying we enjoy a very positive relationship with a very prominent Muslim nation and that is Turkey, who is a member of NATO, is involved in this coalition with us, and is in Afghanistan with us. It's very possible to have very positive relations with——

Senator MANCHIN. Our relations are pretty poor, right? I mean, as far as the image of the United States being in the Middle East from the citizens of the Middle East?

Admiral STAVRIDIS. That's a fair statement, yes, sir.

Senator MANCHIN. Let me ask another question I have. You were talking about the rules of engagement, which I took to understand that we're able to engage whenever we think there is any threat or harm to American troops or the American mission. So you feel free to use the rules of engagement apply in Libya?

Admiral STAVRIDIS. Yes, sir, they will along those lines, as well as rules of engagement that permit everything from stopping ships that we think are bringing weapons in, to stopping Qadhafi's forces if they are attacking the population or demonstrating an intent to.

Senator MANCHIN. What about the rules of engagement in the Afghanistan war, in the Pakistan mountains, where the Taliban

and al Qaeda are, that we know of? You don't have the same green light on the rules of engagement there as you do in Libya?

Admiral STAVRIDIS. The rules of engagement in Pakistan are fundamentally different, yes, sir, from the rules of engagement that are in place in the Libyan campaign.

Senator MANCHIN. When we know that there's harm being orchestrated, being directed, we can't do a thing about it?

Admiral STAVRIDIS. General Petraeus addressed this when he was here last week, and he would tell you that he's in constant dialogue with his counterparts across the Pakistani border, notably General Kayani of Pakistan, to try and work on these cross-border issues.

Senator MANCHIN. Thank you. I know that Chairman Levin has been getting some information on that, and if we could just be kept up on the cost on a weekly basis of what we're incurring as far as the U.S. military, would that be a fair question?

Chairman LEVIN. It's a fair question and we can ask that directly of DOD if you'd prefer.

Admiral STAVRIDIS. That would probably be the best—that's going to be the best source, rather than feeding it through me, sir.

Senator MANCHIN. Mr. Chairman, if you will do that I'd appreciate it very much, and if we can keep the committee updated on what the cost to the American people for that support would be.

Thank you, sir.

Chairman LEVIN. Senator Manchin has made a really good effort to ascertain these costs. I've tried the best I could to get some information, but it's slow in coming, and he's right in asking for it. We will ask the right people in DOD to promptly give us a cost estimate as up to date and then a week-by-week estimate as well. Thank you for pressing that, Senator Manchin.

Senator Ayotte is next.

Senator AYOTTE. Thank you, Mr. Chairman.

Thank you, Admiral and General, for your service to our country. Again, pass on our gratitude to the troops that serve underneath you for the important work and the sacrifices that they're making for us.

I notice you described, Admiral, the mission in Libya. How do we define success in Libya?

Admiral STAVRIDIS. The military mission that I am given and under which I am operating at the moment has some clear metrics associated with it. Let's take the arms embargo, for example. It would be zero penetration of Libya with arms coming to resupply Colonel Qadhafi, for example.

In terms of protecting the population, our metric would be, is the population safe, are the civilians under attack? What we would want to establish over time is a situation, which we would call in the NATO context, a safe and secure environment for the population.

In terms of the no-fly zone, the metric's obvious. It's no flying by any of the military aircraft or any other aircraft without authorization from NATO.

In terms of the humanitarian mission we've been assigned, it's numbers of refugees, are they receiving the care, and so on.

That's the military mission we've been given, and we have some reasonable metrics that will apply as we go forward to make sure that we meet those for policymakers.

Senator AYOTTE. I certainly understand and appreciate those metrics. My question is getting at overall, what's our objective? How do we measure successes in Libya? Meaning, if we have Qadhafi in power and he decides to wait us out, one of the concerns I have is, what's our strategy if that's the outcome?

Admiral STAVRIDIS. If you look at what's happening today again in London, where 40 nations are coming together to discuss this, virtually every nation's leader has spoken to the desirability of the departure of Colonel Qadhafi. How the international community arrives at that will be a combination of the work that's being done in a military context by and under the auspices of the U.N. Security Council resolution and NATO, coupled with the economic sanctions, the financial control of assets and Libyan goods that are outside the travel restrictions.

By putting that cumulative pressure on the regime in Libya, you have the best chance of achieving what the heads of state have indicated they desire.

Senator AYOTTE. Don't you think it will be difficult without some type of military involvement to get a man like Qadhafi to go?

Admiral STAVRIDIS. It's hard to say. When you look historically at different leaders, sometimes they stay, they fight, and they die, and sometimes they crack, give up, and they leave the country. There's a wide spectrum of what could happen going forward.

It is clear that the international community, as indicated by the statements of the leaders of so many different countries, that it's time for Colonel Qadhafi to leave.

Senator AYOTTE. I'd like to follow up on a question that Senator Inhofe asked you about, and that's the relationship or information relationship between al Qaeda and the rebels in Libya. There was open source reporting earlier this week that al Qaeda affiliates in North Africa may have stolen surface-to-air missiles from an arsenal in Libya recently. Can you tell us about that incident? Also what does that say, if anything, about the relationship between the rebels and al Qaeda affiliates?

Admiral STAVRIDIS. I'd like to take that question for the record and come back to you, so I can give it the full benefit of a classified response. That would probably be the appropriate way to tackle that one.

Senator AYOTTE. Thank you. I appreciate that, and appreciate that some of that information might need to be classified. But I think it's a very important question for us to understand in this committee.

[The information referred to follows:]

[Deleted.]

Senator AYOTTE. I'd also like to ask you about, overall with your command, the command of the European forces, to be a member of NATO we've asked each member of NATO to commit at least 2 percent of their gross domestic product (GDP) toward military spending.

Admiral STAVRIDIS. Right.

Senator AYOTTE. Yet not all members of NATO are committing 2 percent of their GDP to military spending.

Admiral STAVRIDIS. That's correct.

Senator AYOTTE. In fact, what we're seeing is even our strongest allies, for example the United Kingdom and France, are dealing with the same budgetary pressures that we're dealing with here in the United States. How do you believe that that's going to impact NATO? Also, given the fact that we're relying substantially on NATO for our involvement in Libya right now, with people withdrawing from their commitment in terms of percentage that they're willing to spend on military spending, how do you think that that will impact our readiness, A, going forward, and B, in particular this conflict in Libya?

Admiral STAVRIDIS. Let me give you the good news and the bad news. The good news about NATO is that it's a resource-rich alliance. The GDP of NATO is about $32 trillion. It's about twice the GDP of the United States. The GDP of NATO is about half that of the world's GDP. The good news is there are resources there to meet these commitments, in my belief.

The bad news is, Senator, and as you just pointed out, our allies in many cases are not committing even the minimum 2 percent. I am concerned about that as I look at the future of the alliance, where some members are meeting that commitment and others are failing to do so. It is incumbent upon nations like ours, that are meeting the commitment, and our leaders, to continue to make this point. I thank you for asking me about it. It's something I talk to all of the uniformed military members about constantly. It is very concerning.

In terms of will it get better, we all hope that as we emerge from this series of global economic concerns that there will be a rise in the economy and there will be more breathing space. In the immediate future, I agree with you, it's extremely concerning and we should continue to talk, encourage, and pressure our allies to meet those kind of spending commitments.

Senator AYOTTE. I certainly share your concerns, particularly given the conflicts that we are leading throughout the world, that that commitment has to be the commitment that we're making. I certainly will be an advocate for that with our allies.

I see that my time is up. I just wanted to also reiterate to both of you, it's very important, to follow up on the chairman's and Senator Manchin's comments, that this committee get very good information on the cost of the conflict in Libya and regular updates, given the fiscal challenges that we're facing right now in this country. Also, none of us want to see this diminish our efforts in Afghanistan.

I appreciate you both for your distinguished service to our country, and thank you very much for answering my questions today.

Admiral STAVRIDIS. Thank you, Senator.

Chairman LEVIN. Thank you, Senator Ayotte.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman, and thank you both for your extraordinary service to our Nation. Again, I join my colleagues in thanking the very courageous and dedicated men and

women who work under you in defending our Nation and its national interests.

I would like to ask a question about the health of the men and women who come to you after serving directly under your command, in conflicts in Afghanistan and Iraq, particularly as to traumatic brain injury (TBI) and post-traumatic stress disorder (PTSD), whether you consider the ongoing efforts sufficient to address their health needs in those areas?

Admiral STAVRIDIS. I'll start, Bob. I am particularly concerned about TBI because my duties with NATO bring me often to Afghanistan and also because in my EUCOM region I have a fair amount of opportunity to see all of this at Landstuhl Regional Medical Center, one of our largest military hospitals.

TBI, in particular, is something that needs more focus. I believe that we have yet to really understand the extent of the challenge we have ahead of us because of the concussive effect that many of our young men and women are undergoing. It's an area that I am focused on. My wife has focused on this as well in terms of family and family support. It can be difficult to diagnose, as you appreciate, and we are all working very hard on the challenge. It's worth highlighting TBI in particular from my experiences.

Senator BLUMENTHAL. General?

General KEHLER. Senator, I would add to that, although there aren't that many STRATCOM people forward deployed, we have a fair number of combat veterans, of course, that have returned to STRATCOM. If I may, just let me back up 60 days to when I was commanding a Service component where we were deploying a fair number of people forward all the time. I share Admiral Stavridis's concern about TBI.

I also am still concerned about PTSD. We have not yet cracked the nut here that relates PTSD and other experiences, it's not just as a result of combat, but stressors that are occurring elsewhere. The suicide rates that we are seeing, which are still far too high. As a commander, I am greatly frustrated that all of the things that we are trying, all the things that the Services are trying, still do not seem to have turned the corner for us in addressing what is far too high a suicide rate.

I remain concerned about that. I believe that the physical care that our wounded warriors receive is superb. In the visits that I've made to our hospitals and the visits that my wife makes to the hospitals in her work, like help sew adaptive clothing for those who have been wounded and all of the efforts that go on there. I am encouraged by what I see and I believe that our people from battlefield, to Landstuhl, and to the air medevac that occurs in all of that, they get magnificent care.

We haven't yet gotten to the bottom of why our suicide rates are way too high, and there is some relationship here, but it is not a sole relationship with combat or the unique stresses of combat. There are other stressors in our people that are showing themselves. We are spending a lot of time and energy trying to work on that. I know all the Service Chiefs are working on that. I know that the Secretary of Defense, the Chairman of the Joint Chiefs, and others are all equally concerned. We have more to do to take care of our people in that regard.

Senator BLUMENTHAL. I want to commend both of you for your very eloquent remarks on this issue, and particularly on the suicide issue, because I know that you and your colleagues are doing more than ever and the quality of care has improved in ways that might have been unimaginable just a few years ago. Yet in these areas of TBI, PTSD, and suicide, we still have a lot of work to do.

I would just say, I know this sentiment is shared by many of my colleagues that anything we can do to help you we would very much like to do.

Admiral STAVRIDIS. If I could just add one thought, in a sense I suppose it's a positive one. We've come a long way since Vietnam in this regard. You look back at the literature post-Vietnam—a book about this is "Achilles in Vietnam," which is an early study of PTSD and its effects. We have learned an awful lot. We are still in the discovery phase and that's an area we need to continue to learn more about.

Senator BLUMENTHAL. Thank you.

Regarding the bilateral security cooperation that you lead with Israel as a cornerstone of our larger strategic relationship in ways that are both large and small, how the Phased Adaptive Approach (PAA) concerning missile defense will be executed with regard to Israel's security and Israel's contribution to protecting Europe?

Admiral STAVRIDIS. Sir, we enjoy an extremely robust broad-spectrum relationship with Israel. But I would say our particular work in missile defense is quite strong. We have a whole series of exercises that we do. I had the chance to go a little over a year ago and see one of the major deployments of this nascent PAA set up in and around Israel. We keep ships that are engaged in that network.

I'm very confident that that's an area where we have learned a lot and that we are then going to be able to apply that in the EPAA and knit all of that together, that knowledge that we shift from our work with Israel to our work with Europe.

General Kehler may want to comment from his background. He's also very deep into missile defense.

General KEHLER. Sir, I would just echo this. The relationship with Israel actually goes beyond the operational relationship. There's a technical relationship there on missile defense as well. The Director of the Missile Defense Agency would tell you that he has a very strong relationship there. We find, as Jim Stavridis just said, that there are many positive lessons that have been learned from our relationship with Israel that can be applied elsewhere as we look at the PAA, both in Europe and elsewhere.

An important recognition that you are making here, without saying it directly, is the importance that we see to being able to counter the large proliferation of short-range and medium-range ballistic missiles that are now appearing in our theaters around the world and pose a threat to our forward-deployed troops and our allies.

Senator BLUMENTHAL. Thank you for articulating that recognition on my part better than I could have done. Thank you for your testimony here today, which has been very useful and important. Thank you.

Chairman LEVIN. Thank you very much, Senator Blumenthal.

Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

General, you mentioned how important it is to define roles and responsibilities when it comes to cyber security. I certainly agree with that statement. I want to make sure that you're aware that Senator Lieberman and I have been working on this issue for the past 2 years in the Senate Homeland Security and Governmental Affairs Committee. The fact is that in our country, 85 percent of the critical infrastructure that is at risk is in the private sector, and it is DHS that has the lead in establishing that relationship.

We are working, as the chairman mentioned, in a bipartisan way to develop a bill. We need to do so because there are an astonishing 1.8 billion attempted attacks on government computers each month. I'm not sure people realize that the volume has just escalated.

As you prepare your report for this committee with your comments and advice, I want to make sure that you're more fully aware of what is going on with the Senate Homeland Security and Governmental Affairs Committee, and we will get you information about our bill to better inform your comments.

General KEHLER. Senator, thank you. I am aware of all the hard work that's been going on there and I would appreciate whatever information we can get from that.

I would add one other point, if I may. The interesting question for us, over the whole time that we've had a U.S. military, we have carved out the appropriate relationship between the military and civil activities. That's what needs to get carved out here, is that appropriate relationship. What has driven us in an interesting direction here is the speed with which this is all emerging.

The work that you have been doing in the Homeland Security and Governmental Affairs Committee and I think the memorandum of agreement that was established between DOD and DHS is a very good start. Thank you for that offer.

Senator COLLINS. Thank you for that clarification. My concern was your earlier comments could have been interpreted as saying that DOD should take over all responsibility in this area. That would be, I think you would agree, a mistake. It would raise all sorts of civil liberties issues. I don't think that's what you were intending to convey in response to Senator McCain's question.

General KEHLER. Certainly not, and thank you for pointing that out.

Senator COLLINS. Thank you.

Admiral, I'm going to turn to some of the questions about Libya while we do have you here. Again, I do want to thank both of you for your service as well. You stated in response to a question from our chairman that it was important to have a U.N. resolution and an international coalition. Don't you think that it also would have been helpful to have a congressional resolution that specifically authorized the military strike against Libya, given that there was no national emergency on our part?

Admiral STAVRIDIS. I would defer that question to the executive branch, as in the President or the Secretary of Defense. When I commented that it was good to have a U.N. Security Council resolution, I'm talking about the military clarity that it provides in

terms of what the mission I'm supposed to do, as a military officer, is all about.

Senator COLLINS. That's certainly a fair response and the one that I thought that you would give, and understandably would give. Since you did answer the chairman's question about the desirability of the U.N. resolution, I did think it was fair to ask you that.

Let me turn to another issue. Secretary Gates stated that the action by the U.N. Security Council with respect to Libya originated with the unanimous resolution of the Arab League and also the action taken by the Gulf Cooperation Council. Now, I know that Qatar and the UAE are now participating in the coalition and providing some aircraft. The fact is that there are many Arab nations in the neighborhood with significant air assets that, to date, do not seem to be participating.

From 2001 to 2008, we provided $10 billion in Foreign Military Sales to Egypt, $10 billion to the Saudis, $2.6 billion to Turkey, and $2.4 billion to Kuwait. The Saudis have more than 200 F–15 fighters. Egypt operates more F–16s than all but three countries in the world.

I'm very concerned about the lack of Arab state participation in enforcing the no-fly zone. In fact, I believe they should have taken the lead. I realize that only the United States and a few of our allies have the capabilities to provide intelligence, coordination, and logistics. What is the reason that we're not seeing more of a contribution from Arab states in the region, particularly those that do have significant air assets?

Admiral STAVRIDIS. I'm not sure I'm qualified to walk you through nation-by-nation in terms of why an individual nation would decide to either participate fully with air strikes or to fly in the no-fly zone or to simply support the resolution in the Arab political body. I can certainly go back to General Mattis, who is the combatant commander for that region, who could really walk you through every one of them. It's a legitimate question.

What I can say, Senator, is from a NATO perspective, which is where I touch this issue, we will continue to aggressively pursue participation by the Arab states in all aspects of what we are doing. As I mentioned earlier in response to another question, we have two mechanisms for doing that in NATO, the Mediterranean Dialogue and the Istanbul Cooperative Initiative. Those are both bodies in which we can continue to move these requests forward and from a military-to-military level put pressure on them to fully participate in this.

It's a good question. I will go back and have DOD come back with a nation-by-nation breakdown to help understand it. From a NATO perspective we'll continue to push forward to get as much support as we possibly can from the other Arab states.

Senator COLLINS. Thank you.

[The information referred to follows:]

From the North Atlantic Treaty Organization (NATO) perspective, we continue to aggressively pursue participation by the Arab states in all aspects of operations under authority from United Nations Security Council Resolutions 1970 and 1973. Current examples of tools to solicit participation include the Mediterranean Dialogue and the Istanbul Cooperative Initiative. These provide excellent venues to discuss options for participation. There are, however, many other valuable and worthy

participants in this operation and NATO is constantly working to enhance participation. I encourage you to follow up with the Office of the Secretary of Defense for more detailed and current information on Arab nation participation.

Chairman LEVIN. Thank you, Senator Collins.

Senator Udall.

Senator UDALL. Thank you, Mr. Chairman.

Good morning, gentlemen. Let me turn to Libya. Let me make an initial comment. I support the actions of the President and the administration. For us to have stood by while Qadhafi moved on the towns and cities of the western part of Libya would have been unconscionable. It would have been indefensible.

Having said that, I've also made it clear I'm going to continue to ask as many questions as come to mind. Admiral, if I might, the rebel forces have been more or less welcomed by the civilian populations in the east. If the rebels are able to close in on cities that are generally more supportive of the Qadhafi regime, how will NATO protect civilians caught in a potential crossfire?

Then that question can become even more intriguing and important if you frame it this way. If rebel forces fire on civilian targets or military targets that place civilians in harm's way, how are we going to protect those innocent people? Would we fire on the rebel forces, for example?

Admiral STAVRIDIS. From all that I've seen, at the current stage of this conflict we are working very hard to protect all of the civilian population. In doing that, we are setting up air zones. This is where the no-fly zone is actually more than simply a no-fly zone. It is a protective zone that allows us to use our air assets to interdict a situation in which civilians are coming under attack.

In terms of whether or not we would parse through civilians versus rebels versus opposition leaders versus Qadhafi forces, we would have to rely on our intelligence, particularly our signals intelligence, to have a sense of what's occurring on the ground, and then make conditions-based decisions at that time.

Senator UDALL. It is difficult, though, Admiral, as you present the various scenarios.

Admiral STAVRIDIS. It is difficult. Yes, sir.

Senator UDALL. Particularly when you move into more densely populated areas.

Admiral STAVRIDIS. Indeed.

Senator UDALL. How do our aircraft prevent civilian casualties and other damage.

Admiral STAVRIDIS. It'll be extremely challenging. We are aided by a sense that is manifest in much of the country, which is against Qadhafi. As more and more pressure is applied, as we continue to apply both economic sanctions, financial freezing, we squeeze the economy, I believe that his support base will shrink and the tribal aspects of Libya will come to play in a way that will hopefully achieve the policy indication of a departure of Qadhafi.

I agree, it's going to be complicated and conditions-based as we move through.

Senator UDALL. Ideally, the use of military force here is designed to create political space so that the Qadhafi regime falls, either of its own accord and its own decisionmaking or through outside forces, particularly brought to bear by the rebel forces.

Admiral STAVRIDIS. Yes, sir.

Senator UDALL. That's the end game, using military force to drive political ends. I see you agreeing and in acknowledgment.

If I could, I'll turn to an entirely different subject, to General Kehler. I know you talked about International Traffic Arms Reductions (ITAR). Since I came to Congress in 1999, we've been talking about ITAR and the way in which it restricts our private sector. Increasingly, I think you could make the argument that it actually does the opposite of enhancing our national security, because we are not developing the capabilities that we might.

Could you speak to that assessment and then, more specifically, how have our export controls under ITAR affected our military space acquisitions and development? Most importantly, are these export controls slowing the development of critical space-based assets that support our warfighters?

In other words, this policy is contradictory to other policies that we have in place, although well-intentioned when it was first put into place.

General KEHLER. Senator, your concerns are well founded. From my current seat as the Commander of STRATCOM, here's where this impacts us most. Just as you suggest, if in fact our industrial base cannot provide the kinds of capabilities that we need, then we need to go back and take a hard look at why that is. What impact that has on us as a military operational force, of course, depends on what it is that has been delayed.

There is at least one thread that runs back through our industrial base. It isn't the only thread, but there's at least one thread that runs back there, that says that some export controls, while well intentioned, need to be there to preserve the best of our national security technologies and capabilities. There is a danger here that export controls, if not reviewed and refined, can in fact create the opposite kind of situation, where our industry is no longer competitive, therefore our industry is declining, therefore their ability to provide for us is also declining.

The President's new national space policy that was signed last summer and the recently approved National Security Space Strategy both point this point, and they both essentially say it's time for us to go back and take another look at ITAR. I support that. It's time for us to do that kind of a look. There needs to be a careful balance struck here between preserving and protecting our highest, most important national security technologies, especially where they relate to space and where they relate to cyberspace, although that's not directly touched in quite the same way.

It's time for that type of review and I would encourage that.

Senator UDALL. With well-intentioned efforts, you can build walls so that those outside the walls can't see in or get in, but the same situation then applies to those who are inside the walls. It's harder to get out and it's harder to see over the top of those walls.

General KEHLER. Yes, sir. There are many, many instances, certainly in my last job, where I had some responsibility for acquisition, where industry would come to us and say: The reason we are having trouble is because of ITAR. It's not a blanket indictment of ITAR, nor is it a blanket indictment of the intent behind ITAR. Execution needs a harder review and that needs to occur soon.

Senator UDALL. There is joint jurisdiction here, some question about jurisdiction between the Department of State (DOS), DOD, and the committees that are involved, which I know the chairman's engaged in. This is the time to push this in ways that perhaps we haven't.

General KEHLER. Yes, sir. No question about it, this is a shared responsibility and DOS does have a significant role here in all of this.

Senator UDALL. Thank you again. Thank you, gentlemen.

Chairman LEVIN. Thank you, Senator Udall.

Senator Sessions.

Senator SESSIONS. Thank you, Mr. Chairman.

Thank both of you for your service to the country, and we appreciate your leadership. I've gotten to know both of you and have great personal affection and admiration for you.

Senator McCain and Senator John Kerry were correct when they called early on for a no-fly zone in Libya, at a time when momentum was with us and they had a chance to be decisive in the outcome of the effort. As a result of the delays that have occurred, we now have a more difficult position and difficult situation.

Senator McCain, to his credit, is a patriot. He's not criticizing the President. His view simply is that if this is the right thing, let's do it, and we'll support the President in his action.

Admiral Stavridis, you mentioned that it is important to secure the U.N. and NATO resolutions before action. You noted that the entire international community is against Qadhafi. But Congress has not voted, as Senator Collins stated, we got approval from a lot of different places, but we don't have one from Congress.

General Kehler, a no-fly zone normally means that you usually use our Air Force to ensure that an enemy's air force is not able to attack forces that we think ought not to be attacked. It normally does not cover, attacking by our Air Force of the enemy forces on the ground on one side of a conflict. Would you comment on that briefly?

General KEHLER. Sir, again from my role in STRATCOM, it's a difficult point for me to comment on. I've heard the operation described as a no-fly zone, but actually there's some additional language that goes with that that characterizes the operation in the way that it's being conducted.

Senator SESSIONS. Additional language comes from the U.N., apparently, which is nice to have. I would ask you, Admiral Stavridis, what if China had vetoed that resolution? What if Turkey or some other country in the NATO family objected? What if the Arab League had some objections to this? Would the United States then stand by and allow a slaughter to occur?

Admiral STAVRIDIS. That's a decision that would squarely rest with the President in terms of making an executive branch decision and my point in saying that the U.N. Security Council resolution was a good thing to have is that it simply broadens the mandate. From a military officer's perspective, the U.N. Security Council resolution, sir, lays out those military tasks very clearly. In that way, it was helpful.

Senator SESSIONS. That is interesting, that you seem to be taking, as your command, the U.N. and the rules of engagement they

have authorized, and we don't have any U.S. rules of engagement that I've understood with clarity, certainly not from Congress. It's not your fault. I'm just saying that the extent to which Congress has been bypassed in this process is rather breathtaking.

I hope there's no suggestion that we're establishing a precedent by which the United States won't act unless multiple international bodies approve that action, because I remember the famous Patton quote, "A good plan violently executed today is better than a perfect plan tomorrow." Sometimes that means a lot of lives at stake. Proper, prompt, aggressive action can be decisive in military conflicts, isn't that true, Admiral Stavridis? Delay can be fatal to the success of an operation?

Admiral STAVRIDIS. That is true, and we see examples of that in history.

Senator SESSIONS. Admiral Stavridis, we love our European allies and I understand you've proposed and suggested we might delay the withdrawal of some of our brigades from Europe. We have four now and the plan is to come down to two. Our German friends are some of the best economic and political partners we have in the world. However, tell the American people why we have to have 40,000 troops in Europe if they're cutting their budgets far more substantially than we're cutting ours?

Admiral STAVRIDIS. Just to walk through this, we currently have four brigade combat teams in Europe as part of about 35,000 soldiers that are there. It bumps up to 40,000 at times. There was a decision made several years ago to cut back to two.

Senator SESSIONS. I was part of a congressional delegation that traveled to Europe to examine the bases that would be enduring. It was during a time when we were closing U.S. bases under the base realignment and closure policy.

Admiral STAVRIDIS. Subsequently, in the course of the Quadrennial Defense Review, DOD decided to take one more look at that decision as to whether we wanted to cut all the way back to two or reduce some other level of that. That analysis has been going on for about 6 to 8 months and is now reaching final decision. I know that has not been announced as yet.

I believe that your fundamental question is, why do we have troops in Europe at this stage, given that they have the resources to defend themselves and so forth. I would say there are still legitimate reasons for a reasonable number of U.S. troops in Europe. As we talked about earlier, we're down from 400,000 in Europe and we've come down 75 percent already since the end of the Cold War.

The reason for them is partly what you're seeing right now. It's the use of these bases in Europe as forward areas from which we can operate in Afghanistan, Iraq, and Libya as we are today. It's also deterrence, reassurance, training, and working with our allies. I would argue, sir, that——

Senator SESSIONS. I believe in your statement you say it's a demonstration of United States commitment. If Europe isn't committed to defending itself, does it need to have us to defend them? We have Europeans that pretend to help us in Afghanistan, but who won't allow their soldiers to fire their weapons.

The Government Accountability Office has reported that it costs $17 billion for DOD installations in Europe and they estimated $24

billion through 2015 to operate and maintain our bases there. Is NATO so frail that we have to have another $1.8 billion construction project to maintain perhaps more troops than the plan has called for?

Admiral STAVRIDIS. Senator, we're looking very hard at making every reasonable reduction in those numbers of troops. I would argue, let's take Afghanistan as an example. We have 45,000 non-U.S. troops in Afghanistan with us. We've lost, very tragically, 1,400 of our young men and women killed in action. Our allies have lost 900 killed in action. On a proportional basis, that's actually higher than our own losses.

They're in it. They're in the fight in Afghanistan. I would argue that part of the reason they are there with us, in Afghanistan and in Libya, is because of those enduring commitments, fully taking your point that we ought to look at every reasonable way to reduce it to a minimum in order to give our U.S. taxpayers the best bang for the buck.

Senator SESSIONS. I know you're familiar with Japan and our fleet that's there and how much Japan supports it.

Admiral STAVRIDIS. Yes, sir.

Senator SESSIONS. They pay about 40 percent of the cost of our military bases in Japan. I believe the Europeans have gotten far too comfortable under the American umbrella. They're reducing their budget substantially across the board. We're trying to hold ours at a minimum reduction, maybe without reduction, and they want us to keep more and more troops there. It's a situation that cannot continue, and both of you need to know that when our government spends $3.7 trillion and takes in $2.2 trillion, we are on an unsustainable path, as the Federal Reserve Chairman has told us. Money is going to be tight in the defense budget and these are some areas that real savings can accrue without weakening our ability to defend America.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Sessions.

Yes, Senator Nelson. I'm sorry.

Senator NELSON. Thank you, Mr. Chairman.

Thank you, Admiral and General, for your service, and all those who serve with you. We appreciate so much the commitment to the defense of our country.

General Kehler, in your written testimony you discuss the need to build a new STRATCOM and control complex. You note that reliable and assured command, control, and communication from the President to the nuclear forces are fundamental to our strategic deterrent. This requires resolving some gaps in our capabilities, gaps that need to be addressed and will be addressed by the planned new STRATCOM and control complex and the nuclear command, control, and communications (C3) node at Offutt Air Force Base.

To the extent that you can expand on the C3 plans, the requirements, and how the new STRATCOM and control complex will meet national security requirements. Would you please try to explain so that we can understand? It's more than a building; it's a housing structure for a command. Please outline that?

General KEHLER. Yes, sir. The STRATCOM location fulfills a unique role in the overall national nuclear command and control

system. It is a unique node on a network of nuclear command and control, a fact that we came to discover with great clarity when we had an 8-inch water main break in the building back in December and seriously impacted our ability to get the job done.

Therefore, as we look at retaining the appropriate nuclear command and control capabilities, the things that are at STRATCOM right now that are encompassed inside the physical plant, inside the headquarters building itself. We're talking about unique operational command and control activities, and we're certainly talking about unique fusion capability there to begin to pull the pieces of not only our nuclear command and control, but space, cyber space, and other pieces, together as well.

As we went forward to look at how we need to address the physical vulnerabilities that we have there, from what is now an antiquated physical plant, a plant that was never designed to do what we are asking STRATCOM to do today. In fact, when that physical plant was built, STRATCOM had one mission and that was nuclear deterrence. Today that is one of many missions that STRATCOM has.

As we looked at this, the physical plant is not going to be capable of keeping up. Therefore, the analysis that was done prior to my arrival leads us to believe that the best course of action is to create an updated command and control node with the appropriate planning tools and to surround that with a new building. That's the pathway that we are on.

When we look at building a new building, I think that that's not an adequate way to describe this, because a new building is one thing. What we are actually creating here, though, is a command and control node, a nuclear command and control node, a planning center that has unique capabilities for global planning requirements, that has to be housed in a facility that can support that. Those two things together is what we are asking Congress to support.

Senator NELSON. Thank you.

Admiral, at the onset of the operations in Libya the President noted the United States' unique capabilities to establish a no-fly zone, in other words the Tomahawk missiles, and the United States employed those unique capabilities in support of the U.N. resolution, with the partnership of NATO. I understand that our committee has asked and is working to get a cost to date for the mission in Libya, along with weekly cost reports. I appreciate this as I believe it's needed, because there are really two questions that go beyond what the role of the mission is. That is the cost and how long.

I've had a number of people ask me if there is any kind of an exit strategy, although those same people didn't necessarily ask that question about Iraq or Afghanistan. They are asking it right now. Could you give us some indication of what we're looking at in terms of costs to date, just on the basis of ballparking it?

Admiral STAVRIDIS. Again, Senator, as I mentioned to a couple of your colleagues, I'm really not the right person to ask. I will say that the operation, as it runs over months, will be in the hundreds of millions of dollars.

Senator NELSON. Hundreds of millions of dollars?

Admiral STAVRIDIS. Hundreds of millions of dollars, yes. I've pledged to Chairman Levin to take back the message to DOD that you're looking for a cost to date and weekly updates. I believe that will be registered loud and clear back at DOD and I understand that.

In terms of an exit strategy, events at this point are so fluid. We're 5 weeks into this thing. The first set of protests began on February 15. The U.N. Security Council resolution was 30 days later, March 17. NATO has taken over the mission. Everything has moved extremely rapidly.

As I look out the spectrum of how this could unfold, it's premature to say what our exit strategy is until we have at least a little more clarity moving forward.

Senator NELSON. With respect to NATO, do you have information that would indicate what percentage of the total costs or the total budget of NATO is borne by the U.S. Government?

Admiral STAVRIDIS. I will find out the answer to that. I think that the NATO budgeting structure, unlike the U.N., which is balanced and in some ways bigger nations pay more, I think the NATO common funding pool is exactly that, a common funded pool. I don't think the United States pays a disproportionate share of NATO costs.

When you get into operations that NATO is doing or any operational setting, the NATO approach is, costs lie where they fall. Which means that the nation that is bringing a force to the fight is the one that pays for that force. In that sense, taking Afghanistan as an example, the United States is about 2 to 1 in terms of a ratio, so it would be bearing roughly twice the cost, for example. But those are very rough estimates. I'll refine those and report back to you.

[The information referred to follows:]

Approximately 20 percent of the total North Atlantic Treaty Organization budget is borne by the U.S. Government.

Senator NELSON. That would be fine.

Thank you very much to both of you.

Chairman LEVIN. Thank you, Senator Nelson.

Senator CORNYN. Thank you, Mr. Chairman.

Admiral, General, welcome. It's good to see you both.

General, if you'll forgive me, I have a number of questions that I need to ask the Admiral. We appreciate your service. In the limited time we have, I wanted to focus my attention on Admiral Stavridis.

I'm struggling a little bit, Admiral, to understand what the plan is, now that we've intervened in Libya and then handed things off to NATO, especially given the unrest still extant in Egypt and Bahrain. Who knows where this contagion will spread and how it will all end. Part of this inability to understand what the plan is is because the President, again, this is not your fault, but the President did not come to Congress and engage Congress in this discussion about his intentions. That's why we have a lot of these questions.

I want to ask you, first of all, to help me understand it as you understand, what the contours are of this new doctrine of intervening for humanitarian purposes and not when our, as Secretary Gates said, vital interests nor an imminent threat was likely to

come from Libya, but we intervened to save civilians, which I understand and any human being with a heart would feel compassion for.

It strikes me that, for example, there have been civilians killed in Syria in protests against the government. We know Syria is a state sponsor of international terrorism. It is a police state, and it has facilitated the entry of foreign fighters into Iraq that have killed American troops. We know that Syria is complicit with Iran in the shipment of weapons through Syria to Lebanon that Hezbollah can use to then attack Israel.

It strikes me that, as bad as Colonel Qadhafi is, he's been in power 42 years. Why Libya and why not Syria? Can you help me understand as you understand why?

Admiral STAVRIDIS. As to why Libya, as we look at the NATO side of this thing, where I'm somewhat qualified to speak on this. In terms of U.S. policy decisions, those more fairly rest with, at my level, with General Ham from AFRICOM, Secretary of Defense Gates, and so forth.

I can tell you from a NATO perspective, as the NATO organization looked at the imminent possibility of a massive slaughter in Benghazi catalyzed NATO. It was the size of it, it was the ability that NATO had because of the geography of Libya being so close to Italy, and it was looking at the potential outcomes from that event from a European perspective of potential mass migrations. Destabilization into Egypt was a significant concern in the halls of NATO.

It was, Senator, a combination of proximity to Europe, the sense of imminent mass disaster, and the capability. Here I would draw a historical parallel going back to the conflict at Bosnia, which you may remember in the 1990s there was an event at a place called Srenbrenica, you may remember, where 8,000 men and boys were executed in a day or 2. It was as a result of that—that catalyzed NATO at that time. It's probably fair to say the memory of that and the fact that Benghazi looked as though it was going to fall with a similar scenario, based on the statements of Qadhafi and his son.

All of that came together.

Senator CORNYN. Fair enough. Our experience in the Middle East, though, has been when America intervenes that, it was General Powell who coined the "Pottery Barn Rule": If you break it, you own it. We've seen our intervention in Iraq and in Afghanistan not go exactly as we might have planned, to say the very least, which causes me concern about what the future is going to mean in Libya under a NATO command.

Just so we can understand this, I believe that the question that Senator Nelson was asking, my understanding is you're correct in terms of the financial contribution the United States makes to NATO. But right now, out of the 132,000 troops that are in Afghanistan, about 90,000 of those are U.S. troops, but they fall under NATO command, correct?

Admiral STAVRIDIS. Yes, sir. Just to sharpen the numbers slightly, 98,000 U.S. troops and 45,000 non-U.S. troops, about 2 to 1 would be the ratio there.

Senator CORNYN. I thank you for that. In your view, is NATO adequately resourced in terms of personnel and financial resources?

Admiral STAVRIDIS. In terms of——

Senator CORNYN. In Afghanistan?

Admiral STAVRIDIS. In Afghanistan, yes, sir. In fact, another set of numbers that are worth knowing, and I mentioned them to one of your colleagues, of killed in action, there have been, sadly, over 1,400 U.S. So 2 to 1, you would expect about 700 of the allies. In fact, 900 allies have fallen. They are in this fight with us and are taking losses and making a significant contribution.

Senator CORNYN. Admiral, my staff has handed me an article that quotes General Caldwell, commander of NATO's training commission who said that NATO still faces a shortage of 740 trainers needed to train Afghan soldiers and policemen. Assuming that NATO is able to handle its commitment in Afghanistan, could you explain, if NATO does decide to deploy stabilization forces in Libya, would that include U.S. troops under NATO command?

Admiral STAVRIDIS. If NATO decided to deploy troops, whether or not the United States decided to participate with troops would be a national decision for the United States. Let me turn it around. In terms of the no-fly zone that we're enforcing right now, Senator, Germany, for example, has chosen not to participate in that mission. It's not required that every nation in NATO participate in every mission. There is a capability to choose among them, and that tends to balance itself out.

For example, the Germans, who are not in the Libyan operation, are contributing 5,000 troops in Afghanistan. They're actually the second largest non-U.S. contributor there.

Senator CORNYN. My time is running out. Let me just conclude with this question. Assuming the humanitarian crisis that you detailed and that the President talked about last night is sufficiently compelling to warrant the intervention of the U.S. military and now NATO's involvement, can you imagine any set of circumstances where NATO would just simply pull out and allow that humanitarian crisis to continue? Or do you think it's more likely than not that it would see it to some sort of satisfactory conclusion that did not involve a massive loss of innocent civilians' lives?

Admiral STAVRIDIS. It's always dangerous to talk about a hypothetical, but based on the conversations I've seen and heard around NATO as the alliance signed up for the mission, NATO will see it through to conclusion. I'll give you a practical example, if I may: Kosovo, 1999. The alliance decided to go in. It went in with air strikes. It then sent in boots on the ground. When I took this job 2 years ago, there were still 15,000 NATO troops in Kosovo. Today that's come down to about 6,800, moving toward a goal of 5,000. That's okay. That's indicative of the ongoing level of engagement.

By the way, of the 6,800 troops, only about 800 of them are U.S. troops.

Senator CORNYN. Do you see any scenario under the NATO mission that would be deemed a success, where Qadhafi would remain in power?

Admiral STAVRIDIS. The international community, speaking through all the leaders, has continued to indicate a desire for Colonel Qadhafi to leave. The NATO mission at the moment is humani-

tarian, arms embargo, no-fly zone, and protect the population. How you square those two will be determined in the weeks and the months ahead.

Chairman LEVIN. Thank you, Senator Cornyn.

Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman, and thank you to both of you for being here and the great job that you're doing for our country. We really do appreciate it.

One of my concerns has to do with the science, technology, engineering, and math (STEM) education in our schools. I know that developing, expanding, sustaining, and retaining a steady stream of cyber specialists is critical to our national security. General Kehler, in your prepared statement you indicated that the cyber workforce is growing, but recruiting adequately trained and equipped cyber warriors is challenging. You also mentioned the importance of partnering with our Nation's educational and commercial information technology entities to spur domestic math and science interests.

This is certainly an area that I'm extremely interested in. I was reading recently where out of 34 nations the United States is 14th in reading, 17th in science, and 25th in math. This is a huge concern.

Can you describe some of your efforts in recruiting a steady stream of cyber warriors and how can Congress help you in this regard? Have you and your staff been engaged with universities and high schools that specialize in the STEM education?

General KEHLER. Senator, let me answer the middle question first. We appreciate the fact that Congress continues to mention STEM and the fact that you all have it as part of your general agenda, some of you with specific agenda items. To continue to push that is important for all of us and for our overall national security, not just in cyber, but as I look across the board in STRATCOM we're the beneficiary of a great deal of our highest tech weaponry. No question about it, both in the industrial base that produces that for us as well as in the military members that we have to recruit to be part of those operations, STEM is critically important to us across the board.

Let me get to the specifics of cyber. Each of the Services have now put together programs to recruit, train, certify, and retain cyber specialists. We have put, from STRATCOM, a bit of a demand signal on the Service components. For example, what they brought to CYBERCOM initially was a policing up, if you will, of all the Service specialties that already had a hand in the cyber business. What we said to them in the last year or so was: That's not enough; we need to increase the demand signal.

We are now going through requirement studies, if you will. The first one was completed. We laid on the Services a requirement for a thousand more cyber operations people. That was split among the Services to about 300 each and the wheels are turning to produce those.

It's now up to us to come back and quantify, with a little bit more fidelity, what additional cyber capacity we need. We know we need more. The question is how much more and of what skills. The Services are being responsive, in this regard. All of them have a

way to recruit from the beginning. In fact, at least one of them has put in place the requirement all the way into basic military training for basic cyber awareness. Like every marine's a rifleman, every sailor's a firefighter, every servicemember, certainly every airman—I can speak for a Service I just came from—every airman is going to be a cyber defender.

That kind of philosophy is going to be very helpful in the long run. In addition, there are advanced degree programs that have been put in place, both in the Air Force and steps are being taken in the Navy. As we retain these people as we go forward, there's going to be a great deal of ability for us to try to keep up with the private sector, which is where most of the rapid advances occur.

The final thing that I would say that the Services have done that makes me feel good as the user of those capabilities is they're looking very hard at the Reserve components and at the National Guard, because where it makes sense for us to link up the Reserves and the Guard with the civilian community that they are attached to and that they come from cyber.

Go to places like Seattle, Silicon Valley, the Carolinas, or places where the hotbeds of cyber high tech activity are; those are ideal places for Reserve units or National Guard units that can do double duty, if you will, keep a foot in the civilian community while bringing those kinds of talents to national security as well.

I would tell you that I believe that the wheels are turning. I believe that progress has been made. We are looking at what joint training might look like, what joint certification might look like, how is it that we ask the Services to provide complementary capabilities, not competitive capabilities. So far what I've seen out of the Services is they're amenable to working with STRATCOM and CYBERCOM in all of those ways forward.

I would make one other point. The Deputy Secretary of Defense has had a great leadership role in all of this. He has been very vocal in his commitment from DOD's standpoint to want to have DOD correctly positioned to have the capacity that we know we're going to need for the future.

Senator HAGAN. I can see you are very interested in this, too, because it's something for our national security and we need to do a much better job. I know that you're always in competition with the private sector, too. I'm also glad you mentioned North Carolina.

A couple of weeks ago I asked the Under Secretary of Defense for Policy, Michèle Flournoy, how our NATO partners can significantly contribute to growing, training, and equipping a sizable and capable Afghan National Security Force (ANSF). Under Secretary Flournoy indicated that this is an area for potential reinvestment by our NATO and ISAF partners, particularly as some of our partner forces redeploy or change the nature of their commitment to the mission.

Admiral Stavridis, can you describe your efforts aimed at conveying to our NATO allies the importance of maintaining forces in Afghanistan at appropriate levels and providing additional funding for the ANSF Trust Fund? I was recently over in Afghanistan and had an opportunity to visit the training center there and there was a lot of good work going on.

Admiral STAVRIDIS. Thank you, Senator. I'm very pleased, as you were with your visit, with the overall training effort. Lieutenant General Caldwell, who heads that mission, has about 5,000 people on his team. They have at any given moment about 35,000 Afghans in training. They have trained 100,000 Afghans, for example, in literacy, speaking of education, which is really an extraordinary thing. In addition to all the warfighting skills, they're teaching basic reading to many of these young Afghan men and women.

What we are encouraging the allies to do now as some of them are withdrawing forces is to shift those to the training mission. I'll give you two practical examples. The Canadians, who have fought very valiantly in Afghanistan, decided to downsize their combat mission, but they have added almost 1,000 people to a training mission, which is flowing into Afghanistan right now.

The second one I would mention are the Dutch, who also fought very valiantly with too many casualties in southern Afghanistan. They've decided to shift to a training focus and they're moving to bring 545 members to focus largely on training, with a few other activities as well. We're showing them as an example to other nations, and as we begin this transition this summer in Kabul, Mazar e-Sharif, Herat, Panshir, and Bamayan, we are going to be able to turn over the warfighting to the Afghans and take some of our forces to do the training. In the end, that's how we will succeed in the security dimension in Afghanistan. We are going to train our way to success there.

Senator HAGAN. How about the funding of this?

Admiral STAVRIDIS. The funding is in place. It is at the moment, I would hasten to say, largely, overwhelmingly from the United States, and that's something that we need to work on with our allies. This is an area, Senator, where even nations that are not in the troops on the ground portion of this can be very helpful.

There are 70 nations that are engaged financially in Afghanistan. Almost 49 have troops on the ground. But that trade space is a place where I'm encouraging our national folks to focus, our diplomats to focus, on funding the Afghan Security Training Trust Fund. I agree with you, that's an area where they could do more.

Senator HAGAN. Thank you.

Chairman LEVIN. Thank you Senator Hagan.

Senator Vitter.

Senator VITTER. Thank you, Mr. Chairman, and thank you both for your service, and thanks to all the great service of the men and women in uniform who serve with you.

Admiral, the fundamental confusion about the situation in Libya is this: The statement is that we're mostly there to avoid a humanitarian catastrophe. Everyone knows that the greatest threat toward that end is Qadhafi remaining in power and regaining control of the country. Yet ousting Qadhafi is not a goal of the operations.

To the average Louisianian, that doesn't connect. Can you explain that to us?

Admiral STAVRIDIS. I can only explain what I do as a military officer leading from the NATO perspective. The military mission I've been given, Senator, is to focus on all the things we've talked about in the course of this hearing, which range from the humanitarian

operation, the arms embargo, the no-fly zone, and to protecting the population.

As distinct from the military mission that I am charged with, as I listen to all of the world leaders talk about this there's a consistent refrain that the time has come for Qadhafi to move on. The way those connect is a sense of, by our participation in protecting the people of Libya we create a safe and secure environment in which the people of Libya can make a determination, and that they then have the ability to undertake the kind of effort that would in effect create regime change, as we have seen in other nations in the Middle East.

It's fair to say that regime change is an aspiration that has been articulated by many world leaders and is under discussion today in London, I'm sure. The military mission that at the moment that I am focused on, that I am charged with, is the one that I described to you a moment ago. I don't think the two are directly linked, but they may connect over time, particularly if we add other tools to the kit in terms of the financial squeeze, in terms of the travel restrictions, finding the money and turning it off are all part of this.

Again, we're in the very early days in this process. We're 6 weeks into it and at the moment my focus as a NATO commander is on the military mission that I've been given.

Senator VITTER. Can you imagine the progress of the Qadhafi forces not posing serious humanitarian threats?

Admiral STAVRIDIS. From everything we've seen in the last 5 or 6 weeks, whenever Qadhafi's forces have an opportunity to move and to operate, they pose a threat to civilians, very much so.

Senator VITTER. Okay. That's my general point. We're somehow trying to have it both ways, that this is a humanitarian mission, but we're not taking sides in a civil war. My main point is that that is rounding a square peg and you can't do it. It would be more constructive to be direct and clear about it so we know what we're getting into or what we're not getting into.

Do you have any reaction to that?

Admiral STAVRIDIS. Those are points that would be well taken up with the policymakers in DOD. I believe you'll have a series of hearings in which that could be appropriately addressed. At my level, as a military officer I'm very focused on the mission that I've been given from my civilian leadership.

Senator VITTER. Okay. The cost of this. We're going to get reports on the ongoing cost of these operations. Can you tell us generally what current defense accounts are being used to offset these costs?

Admiral STAVRIDIS. No, sir, again not within my purview either as a combatant commander in EUCOM, where I am flowing forces to AFRICOM. The budgetary train that comes behind that is handled by each of the individual Services, so DOD would be able to give you that answer. I'll, as I mentioned to the chairman, I'll gladly convey that back.

Senator VITTER. Well, if you can add to the request that we've talked about before, that we also get a report specifically about where money is coming from.

Admiral STAVRIDIS. Yes, sir.

Senator VITTER. Thank you.

[The information referred to follows:]

As I understand it, the Department of Defense (DOD) is currently covering the costs for Libya operations by deferring other DOD requirements and, in the case of munitions, by drawing down inventories. For more specific and up-to-date information, I recommend you contact DOD's Comptroller.

Senator VITTER. Finally on intelligence. The President specifically highlighted intelligence as a significant continuing U.S. role in Libya, in his remarks last night. At the same time, on the same day Vice Admiral Gortney stated that we have limited intelligence capability and, specifically, we don't know who the rebels are. Those seem like inconsistent comments. Can you explain that?

Admiral STAVRIDIS. Yes, sir, I can take a try at it. We're, again, very early in the process. When Admiral Gortney was talking about limited intelligence he was talking about having the opportunity to really understand who is in the opposition, what is their background, what are their connections, who are they talking to. We're in the process of working very hard, as you can imagine, to gather that intelligence right now.

In terms of intelligence support to the mission broadly, we're talking about the whole array of U.S. capabilities. That's everything from satellites, signals intelligence, U–2s, to other aircraft that are gathering intelligence. Those two elements come together. One is a resource and an enabler and the other is a proximate intelligence requirement or need, and by enabling and using those resources in the operation we have a much better chance of gathering the specific intelligence on the opposition that we very much need.

Senator VITTER. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Vitter.

Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman.

Admiral Stavridis, General Kehler, I am sorry that I missed your testimony. I was presiding. But I'm delighted to be here and to have you both here. General Kehler, it's nice to have you here as the commander, for the first time, of STRATCOM. But all my questions are NATO-related, so I will direct them to Admiral Stavridis.

Admiral STAVRIDIS. I think General Kehler's going to put in a request to always testify with me. [Laughter.]

Senator SHAHEEN. I'm not surprised. I only have one Libya question, so that should make you feel better.

I want to pick up on the concern that was raised by Senator Collins about Arab involvement in the mission in Libya. I share the commitment that you expressed and she raised about maximizing the engagement on the part of our Arab allies in what's happening in Libya. I know that some had expressed concern that having the mission led by NATO might discourage some of our Arab allies from participating.

Can you tell me if that's your view and what you've heard from Arab countries about NATO leading the mission?

Admiral STAVRIDIS. I can, Senator. I do not agree with the statement that shifting the mission to NATO will reduce Arab participation. I base that on several factors. One is, and I've mentioned it a couple of times in the hearing, two suborganizations we have at NATO that you know about: the Mediterranean Dialogue, which has five Arab nations from around the periphery of the Mediterranean, in fact, almost all of the ones in North Africa, except Libya;

and the Istanbul Cooperative Initiative, which is a similar organization in the Gulf States of the Arabian Gulf.

Both of those organizations give NATO an ongoing set of relationships with 11 Arab nations in total, and we have tapped each of those and overwhelmingly the impression we get is that the Arab states are very willing to operate with NATO. We already have two. There are a couple more coming or are in sensitive conversation. The range of participation and engagement, in the end doing this under NATO auspices will be very positive, and we'll continue, as I told Senator Collins, to work it very hard. I'll come back to you in 30 days and follow up on that particular point.

[The information referred to follows:]

From the North Atlantic Treaty Organization (NATO) perspective, we continue to aggressively pursue participation by the Arab states in all aspects of operations under authority from United Nations Security Council Resolutions 1970 and 1973. Current examples of tools to solicit participation include the Mediterranean Dialogue and the Istanbul Cooperative Initiative. These provide excellent venues to discuss options for participation. There are, however, many other valuable and worthy participants in this operation and NATO is constantly working to enhance participation. I encourage you to follow up with the Office of the Secretary of Defense for more detailed and current information on Arab nation participation.

Senator SHAHEEN. They would be participating as full partners sitting around the table as decisions are being made?

Admiral STAVRIDIS. I would say that for military operations the 28 member states of the NAC will be the deciding body. This is parallel to the situation in Afghanistan, where the 28 NATO nations are the actual military decisionmakers.

Around that nucleus of 28 NATO nations, the political partners come together with very free dialogue, and yet they don't have delineated control over the military operations. That's a pretty functional arrangement.

Senator SHAHEEN. Thank you.

Now I want to switch to the Balkans. You mentioned Kosovo and the reduction in both NATO and U.S. forces in Kosovo. Is it your assessment that we're making good progress there? One of the concerns that was raised with me over the weekend when I was at the Brussels conference was concern about some of the holy sites in Kosovo and the extent to which they would be secure if NATO forces withdrew.

Admiral STAVRIDIS. Senator, we're making very good progress in Kosovo if you look at a time scale. 10 years ago we were launching Tomahawk missiles into Belgrade to kick off that conflict. When I came on the job, we had 15,000 troops. Because we've been able to maintain a safe and secure environment, we reduced to 10,000, and in February I came down to 5,000 troops.

I'm very comfortable at that level. In a year I'll take another look and we're going to work our way out of a job in Kosovo, because the ongoing dialogue between Serbia and Kosovo continues to improve.

In terms of the sensitive sites, we started out with nine of those. We have turned over five of them at this point. We're about to turn over a sixth. Two are particularly sensitive and we're going to hold those for some number of months into the future. You're correct to raise that as an indicator of what we'll look at as we go forward to ultimately close this mission out.

Overall, I am pleased with the progress in Kosovo and I believe we're on the right trajectory.

Senator SHAHEEN. That's encouraging.

Last April, NATO placed a number of conditions on Bosnia's membership action plan (MAP). I was one of those who argued that it would be important to offer MAP for Bosnia as they are trying to work their way through some of their governmental structures. At this point, however, given the challenges that they've had in putting together a government, can you talk about what progress there is in moving forward on MAP and what message the people of Bosnia might want to take away as they watch their leaders squander a real opportunity?

Admiral STAVRIDIS. You categorized it correctly, in that there is continuing acrimony between the three major groups in Bosnia, which is holding them back from making significant progress on the MAP at this time.

One concrete example would be the allocation of defense properties, which are distributed amongst the Croat, Bosniak, and Serbian ethnic populations, bringing those together in a centralized way. We have yet to see real progress on that. That's, for example, one of the conditions of movement on the MAP.

I am not encouraged about that. We will continue to work with them and try and move progress there, because that's very important and I am concerned about Bosnia falling backward if we don't all continue to work together there.

Senator SHAHEEN. Thank you.

I'm out of time, so I won't ask you about the new strategic concept and I will save that for another time.

Admiral STAVRIDIS. Thank you.

Chairman LEVIN. Thank you, Senator Shaheen.

I just have a couple questions. First of all, Admiral, you testified earlier that you are comfortable with the mission which has been given to you. I take it that means that you view that the mission is sufficiently clear; is that correct?

Admiral STAVRIDIS. Speaking as a NATO commander, I hold this mission as a NATO commander; yes, sir, it is clear to me what the NAC has tasked me with.

Chairman LEVIN. Okay, and you've said you're comfortable with that mission?

Admiral STAVRIDIS. I am comfortable with that mission.

Chairman LEVIN. The fact that there's no exit strategy yet, is not troubling to you?

Admiral STAVRIDIS. It's very early in the process and I am confident that one will develop. Again, events in London today may give us some indication.

Chairman LEVIN. General Kehler, you made reference to or you were asked about the EPAA. Do you support the EPAA? I'm not sure you answered that question fully.

General KEHLER. Yes, I do.

Chairman LEVIN. Why?

General KEHLER. Missile defense for the United States has been based on two major objectives. Objective number one has been to make sure that our homeland is protected against a limited bal-

listic missile attack from North Korea and to extend that if events warrant and Iran develops similar capacity.

At the same time, objective number two that has emerged has been to make sure that we are responding to the regional threats that we see that are growing at a very, very fast pace. The PAA is intended to put resources in the theaters where we need to add to the defenses of U.S. troops and our allies, but to do so in such a way that it builds upon the threat. I support that. I think that's the right way to go forward. That gives us a prudent way to go forward and it allows us to hedge our activities as well.

Inherent in both pieces of this missile defense activity that we are putting together, there are appropriate hedges in place that allow us to adapt and to respond as needed.

Chairman LEVIN. The regional threat is an existing threat, is that correct?

General KEHLER. The regional threat is an existing threat and growing.

Chairman LEVIN. Is it true that the PAA addresses an existing threat?

General KEHLER. It does, yes.

Chairman LEVIN. Unlike the previous approach, is that correct? Because isn't the existing threat the short- and medium-range missiles?

General KEHLER. That's right.

Chairman LEVIN. Particularly the Iranian missiles?

General KEHLER. Yes, and that includes Iranian missiles, that includes missiles from other actors as well.

Chairman LEVIN. Okay. The advantage of the PAA as I understand it is that it addresses that existing threat?

General KEHLER. It does.

Chairman LEVIN. The other threat, which is the threat to the homeland, can be addressed by the existing defense that we have on the West Coast, including Alaska and California; is that correct?

General KEHLER. That's right. That's the Ground-based Midcourse Defense.

Chairman LEVIN. Okay, thank you so much, both of you. Yes, Admiral?

Admiral STAVRIDIS. Sir, if I could, I'd like to just make a comment about a naval officer because I'd like this to go into the Congressional Record. Vice Admiral Robert Moeller died yesterday. He was the first Deputy Commander of AFRICOM. You met him, every member of this committee met him. He came around and created AFRICOM along with General Ward.

He died last night, but I wanted to say for the record that the performance of AFRICOM during the Libyan operations has been exemplary, and I believe that the quality that Vice Admiral Moeller built into that organization is part of it, and I wanted to say that on the record.

Chairman LEVIN. Thank you for mentioning that. We appreciate that. What was the cause of his death?

Admiral STAVRIDIS. Sir, he died of Amyotrophic Lateral Sclerosis, Lou Gehrig's Disease, as it's commonly known.

Chairman LEVIN. Thank you for making reference to him and his valiant service.

Thank you both for the service that you've given to our country, for the men and women with whom you work, and to your families.

Admiral STAVRIDIS. Thank you, Senator.

Chairman LEVIN. We will stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JACK REED

COMMAND AND CONTROL

1. Senator REED. Admiral Stavridis and General Kehler, does the North Atlantic Treaty Organization (NATO) or U.S. Strategic Command (STRATCOM) train to maintain command and control without the use or ability of electronic systems like satellites, Global Positioning System (GPS), communications, etc.?

Admiral STAVRIDIS. 21st century coalition, joint warfare, and network enabled operations cannot be conducted without sufficient support from electronic systems for communications and navigation. NATO and NATO Commands do not routinely train their staffs to be prepared for a longer lasting failure of electronic communications, although there are some fallback systems available.

General KEHLER. All STRATCOM fixed and mobile command and control centers maintain a diverse range of satellite, high-bandwidth terrestrial fiber, and radio communication capabilities. The STRATCOM staff regularly trains with these systems so we understand the vulnerabilities and how to work around the loss of systems. When communications are too badly degraded, alternate facilities are trained to assume command of STRATCOM missions. STRATCOM conducts over 250 restricted or degraded communication exercises a year. We go to great lengths to ensure we can minimize the impact of any communications degradation.

2. Senator REED. Admiral Stavridis and General Kehler, what installation redundancies and back-up systems are in place within U.S. European Command (EUCOM), NATO, and STRATCOM to prevent a loss of command and control in the event of a natural disaster or damages suffered during an attack?

Admiral STAVRIDIS. The EUCOM Joint Operations Center (JOC) maintains a fully redundant and active facility at Kelley Barracks in Stuttgart, Germany. At this location, we maintain laptop workstations for all JOC positions. We also have Secret Internet Protocol Router Network (SIPRNET), Non-Classified (Unclassified but Sensitive) Internet Protocol Router Network, Secure Terminal Equipment voice communications, and Secure Video Teleconferencing capabilities. We monitor and upload roaming profiles for positional accounts and conduct operational checks on a weekly basis. In the event of a total loss of SIPRNET, the JOC will operate on a separate domain from EUCOM.

NATO has sufficient hardened and non-hardened headquarters installations spread over the territory of its member states. These command and control facilities are well connected to NATO, as well as national networks. Therefore a loss of effective command and control is highly unlikely. The main and the alternate NATO network control centers are implemented in facilities protected against nuclear, chemical, and biological threats.

General KEHLER. STRATCOM has established backup or alternate command centers capable of quickly assuming command and control of STRATCOM forces and ensuring continuity of our most critical mission functions should the primary command center be degraded or rendered inoperable. These redundancies include geographically dispersed fixed facilities and mobile (airborne and maritime) platforms. Additionally, STRATCOM Component Commands are dispersed throughout the country, which provides immediate redundancy of vital command and control functions for critical mission sets. As the command continues planning for construction of its new headquarters building, well-considered redundancies and backup systems will be incorporated to further reduce the risk to positive command and control.

COALITION PARTNERS CAPABILITY

3. Senator REED. Admiral Stavridis, what have we learned from our coalition partners, who may not operate at the same level of technical capability?

Admiral STAVRIDIS. Having more limited satellite access than the United States, many of our coalition partners operate in a manner similar to the way we did over 20 years ago—processing command and control and targeting information point-to-point over the high frequency radio spectrum. Increasingly over the past decade, U.S. forces have become critically dependent on satellite communications networks

to process and move large amounts of information. In the event of a major cyber attack with the potential to degrade these networks, our partners' dependence on point-to-point high frequency communications, widely perceived as a weakness in today's information environment, would provide a degree of immunity and preservation against a major network attack.

Additionally, U.S. smart weaponry, while incredibly precise, has created a heavy reliance on high technology and intact information networks. In the event that our technical edge was removed through a major cyber attack, U.S. forces would have to revert in many cases to manual modes of operation. In the absence of GPS signaling, the accuracy of many of our military operations would depend on individual operator skill and training. This remains the mission space within which many of our coalition partners still operate.

QUESTIONS SUBMITTED BY SENATOR E. BENJAMIN NELSON

NATIONAL NUCLEAR SECURITY ADMINISTRATION FUNDING

4. Senator NELSON. General Kehler, during the New Strategic Arms Reduction Treaty (START) debate last year there was a lot of discussion about the administration's commitment to modernize the nuclear weapons complex, the substantial additional funding that both the Department of Defense (DOD), and the National Nuclear Security Administration (NNSA) built into the NNSA budget requests for fiscal year 2011 and beyond. It looks as if a significant portion of the request for fiscal years 2011 and 2012 may be cut by the House. How important is it to maintain the NNSA funding for the weapons, naval reactors, and nonproliferation programs?

General KEHLER. The President's fiscal year 2011 and fiscal year 2012 budget levels for NNSA programs are essential to maintain the stockpile, support crucial naval reactor design activities, and address the administration's nonproliferation initiatives. Moreover, a modernized infrastructure is critical to safely reducing the nuclear stockpile and supporting civil nuclear interests. Cuts to these programs will delay vital life extension programs (LEP), impact the *Ohio* Replacement program, and adversely affect nonproliferation initiatives.

5. Senator NELSON. General Kehler, NNSA funds the research and development for new nuclear reactors for naval surface ships and submarines. This includes the ongoing work to support the new nuclear propulsion systems for the *Ohio*-class replacement ballistic missile submarine (SSBN). Under the Continuing Resolution (CR), the funding has been restricted to the fiscal year 2010 funding levels. If there is a CR for all of fiscal year 2011, will the *Ohio*-class replacement be delayed?

General KEHLER. It is my understanding that a new nuclear propulsion system is a critical prerequisite to the fleet size, performance, and operating concept of the *Ohio* Replacement SSBN. Reductions to the *Ohio* Replacement Program funding will increase schedule and possibly performance risk. Any delay in platform delivery could impact the Navy's ability to meet the Nation's survivable strategic deterrent requirements during the transition period from current *Ohio*-class SSBN (2029–2041). The first *Ohio* Replacement Program submarine delivery is timed to manage the transition and maintain 12 SSBNs in strategic service.

6. Senator NELSON. General Kehler, NNSA has not been allowed to start the life extension study for the W–78 warhead for the Minuteman III intercontinental ballistic missile (ICBM). This study was supposed to have started last fall. Among other issues, the study was to look at the feasibility of consolidating the arming and fusing systems of the warheads. What are the impacts of further delays in the W–78 life extension study?

General KEHLER. Continued delays in the W–78 LEP will introduce risk to the Minuteman III weapon system and subsequent LEPs, as well as delay improvements in safety and security.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

LIBYA

7. Senator MCCAIN. Admiral Stavridis, the President said last night that it would have been a mistake to define the mission for the U.S. military as regime change by force. I think many Americans who have been watching cable news may be somewhat confused by that statement, considering that the rebels are now advancing under the cover of our airpower. How would you explain our military mission when

our military actions are clearly supporting Libyan rebels that are seeking a regime change by force?

Admiral STAVRIDIS. NATO's military mission is three-fold and entirely derived from United Nations Security Council Resolutions (UNSCR) 1970 and 1973. The first part of its mission is to enforce an arms embargo. The second part is to enforce a no-fly zone. The third part is to take all necessary means to protect civilians and civilian populated areas from attack. These three missions are being carried out by NATO forces and those of partner nations under Operation Unified Protector.

8. Senator MCCAIN. Admiral Stavridis, isn't it correct that this is not simply a humanitarian operation?

Admiral STAVRIDIS. Yes, this is not simply a humanitarian operation.

In support of UNSCR 1973, Operation Unified Protector has a three-fold mission: to enforce a maritime and air arms embargo, to enforce a no-fly zone and to protect civilians and civilian populated areas under threat of attack.

9. Senator MCCAIN. Admiral Stavridis, once NATO assumes command of operations in Libya, does that mean that the selection of targets and other tactical-level command decisions will require consensus in the capitals of all NATO allies?

Admiral STAVRIDIS. No. The operation plans from Supreme Headquarters Allied Powers Europe (SHAPE) are agreed to by the North Atlantic Council (NAC), the political decisionmaking body within NATO, comprised of the member states' Foreign Ministers, Defense Ministers, or Heads of State. After this, the subordinate Headquarters' tactical operations and orders are planned and executed in line with the agreed direction and guidance contained within these plans.

10. Senator MCCAIN. Admiral Stavridis, from a military perspective, how would you assess the odds that Muammar el-Qadhafi will manage to hold onto power?

Admiral STAVRIDIS. Although this issue falls outside the mandate of UNSCR 1973, I will say this is difficult to predict. The situation is fluid, but it appears Qadhafi's strategic aim is to consolidate his control over Libya by using force against the people. To date, he has failed in this aim.

11. Senator MCCAIN. Admiral Stavridis, in your opinion, from a military perspective, what are the main gaps in the capabilities of the opposition forces in Libya?

Admiral STAVRIDIS. From my military perspective, the opposition forces in Libya are not a professional military force. As such, they do not possess the basic fundamental elements necessary to conduct a large scale undertaking like unseating Colonel Qadhafi and his regime. Specifically, they are still formulating a unified command structure that provides clear lines of communication that facilitate command and control throughout the various disparate elements loosely aligned across the country. In addition, they lack the numbers of weapons and equipment, as well as the level of proficiency required to employ and operate the weapons and equipment, to carry out sustained military missions in this situation.

12. Senator MCCAIN. Admiral Stavridis, do you believe that, with continued coalition air support, Libyan opposition forces will be capable of pushing all the way to Tripoli?

Admiral STAVRIDIS. This is difficult to predict, as many factors are involved. Our focus, however, is on enforcing the arms embargo, enforcing the no-fly zone, and taking all necessary means to protect Libyan civilians. I would also like to clarify that Operation Odyssey Dawn, led by U.S. Africa Command, is not providing "coalition air support;" rather, it is protecting civilians and civilian populated areas as mandated by the UNSCR 1973.

13. Senator MCCAIN. Admiral Stavridis, how would you assess the morale of Qadhafi's forces?

Admiral STAVRIDIS. As of today, Operation Odyssey Dawn has damaged or destroyed 154 ground combat targets, 1 ship, 46 regime static aircraft on the ground, and a total of 137 surface-to-air and anti-aircraft artillery systems. Additionally, operations have prevented Qadhafi's forces from achieving their strategic objectives. Taken together, these factors will have a negative impact on the morale of Qadhafi's forces.

14. Senator MCCAIN. Admiral Stavridis, can you confirm reports that opposition forces in eastern Libya have been effectively cut off from reliable means of communications?

Admiral STAVRIDIS. Although they do not have a robust communications capability, opposition forces in eastern Libya have been and continue to communicate with each other and internationally.

CYBERSECURITY

15. Senator MCCAIN. General Kehler, General Alexander recently told Congress that he would give the military a C in its ability to defend DOD networks. Do you agree with his assessment and if so, what must be done in the near-term to improve network defense?

General KEHLER. While progress has been made, I agree there is much more to do to improve network defense. With over 3,500 different DOD networks in over 88 countries, the challenge is vast. Our most fundamental networks were not designed or built to work together and be managed as a single enterprise. We've begun to overcome this challenge by developing methods to gain full situational awareness into our "friendly cyberspace," and U.S. Cyber Command was recently issued unambiguous defensive configuration management authority. He has a team at Fort Meade working to address the inherent vulnerabilities in our current configuration, a pilot program, seeking to fuse many large data sets that support defense of DOD information networks by building a distributed data sharing architecture that is global in scope. The program will use powerful analytics to provide operational commanders and network defenders with situational awareness to include indications and warning. Additionally, DOD has also recently embraced a major cybersecurity strategy calling for a more dynamic, agile, and informed defense—a major change from the relatively reactive and static defenses of the past. We have positive momentum, and the operational shift in culture has begun.

BALLISTIC MISSILE SUBMARINE TUBES

16. Senator MCCAIN. General Kehler, according to recent press reports, the Navy recently rejected the recommendation of STRATCOM to design the next generation ballistic missile submarine (SSBN(X)) with 20 missile tubes, instead opting for only 16 per boat. What was the basis for the Navy's decision of 16 tubes?

General KEHLER. A 20 missile tube configuration would provide some additional flexibility at the margins, but the planned 16 missile tube configuration on the 12 *Ohio* Replacement SSBNs provides sufficient operational flexibility and responsiveness to meet the Nation's survivable strategic deterrence requirements across a range of scenarios. STRATCOM is working closely with the Navy to ensure these platforms have the inherent flexibility and capability to be an effective strategic asset throughout a 50-year service period. The Navy's decision to proceed with a 16 tube design reflects a balance between capability and affordability.

17. Senator MCCAIN. General Kehler, aside from cost, which is reduced significantly at 16 tubes per submarine, in what ways will such a decision impact the overall nuclear force structure and the associated flexibility of the Commander of STRATCOM?

General KEHLER. A 16 missile tube configuration provides sufficient operational flexibility and responsiveness to meet the Nation's survivable strategic deterrence requirements across a range of scenarios. From a broader perspective, the *Ohio* Replacement tube decision is one factor in shaping our nuclear deterrent forces. For example, the total number of launchers; the size, capabilities, and posture of each Triad leg; and the ability to adjust acquisition programs are also considerations. The strategic environment, national policy and guidance, and capabilities of Triad systems will ultimately determine the overall nuclear force structure.

BALLISTIC MISSILE SUBMARINE LIFE OF HULL REACTOR

18. Senator MCCAIN. General Kehler, I understand that the current milestone and decision point for determining the technical feasibility for developing a life of hull reactor for SSBN(X) is in February 2012. If it is determined that a life of hull reactor for the SSBN(X) is not possible, how will that impact the overall number of boats required to meet STRATCOM requirements? In other words, would additional boats be required to compensate for refueling?

General KEHLER. It is essential the NNSA receive full funding to support reactor plant design efforts for the *Ohio* Replacement SSBN. Insufficient funding increases risk for program delays that could impact scheduled delivery and the Navy's ability to meet strategic deterrent requirements. Should reactor performance impact the

Navy's ability to meet deployment needs, we would then re-assess how best to meet our overall requirements.

MODERNIZATION AFFORDABILITY

19. Senator MCCAIN. General Kehler, the Nuclear Posture Review (NPR) set forth a broad vision that must not be viewed outside of the realm of affordability. The cost alone for modernizing both the nuclear weapons complex and the triad are substantial. As we move to reduce the size of our nuclear stockpile, this modernization effort becomes all the more important. Factoring in the cost of missile defense and non-nuclear prompt global strike capability—both essential and critical, but also costly, programs—the overall budget requirement calls for steady increases for the foreseeable future. The same DOD budget which Secretary Gates recently stated will experience, at most, long-term growth of 1 percent a year after inflation. What is the short-term and long-term affordability of implementing the NPR?

General KEHLER. The President's fiscal year 2012 budget submission fully supports NPR objectives. Funding for long-term sustainment and modernization of nuclear forces and weapons infrastructure will require a sustained commitment from multiple administrations.

20. Senator MCCAIN. General Kehler, do you intend to advocate for a new ICBM as a replacement for the current system that reaches the end of its service life in the 2030 timeframe?

General KEHLER. Yes. STRATCOM will continue to advocate for a safe, secure, and effective ICBM deterrent force through 2030. We are working closely with the Air Force to identify options to meet the Nation's future land-based strategic deterrence requirements beyond 2030 as part of the overall Triad of capabilities.

21. Senator MCCAIN. General Kehler, when should budgets begin to reflect the steady increases suggested in the NPR?

General KEHLER. The President's fiscal year 2011 budget reflects funding increases to meet NPR objectives. The President's fiscal year 2012 budget request continues this trend.

22. Senator MCCAIN. General Kehler, what are the implications for the strategic deterrent if we don't modernize the triad or find we cannot afford to?

General KEHLER. The NPR concluded that, under New START treaty, the United States will retain a triad of submarine launched ballistic missiles, ICBMs, and heavy bombers. It is essential that we continue to press forward with sustainment and modernization of our nuclear forces in order to ensure that they are safe, secure, effective, and to ensure that those forces provide a credible deterrent. Failure to maintain our nuclear weapons stockpile and associated nuclear weapons infrastructure could undermine the credibility of our deterrent and put at risk our ability to maintain a strategic and technical hedge.

MISSILE DEFENSE

23. Senator MCCAIN. General Kehler, as a result of a second consecutive test failure of the Ground-based Interceptor (GBI), the Missile Defense Agency (MDA) has ordered a halt on delivery of completed interceptor kill vehicles. What is the current status of the Ground-based Midcourse Defense (GMD) system, the system responsible for defense of the Homeland?

General KEHLER. I remain confident that the currently deployed GMD system, as part of a layered defense, is protecting our Homeland today from a limited ICBM attack. The recent test failures concern a follow-on to the system on alert today. We are working closely with MDA and a team of experts from across industry, academia, and the government on root causes and the path to resuming flight tests.

24. Senator MCCAIN. General Kehler, what additional investment is necessary to correct these issues?

General KEHLER. Certainly anomalies discovered during developmental testing will require additional funding to improve baseline performance. It is premature, however, at this point to estimate future investment needs until the MDA's ongoing Failure Review Board has reached its conclusions and recommendations. We remain actively engaged in the board's progress.

IRANIAN MISSILE DEVELOPMENT

25. Senator MCCAIN. General Kehler, according to press reports, earlier this month Iran launched a new rocket and space capsule into orbit. How do advances in Iran's space program influence its ICBM development program?

General KEHLER. Space launch vehicle and ICBM design and technology generally share a high degree of commonality. While different mission requirements lead to different technical choices, it is more cost effective for Iran to use as much common design and technology as possible when considering the limited scope and scale of their production. Key technologies such as guidance systems and rocket engines used in space applications are easily adaptable to ballistic missiles.

The international community has stringent export controls on components that could be used for ballistic missiles, but Iran can potentially circumvent these by using components for its space program and then transferring the technology to an ICBM program.

Iran has ambitious ballistic missile and space launch development programs. The 2009 test of the Safir, a multi-stage space launch vehicle, successfully placed a satellite in orbit. The Safir probably could achieve intermediate-range ballistic missile (IRBM) range (3,000–5,500KM) if used as a ballistic missile. In February 2010, Iran displayed a new rocket engine design that Tehran claimed was for the future Simorgh, a larger space launch vehicle. This technology could be used for ICBM-class vehicles.

NUCLEAR AND INTERCONTINENTAL BALLISTIC MISSILE PROGRAMS IN NORTH KOREA AND IRAN

26. Senator MCCAIN. General Kehler, earlier this year during his trip to China, Secretary Gates publically stated that North Korean nuclear and ICBM programs are becoming a direct threat to the United States and forecasted that North Korea would achieve development of an ICBM within 5 years. While this assessment is not new, to what extent is North Korea and Iran on the verge of posing a direct threat to the U.S. Homeland?

General KEHLER. Previous Intelligence Community assessments of the threats from North Korea and Iran have been fairly accurate and have prevented surprise. In recent months both countries have displayed technological advances that demonstrate continued interest in and progress toward achieving an ICBM capability. North Korea, building on experience gained in two Taepo Dong space launch vehicle tests, is ahead of Iran in the development of an ICBM capability. Where either country is in the weaponization of warheads-conventional or unconventional-that can be delivered by an ICBM is an open question. We will continue to closely monitor any ICBM or nuclear program progress these countries make with the Intelligence Community, as STRATCOM provides advice regarding U.S. missile defense capabilities designed to address them.

27. Senator MCCAIN. General Kehler, according to an unclassified DOD report on Iran sent to Congress in April 2010, Iran with "sufficient foreign assistance . . . could probably develop and test an intercontinental ballistic missile capable of reaching the United States by 2015." Given the well-known existence of collaboration between North Korea and Iran, do you agree that estimates on Iran's timeline for ICBM development must take into account North Korean advancements?

General KEHLER. The unclassified report did not specifically address North Korean assistance to Iran but assessed that without foreign assistance Iranian ICBM development would be slowed. As you mentioned, the fact of North Korean assistance to Iranian ballistic missile development programs has been documented-although the extent of that assistance or any other foreign help is not as clear. Any technology transfer between rogue states represents reason for concern, and STRATCOM remains engaged with the Intelligence Community to assess the level and impact of any foreign support to Iran.

28. Senator MCCAIN. General Kehler, do you currently see any evidence of technology transfer between Iran and North Korea?

General KEHLER. Yes. North Korean ballistic missiles have been proliferated to Iran in the past. I defer to the Intelligence Community for an assessment of the full scope of technology transfer between these two countries.

LIGHTSQUARED

29. Senator MCCAIN. General Kehler, Deputy Secretary of Defense Lynn recently voiced significant concerns to the Chairman of the Federal Communications Commission (FCC) regarding the FCC's provisional authorization of LightSquared's new wireless broadband proposal and the potential for interference with GPS signals. Secretary Lynn states that there is a "strong potential for interference to these critical National Security Systems" and that DOD strongly recommends that the FCC defer final action until proper interference analysis and mitigation studies can be conducted. Do you agree and share the concerns raised by Secretary Lynn?

General KEHLER. Yes. I agree and share the concerns raised by Deputy Secretary of Defense Lynn in his 25 March 2011 letter to FCC Chairman Genachowski.

As global providers of the GPS service, protecting GPS is essential to defense, civil, and commercial entities. I also concur that a comprehensive study of all potential interference to GPS is needed, especially with the increased potential for interference by LightSquared to GPS receivers. It is crucial that all pertinent technical and operational information is exchanged to ensure effective mitigation of interference solutions.

The Air Force is currently conducting formal tests on a variety of military and commercial receivers using the actual LightSquared transmitters, filters, and antennas. We need to conduct a complete analysis of the issue and adjudicate the various technical viewpoints to ensure we avoid unintended consequences to this critical national utility. A final report on the test results is due to the FCC on 15 June 2011.

30. Senator MCCAIN. General Kehler, what are the national security implications of LightSquared's proposal?

General KEHLER. Any interference or potential interference to GPS is a national security concern. GPS is a critical national infrastructure asset and is used in military, commercial, and civil applications, such as public safety, aviation, transportation, agriculture, forestry, engineering, construction, utilities, disaster management, scientific research, and land management. The actual impact of LightSquared signals on GPS receivers depends on how GPS is being used and the user's proximity to one or more of the LightSquared transmitters. The full aspects to our military systems and the subsequent impacts to our national security will have to be provided in a classified forum once a full analysis has been accomplished.

FUNDING FOR THE MODERNIZATION OF THE NUCLEAR WEAPONS COMPLEX

31. Senator MCCAIN. General Kehler, I am concerned by the fact that both the House and Senate Appropriations Committees did not meet the President's full fiscal year 2011 request for the NNSA in either version of the full-year DOD Appropriations bill for fiscal year 2011. Despite the commitment made during debate of the New START treaty for the long-term modernization of the nuclear weapons complex, the House cut the fiscal year 2011 request by $312 million and the Senate cut the request by $185 million. This failure to recognize the national security importance of NNSA funding, in my opinion, is very troubling. Do you share similar concerns?

General KEHLER. Yes, I share your concerns. The President's fiscal year 2011 and 2012 budget for NNSA activities are critical to maintain a credible, safe, secure, and effective nuclear deterrent.

32. Senator MCCAIN. General Kehler, do you agree that sustained support for the modernization of the nuclear weapons complex is a national security priority?

General KEHLER. Yes. As the President stated, we must maintain a safe, secure, and effective stockpile as long as nuclear weapons exist. These investments support the modernization of national capabilities necessary to sustain the stockpile, dismantle retired weapons, and support nonproliferation initiatives.

PHASED ADAPTIVE APPROACH TO MISSILE DEFENSE IN EUROPE

33. Senator MCCAIN. Admiral Stavridis, what is the current status for deployment of Phase 1 of the European Phased Adaptive Approach (EPAA) for missile defense?

Admiral STAVRIDIS. The USS *Monterrey* has arrived in theater as the first missile defense asset deployed in support of the EPAA. As the initial element, the *Monterrey* will lay EPAA's foundation by providing a better understanding of missile defense needs in the region. This Aegis Ballistic Missile Defense (BMD) ship brings BMD sensor, weapon, and command and control capabilities to Europe and can re-

spond to regional ballistic missile threats. EUCOM is actively supporting significant interagency efforts led by the Department of State (DOS) to place an AN/TPY–2 radar in Southeast Europe.

34. Senator McCAIN. Admiral Stavridis, does EUCOM foresee any obstacles for meeting full deployment of Phase 1 by the end of the year?

Admiral STAVRIDIS. The USS *Monterrey* is already in theater, laying the foundation to make Phase 1 operational. This ship represents the first asset deployed under the EPAA as well as the intercept capability planned for Phase 1. To enhance this capability, which is already in theater, EUCOM is fully supporting DOS's basing negotiations for the AN/TPY–2 radar and is working closely with the Joint Staff, Office of the Secretary of Defense, and U.S. Army Europe to ensure deployment can occur as soon as possible once negotiations are complete.

35. Senator McCAIN. Admiral Stavridis, regarding a critical element of Phase 1, what is the current status of basing negotiations for the forward-based radar in Southern Europe?

Admiral STAVRIDIS. EUCOM is fully supporting DOS's negotiations and engagement to deploy the AN/TPY–2 radar to Southern Europe. These DOS-led negotiations are continuing, as is EUCOM planning within DOD for the eventual deployment. DOS is the best source of information for status on the progress of those negotiations.

QUESTIONS SUBMITTED BY SENATOR JAMES M. INHOFE

NUCLEAR FORCE LEVEL

36. Senator INHOFE. General Kehler, during the New START treaty hearings, when asked by Senator Feingold whether the New START treaty allowed the United States "to maintain a nuclear arsenal that is more than is needed—that is more than is needed to guarantee an adequate deterrent" General O'Reilly said:

Sir, I do not agree that it is more than is needed. I think the arsenal that we have is exactly what is needed today to provide the deterrent. And I say this in light of—when we talk about the non-deployed portion of the arsenal, it is sized to be able to allow us to hedge against both technical failures in the current deployed arsenal and any geopolitical concerns that might—changes in the geopolitical environment that might have caused us to need more weapons deployed.

Do you agree with General O'Reilly?

General KEHLER. Yes. The stockpile under the New START treaty is appropriately sized to meet our deterrence requirements and manage risk associated with our aging systems and infrastructure. A recapitalized nuclear infrastructure could also support potential reductions in the future non-deployed stockpile.

HEDGING

37. Senator INHOFE. General Kehler, the updated 1251 plan report and the NNSA's Stockpile Stewardship and Management Plan (SSMP) suggest a plan to unilaterally reduce the stockpile hedge, such that the Nation will have fewer than 3,500 total weapons, well below the 5,113 we possessed at the end of 2009. Is there a formal DOD agreement to this reduction?

General KEHLER. DOD and NNSA agree on projected stockpile quantities through fiscal year 2024. While the updated 1251 Report does not address the number of stockpile weapons, the SSMP projects a reduction of non-deployed hedge weapons based on a variety of factors to include planned LEPs and greater commonality. Reductions in the stockpile are reviewed annually by an interagency (DOD/Department of Energy (DOE)) process to project strategic deterrence requirements and manage risk.

38. Senator INHOFE. General Kehler, if so, at what time are reductions planned, what are the documents with the planning requirements, and what are the planned reductions by weapon type?

General KEHLER. Completion of critical stockpile sustainment activities and restoration of NNSA's production infrastructure could enable future reductions in the quantity of nondeployed warheads currently held to mitigate weapon and infrastructure risk. The administration's infrastructure recapitalization and stockpile sustainment plans, if adequately funded, should enable stockpile reductions in the

late 2020s. Planned reductions, timing, and requirements by weapon type are included in NNSA's SSMP.

39. Senator INHOFE. General Kehler, if there is not a plan to reduce this portion of the stockpile, will the hedge be fully maintained, including life extension, or will these 1,500 to 2,000 weapons be retained without maintenance?

General KEHLER. The required readiness level for nondeployed hedge weapons is determined on a system-by-system basis and reviewed annually. Weapons are retained in the appropriate readiness category to respond to a technical failure or other uncertainties. All weapons undergo surveillance and are maintained in accordance with DOD requirements.

40. Senator INHOFE. General Kehler, what weapon types will be retained and what are the current lifetime estimates for those weapons?

General KEHLER. In April 2011, the NNSA provided an updated SSMP to Congress. The classified Annex B, Table B–11, "Stockpile Refurbishment Plans and Schedules," details retention and sustainment plans for all systems through 2030. Together with the 2010 NPR Report and the Section 1251 Report, the SSMP details the activities necessary to retain weapons for delivery systems affirmed in the NPR and ensure a safe, secure, and effective nuclear stockpile over the upcoming decades.

41. Senator INHOFE. General Kehler, on December 6, 2010, General Cartwright stated that the cost to maintain additional warheads, above 3,500, would be tens of millions of dollars per year. As this does not appear to cover the cost of a LEP, is this merely the cost of replacing limited-life components? Is it more than that, or is it the cost to store weapons that are not held ready?

General KEHLER. Yes, the cost of maintaining additional weapons above 3,500 is largely for the periodic replacement of limited life components. The required surveillance and storage for these weapons does not significantly contribute to the cost.

42. Senator INHOFE. General Kehler, do you agree with General Cartwright that cost is not a significant factor in maintaining the technical and strategic hedge?

General KEHLER. Yes. The majority of costs are incurred during the development and testing conducted during LEPs. The procurement and annual sustainment costs associated with nondeployed (i.e. technical/strategic hedge) weapons are not significant when compared to the LEPs required to sustain our deployed forces and the potential risks these weapons are meant to mitigate.

43. Senator INHOFE. General Kehler, do you support these reductions to the hedge? If so, under what conditions?

General KEHLER. Hedge requirements are evaluated as part of the annual review of the stockpile. Reductions in our nondeployed hedge may be appropriate based on completion of critical warhead LEPs, nuclear weapons complex modernization, and an assessment of the future global security environment. In the near-term, I support the retention of nondeployed warheads as a cost effective risk management approach to ensure our nuclear deterrent remains credible.

44. Senator INHOFE. General Kehler, what are the assumptions that must be met prior to the reductions of the nondeployed stockpile?

General KEHLER. The assumption is a continued commitment for investments in our platforms, stockpile, and infrastructure. Specifically, implementation of the SSMP, commitment to critical LEPs to ensure confidence in the performance of our deployed platforms and weapons; and a modernized, responsive infrastructure capable of responding to technological and geopolitical surprise.

45. Senator INHOFE. General Kehler, is it contingent on:

a. The NNSA infrastructure and completion of the Uranium Processing Facility and the Chemistry and Materials Research Replacement facility?
b. The demonstration of modernized warhead production?
c. Negotiated arms reductions that might trade U.S. nondeployed warheads for Russian tactical nuclear weapons?

General KEHLER. A demonstrated, modern, responsive infrastructure with plutonium and uranium capabilities is necessary to maintain a credible nuclear deterrent and hedge against technological and geopolitical surprise at lower stockpile levels. In addition, future arms reductions, with appropriate verification, may lower the risk of geopolitical surprise and enable reductions in our non-deployed stockpile.

46. Senator INHOFE. General Kehler, what are the safeguards to protect the hedge should any of the above assumptions not be realized?

General KEHLER. The "safeguard" is the interagency process completed annually to review the stockpile and recommend its composition to the President. My military advice will be based on an assessment of the resilience and flexibility of the deterrent and our ability to respond to surprise.

47. Senator INHOFE. General Kehler, in the past, has the United States maintained some nuclear weapons solely for the purpose of having leverage in future arms control negotiations?

General KEHLER. No, the United States developed, fielded, and maintained nuclear weapons to meet national security needs.

48. Senator INHOFE. General Kehler, what is the schedule for the total retirement of the nuclear sea launched cruise missile force; does this retirement change the requirements for strategic forces, the assurances to allies, or the targeting and warhead requirements?

General KEHLER. In accordance with the 2010 NPR, the United States will retire the nuclear-equipped sea-launched cruise missile (TLAM–N). The Navy is developing a plan to retire TLAM–N this year. The deterrence and assurance roles of TLAM–N can be adequately substituted by other U.S. forces and the U.S. remains committed to providing a credible extended deterrence posture and capabilities.

PRESIDENTIAL GUIDANCE AND TARGETING

49. Senator INHOFE. General Kehler, please describe the process for developing the targeting requirements and doctrine of employment of our nuclear weapons, from the President's guidance to you. What is required to change targeting requirements, Presidential Decision alone and what is the mechanism for military feedback on security stability following a change in guidance?

General KEHLER. [Deleted].

50. Senator INHOFE. General Kehler, has the process started to modify presidential guidance on the employment of nuclear forces and what activities are underway at STRATCOM to support this work?

General KEHLER. My understanding is that the process to modify presidential nuclear employment guidance based on the results of the 2010 NPR is underway. We stand ready to support the administration's efforts to update nuclear planning guidance with our unique perspective as the combatant command principally charged with this mission. Upon the Secretary of Defense's request, we will evaluate any potential changes in guidance and, if needed, will recommend force and resource allocation adjustments after our own review and analysis.

51. Senator INHOFE. General Kehler, what is STRATCOM doing currently to implement the April 2010 NPR?

General KEHLER. STRATCOM continues to align our command's priorities, plans, and requirements to reflect both NPR and the New START treaty guidelines. We are working with the Secretary of Defense, Chairman of the Joint Chiefs of Staff, and Service chiefs to set conditions for the effective implementation of NPR guidance and the New START treaty limits.

52. Senator INHOFE. General Kehler, how many planners are there at STRATCOM today doing deterrence analysis, targeting analysis, model development, analysis validation, etc.?

General KEHLER. Considerable effort and resources are dedicated to performing STRATCOM's deterrence mission. There are approximately 254 personnel performing these tasks.

53. Senator INHOFE. General Kehler, what is the pedigree of the tools used for this analysis?

General KEHLER. We use a number of analytic and planning tools to conduct our global strike planning analysis, and each has its own pedigree. Most of the tools we use today were introduced in the 1990s; however, the first version of the Probability of Damage Calculator was introduced in 1976. Despite the different origins and introduction dates, all of our analytic tools undergo modernization, verification, and validation. Additionally, they are accredited for their intended application, and that accreditation is approved at the general officer level.

54. Senator INHOFE. General Kehler, have models been modernized or updated?
General KEHLER. Yes. Our model developers continuously update and typically improve the models and typically provide an updated version once per year. We are looking to upgrade our primary planning and command and control tools as part of the project to replace the STRATCOM command complex at Offutt Air Force Base, NE.

55. Senator INHOFE. General Kehler, what is the role of the national labs in this process?
General KEHLER. The national labs are not involved in the nuclear strike planning process. Their primary role is identifying adjustments that can be made in the weapons and their technology to ensure a safe, secure, and effective nuclear stockpile. However, on request the national labs do provide supporting analyses on a number of nuclear-related issues. These analyses can contribute indirectly to our planning.

56. Senator INHOFE. General Kehler, what other agencies participate in this work?
General KEHLER. In addition to STRATCOM, the NNSA and agencies within the Intelligence Community are all significant participants in this endeavor.

57. Senator INHOFE. General Kehler, are these agencies active in activities related to the 2010 NPR or to potential presidential guidance changes?
General KEHLER. Yes. The Intelligence Community, DOE, and NNSA were all involved in activities related to the NPR. I would expect similar involvement as needed during follow-on work to implement the NPR via presidential guidance.

58. Senator INHOFE. General Kehler, would you characterize the current nuclear deterrence relationship with Russia as stable?
General KEHLER. Yes.

59. Senator INHOFE. General Kehler, are there incentives for either side to strike first in a crisis or incentives for either side to build-up nuclear forces?
General KEHLER. In my opinion, due to both sides' extensive nuclear arsenals, neither nation would gain a decisive strategic advantage by conducting a first strike. Mutual ratification of the New START treaty indicates to me that today neither nation perceives an incentive to build up their strategic nuclear forces. On the contrary, both nations apparently see advantage in reductions in their forces.

60. Senator INHOFE. General Kehler, if the deterrence relationship is stable, what would the incentive be to seek further reductions in the strategic nuclear forces?
General KEHLER. Recognizing U.S. obligations under the Nuclear Non-Proliferation Treaty (NNPT), the NPR states that the United States will meet its commitment under Article VI of the NNPT to pursue nuclear disarmament and that it will make demonstrable progress over the next 5 to 10 years. The NPR further states that the United States will: (a) reduce the role of U.S. nuclear weapons in our national security strategy, and (b) maintain strategic deterrence and stability at lower nuclear force levels. By reducing the numbers of U.S. nuclear weapons and demonstrating that we are meeting our NNPT obligations, we can put ourselves in a much better position to persuade our allies and partners to adopt measures needed to reinvigorate the nonproliferation regime.

61. Senator INHOFE. General Kehler, what are the potential risks of reduction of U.S. and Russian deployed strategic nuclear warheads to a level of 500?
General KEHLER. Answering this question would require analysis we have not conducted. However, rather than examining the implications of specific force levels, I believe it is necessary first to identify what our nuclear strategy ought to be, and then determine what forces we require to implement it. Of course, the Nation's nuclear strategy takes into account far more than just employment guidance.

62. Senator INHOFE. General Kehler, what is your view of deterrence and has it changed in the past 5 years?
General KEHLER. Deterrence is about achieving decisive influence over a potential adversary's decisionmaking regarding conducting an attack on the U.S or our allies and partners. Achieving this requires an understanding of a potential adversary leadership's values, objectives, perceived alternative courses of action, and their perceptions of U.S. potential will and capabilities. Nuclear forces play a unique role in providing us the capability to influence adversary decision-making regarding attacking the U.S. or our allies and partners.

63. Senator INHOFE. General Kehler, how will it be changed if we do not get control of the illicit nuclear weapons programs of Iran and North Korea?

General KEHLER. While the overall concepts of deterrence do not change, our deterrence strategies would have to account for the impact of these programs. For example, in the case of nuclear armed regional states like Iran and North Korea, other U.S. capabilities like conventional forces and missile defenses play a deterrence role in addition to our ability to hold targets at risk with nuclear weapons.

64. Senator INHOFE. General Kehler, can you provide your unclassified views about what China's robust nuclear modernization program will mean for the sizing of the future U.S. nuclear force?

General KEHLER. The sizing of the U.S. nuclear force is dependent on fulfilling the national security strategy and employment guidance. STRATCOM receives nuclear employment guidance in three forms: Presidential, Secretary of Defense, and Chairman of the Joint Chiefs of Staff level guidance; each level of guidance articulates the President's intent in more detail. Our current nuclear deterrent posture provides the President with a range of employment options. It accounts for China and their modernization programs and will continue to do so.

65. Senator INHOFE. General Kehler, what about potential cuts to allied nuclear programs?

General KEHLER. Allied nuclear program cuts could affect our extended deterrence policies, but the degree and manner of potential changes would vary given U.S. policies, allied policies, and the situation.

Our nuclear-armed allies contribute to the deterrence of attack by potential adversaries by complicating their calculations. Whether cuts to allied nuclear programs would affect U.S. force sizing is again a function of what our nuclear strategy is, and the role, if any, that allied nuclear forces play in that strategy.

2008 NUCLEAR DETERRENCE SKILLS REPORT

66. Senator INHOFE. General Kehler, below are excerpts from the 2008 Nuclear Deterrence Skills Report by the Defense Science Board (DSB) that highlight declining capabilities to effectively assess the effect of policy decisions on U.S. national security, including evaluation of foreign plans and capabilities, weapons effects, and targeting:

- "Hence, thought specifically addressing nuclear deterrence and its requirements has become defocused and has been shifted to ever-lower levels in the national security establishment over time."
- "It is estimated that fewer than 5 percent of those once responsible for assessing the damage effectiveness of ICBM targeting remain available."
- "There does not appear to be any study or assessment sponsored by DOD or the National Intelligence Community (NIC) that specifically addresses the potential roles of nuclear weapons in the 21st century."
- "The dedicated internal capability to provide battle damage assessment [in STRATCOM] no longer exists. The overall assessment capability of Defense Intelligence Agency (DIA) for determining targets requiring a nuclear weapon response in support of STRATCOM appears thin."
- "For the strategic nuclear deterrence mission, nuclear reconnaissance planning is not adequate."
- "Commander, STRATCOM, should strengthen competence to identify consequences of targeting actions (battle damage assessments)."

Do you concur with the 2008 DSB Nuclear Deterrence Skills Report stating that "thought specifically addressing nuclear deterrence and its requirements has become defocused and has been shifted to ever-lower levels in the national security establishment over time"?

General KEHLER. Clearly, there was a period where one could conclude DOD did not place adequate emphasis on the nuclear enterprise. The deficiencies are well documented. I believe all organizations associated with the nuclear enterprise are working aggressively to restore confidence, inculcate perfection as the standard, and are making substantial progress. At STRATCOM, we reestablished rigor and oversight on the nuclear enterprise through the standup of the Deputy Director of Nuclear Operations, observation of all nuclear-related inspections, and creation of a Nuclear Enterprise Council process. Additionally, our Strategic Deterrence Assessment Lab (SDAL), annual deterrence symposium, and the NPR have reinvigorated the emphasis and dialogue on strategic deterrence. Much work remains, but I am confident we are heading in the right direction and there is commitment in the ad-

ministration to ensuring a safe, secure, and effective deterrent-credible to our adversaries and assuring our allies.

67. Senator INHOFE. General Kehler, has STRATCOM addressed the DSB recommendation to strengthen competence to identify consequences of targeting actions and battle damage assessments? If not, why not and what more is required?

General KEHLER. STRATCOM, with our Service and Agency partners, has taken positive measures to dedicate an internal capability to provide battle damage assessment, strengthen support from DIA, and clarify our overall Reconnaissance in Support of Nuclear Operations (RISNO) process. Since 2009, multiple global exercises included generation of forces, readiness evaluations, and targeting actions on a scale not accomplished in over a decade. Finally, we secured additional manpower to revitalize RISNO within STRATCOM to continue improving our procedures.

68. Senator INHOFE. General Kehler, please detail the other steps taken by STRATCOM to address the findings of the 2008 DSB report.

General KEHLER. STRATCOM efforts to strengthen the Nation's nuclear enterprise include: the standup of the Deputy Director of Nuclear Operations; observation of all nuclear-related inspections by the STRATCOM Inspector General; the establishment of the Nuclear Enterprise Council and Board; the creation of the SDAL; and an annual Strategic Deterrence Symposium. In every additional staff area, STRATCOM refocused resources to strengthen the Nation's nuclear deterrent and emphasize the nuclear mission.

2010 NUCLEAR WEAPONS EFFECTS NATIONAL ENTERPRISE REPORT

69. Senator INHOFE. General Kehler, the 2010 Nuclear Weapons Effects National Enterprise report of the DSB highlights problems in the nuclear weapons effects skill-set. In addition to the need to determine survivability of the U.S. nuclear and conventional forces in the event of an attack, these analysis capabilities are required for accurate targeting planning. The DSB stated, "A near 'perfect storm' is brewing—one in which the threat of nuclear use against U.S. forces is growing at the same time that our Nation's understanding of if/how we can operate in such environments has all but disappeared." What actions has STRATCOM taken to address the findings of the 2010 DSB report on the Nuclear Weapons Effects National Enterprise and has there been an increase in funding for weapons effects studies?

General KEHLER. STRATCOM continues to advocate for nuclear survivability standards, modeling, and simulation capabilities through the Nuclear Weapons Council and the Joint Capabilities Integration and Development System (JCIDS). The administration's commitment to recapitalizing the NNSA's nuclear weapons enterprise in the President's fiscal year 2011 budget and fiscal year 2012 budget submission will maintain core competencies while improving our scientific understanding and nuclear weapon effects modeling capabilities.

DELIVERY PLATFORM MODERNIZATION

70. Senator INHOFE. General Kehler, what is the current schedule for delivery platform modernization throughout the triad? Specifically, is the Long-Range Strike Option (LRSO) cruise missile schedule being accelerated? If so, why?

General KEHLER. All Triad delivery platforms are undergoing sustainment and modernization programs. The DOD plans to replace the current *Ohio*-class SSBNs with *Ohio* Replacement SSBNs—the first of which enters strategic service in 2029. An ICBM Analysis of Alternatives (AoA) will begin in 2013 to determine requirements options to ensure a land based deterrent force through 2030 and beyond. Additionally, the Air Force plans to retain its bomber fleet through 2040 with planned upgrades and fleet life extensions. A new nuclear-capable penetrating bomber is in early development.

The LRSO cruise missile schedule has not been determined. The Air Force is preparing to start the AoA this summer to determine requirements and cost options. The DOD's initial planning assumption projects fielding a new missile in the mid-2020s.

71. Senator INHOFE. General Kehler, has there been an alignment of that schedule with the warhead life extension development?

General KEHLER. No. However, the upcoming AoAs study will determine warhead options for the LRSO cruise missile.

72. Senator INHOFE. General Kehler, will the next generation bomber be nuclear certified beginning with its deployment? If that decision hasn't been made yet, please detail who will be involved in making that decision, what the process and timeline for that decision is, and what you understand to be the factors involved in that decision, e.g., what assumptions would be involved in a decision for that bomber not to be nuclear certified from its initial deployment?

General KEHLER. The decision on when to certify the new penetrating bomber for nuclear operations will be primarily based on replacement plans for the air-launched cruise missile, B–2 survivability and sustainment, and B–52 retirement. The confidence in our air leg of the Triad will be continuously assessed to ensure the new bomber's timely nuclear certification. We are engaged with the Air Force, Joint Staff, and the Office of the Secretary of Defense to ensure all factors associated with this future decision are considered.

73. Senator INHOFE. General Kehler, what factors or assumptions will be involved for you to support the bomber not being nuclear certified from its initial deployment?

General KEHLER. No decision has been made on nuclear certification timing. I am working closely with the Chief of Staff of the Air Force to ensure bomber capabilities are available to support strategic deterrence requirements.

74. Senator INHOFE. General Kehler, what steps has STRATCOM taken to define the requirements of modernized delivery platforms? If no steps have been taken, when will the requirements be defined?

General KEHLER. STRATCOM is engaged in DOD's requirements processes to define future capabilities to support STRATCOM's strategic deterrence and global strike responsibilities. We have identified requirements, for example, on the *Ohio* Replacement and the new bomber. These required capabilities are identified through mission-driven assessments conducted by the Office of the Secretary of Defense, the Joint Staff, the Services, and STRATCOM. The Department's acquisition processes provide the force structure and capabilities required to meet STRATCOM's current and planned future needs.

75. Senator INHOFE. General Kehler, was an assessment of potential adversary capabilities made prior to the requirement definition?

General KEHLER. Yes, STRATCOM and the Services work with our Intelligence Community partners to assess the potential future operational environment as part of the AoA and Material Solution Analysis phase in the JCIDS process.

76. Senator INHOFE. General Kehler, do these assessments consider potential conditions at the end of life for the new systems?

General KEHLER. Yes, requirements for new strategic delivery systems are developed using the best Intelligence Community assessments available of the potential operational environment for the projected life of the system. However, due to the difficulty in predicting potential conditions decades in the future, the attributes of flexibility and adaptability enable systems to endure unforeseen changes in the operational environment and maintain mission effectiveness.

77. Senator INHOFE. General Kehler, please describe how STRATCOM utilizes the reliability assessments of the systems in the triad?

General KEHLER. STRATCOM uses reliability assessments to ensure credible deterrent plans and effective weapon employment options. Additionally, weapon system reliability is a key indicator in assessing confidence to meet mission requirements and forms a basis for sustainment and modernization decisions.

78. Senator INHOFE. General Kehler, is there a reliability assessment for the command and control infrastructure?

General KEHLER. There are several command and control related reliability and readiness assessment activities conducted by the Joint Staff, STRATCOM and the Nuclear Command and Control System (NCCS) Support Staff (NSS). The Joint Staff conducts periodic strategic and theater assessments of the overall nuclear command, control and communications systems and architecture for its ability to meet defined Nuclear Technical Performance Criteria. STRATCOM assesses readiness on an ongoing basis through the Defense Readiness Reporting System with focus on the readiness of all operational capabilities required to execute the Command's assigned mission essential functions. The annual Integrated Nuclear Survivability Report assesses the survivability of critical command and control facilities and assets. Additionally, the Command conducts continuing evaluation program assessments for

both its command and control assets as well as its weapon systems. Finally, under my responsibilities as the Director of the NSS, an annual report is prepared for the Secretary of Defense, as NCCS Executive Agent, to advise the President on status of overall management and execution of responsibilities directed by National Security Presidential Directive-28, United States Nuclear Weapons Command and Control, Safety, and Security.

79. Senator INHOFE. General Kehler, how do the Services provide updated reliability assessments?

General KEHLER. We task the Services to provide annual capability assessments on each weapon system employed in the Triad. In response to this task, the Services provide annual planning factor reports which include updated reliability assessments for each weapon system. Service testing accomplished in support of these reports seeks to conduct end-to-end, stockpile-to-target assessments under the most operationally realistic conditions possible. Our planners apply this data during the nuclear planning process.

80. Senator INHOFE. General Kehler, is there any sort of process along the lines of the annual assessments of our nuclear weapons by the lab directors?

General KEHLER. The Services conduct annual, end-to-end nuclear weapons system tests to provide STRATCOM planners with realistic estimates of weapon system capabilities. The Services evaluate the data at the end of each test cycle and report updated weapon system capability assessments to STRATCOM. The Services' assessments include those completed by the national labs. We host an annual conference, attended by DOD and DOE subject matter experts, to review and validate these assessments.

81. Senator INHOFE. General Kehler, do reductions in the stockpile required by the New START treaty increase the need for reliable delivery systems and weapons?

General KEHLER. We have always set the highest reliability standards for the nuclear deterrent. As we continue to reduce our force and stockpile levels, a higher premium is placed on maintaining confidence in the reliability of our systems through comprehensive surveillance, testing, and sustainment programs.

82. Senator INHOFE. General Kehler, will reliability requirements change, and given the age of delivery systems and weapons, are there additional risks that can occur as the stockpile size is reduced?

General KEHLER. No, our reliability requirements will not change; we set a very high reliability standard for each system today. As our nuclear deterrent ages, our level of effort to maintain those standards increases. As our stockpile becomes smaller, it places a higher premium on maintaining confidence in the reliability of our systems through comprehensive surveillance, testing, and sustainment programs.

GROUND-BASED MISSILE DEFENSE

83. Senator INHOFE. General Kehler, what actions and/or investments do you believe are necessary to ensure the GMD is a reliable and operationally effective system to protect the U.S. Homeland against evolving threats?

General KEHLER. We are finalizing STRATCOM's Global BMD Assessment which confirms our continued confidence in the GMD system, as part of a layered defense strategy, protecting the Homeland from a limited ICBM attack. The President's fiscal year 2011 budget and fiscal year 2012 budget submission provide the right investment to further advance our capability across interceptors, sensors, and command and control. We work closely with the MDA and Office of the Under Secretary of Defense for Policy to ensure we have an adequate hedge strategy should these acquisition efforts experience delays or an emerging threat materialize sooner than predicted.

84. Senator INHOFE. General Kehler, under the fiscal year 2011 CR, MDA is spending $324 million less than it anticipated in fiscal year 2011. The fiscal year 2012 budget request reduces the GMD program by $185 million. How are these reductions impacting GMD operations, reliability, and any modernization activities?

General KEHLER. MDA has a plan for absorbing the impact of the fiscal year 2011 continuing resolution which provides the right balance between capability and risk. We expect to see completion of missile field 2, Fort Greely power plant, power distribution and other upgrades thru fiscal year 2012. There will be some slip of manu-

facturing GBIs number 31 through number 44 and software builds, as well as delays in flight testing.

MISSILE DEFENSE—SM–3 AND AEGIS

85. Senator INHOFE. Admiral Stavridis and General Kehler, what is your current level of confidence in being able to deploy the Standard Missile-3 (SM–3) block IIA by 2018 and the SM–3 IIB by 2020?

Admiral STAVRIDIS. EUCOM is actively working with the Joint Staff, the MDA, and our allies and partners, and will be ready to deploy the SM–3 block IIA and SM–3 block II B once the development testing and fielding are complete.

General KEHLER. I am confident that the MDA will meet the deployment timelines for both the SM–3 Block IIA and Block IIB. The SM–3 Block IIA—a cooperative development program with the Japanese—has undergone component ground testing in preparation for its first intercept test in 2015 and is on track for 2018 deployment. For the SM–3 Block IIB, MDA has completed system concept review and solicited three competitive concept definition contracts. One industry team will be selected in 2013 to complete development and begin flight testing in 2016. MDA is allocating more time for SM–3 Block IIB development than other similar missile defense interceptors to ensure low development risk, and is on track for a 2020 deployment.

86. Senator INHOFE. Admiral Stavridis and General Kehler, even with the updated version of the SM–3 missile, deploying seven Aegis ships in European waters could provide only patchwork protection. Permanently stationing these ships in European waters would require more than the 18 Aegis ships in our inventory. Do we have enough Aegis ships to not only protect Europe from an Iranian threat but also have Aegis ships deployed around the globe?

Admiral STAVRIDIS. EUCOM has been working with our service components and the Joint Staff to define our requirements for missile defense capabilities using the Global Force Management (GFM) process. At this time, we are satisfied with how this process is being managed and understand the difficult choices that are made with regards to missile defense assets, such as Aegis. With regard to how allocated Aegis Missile Defense platforms are best sourced, the Navy is best suited to provide a more detailed answer.

General KEHLER. Today's inventory of 22 Aegis BMD modified ships is adequate to complete EPAA Phase I deployment. By end of fiscal year 2011, inventory will be 24 Aegis ships. Current modification plans reflect 38 Aegis BMD ships in total. The PAA strategy applies to all geographic combatant command area of responsibility (AOR). It requires we maintain a flexible pool of rapidly deployable BMD capabilities to surge into a threatened area of responsibilities based on strategic indications and warning during an emerging crisis, while maintaining steady-state defenses in other areas of responsibility. Aegis ships form the bulk of this deployable pool, but are also a multi-mission platform, conducting other missions than BMD. By themselves, Aegis provides only one layer of BMD, and is not intended to ensure complete defense against all threats in all theaters. Other systems, such as, Aegis Ashore, Terminal High Altitude Area Defense and NATO members' BMD assets are part of the overall strategy.

U.S. EUROPEAN COMMAND FORCE STRUCTURE

87. Senator INHOFE. Admiral Stavridis, if the number of U.S. troops stationed in EUCOM's AOR is reduced, could EUCOM still carry out its building partnership capacity mission in Europe and still provide substantial rotational troops to an overseas contingency operation?

Admiral STAVRIDIS. Yes. Depending on the scope and timing of any reductions, EUCOM should to be able to continue to support its building partner capacity (BPC) mission, as well as provide support for overseas contingency operations. With the anticipated drawdown in Afghanistan, the reduced global demand signal for forces assigned to EUCOM should enhance our capability to focus even more on BPC activities in the near future.

88. Senator INHOFE. Admiral Stavridis, at what troop level does conducting both of these missions become impossible?

Admiral STAVRIDIS. The answer to your question depends on many factors. Currently, it is difficult to pinpoint an exact troop level at which EUCOM's ability to support the building partnership capacity mission and provide support to overseas

contingency operations would become impossible. Further analysis, beginning with a specific mission EUCOM is tasked to support and focused more on capabilities than numbers, would be required if additional EUCOM force reductions were proposed in order to assess the point at which we would experience mission failure.

89. Senator INHOFE. Admiral Stavridis, will DOD continue to retain four Brigade Combat Teams (BCT) in Europe? If not, what has changed and why?

Admiral STAVRIDIS. As of today, DOD has not announced its final decision on European force posture. I do believe we will hear that announcement soon and I am confident that my voice was heard in the Department's deliberations on this matter.

Post-Hearing Note: On April 8, 2011, DOD announced that it will retain three BCTs in Europe to maintain a flexible and rapidly deployable ground force to fulfill U.S. commitments to NATO, engage effectively with our allies and partners, and meet the broad range of 21st century challenges. The three BCTs remaining in Europe after 2015, complemented by other capabilities, will enhance and rebalance U.S. force posture in Europe to make it more capable, more effective, and better aligned with current and future security challenges. This decision was based on the administration's review of global posture, consultations with our allies, and the findings of NATO's New Strategic Concept.

90. Senator INHOFE. Admiral Stavridis, do you support any changes?

Admiral STAVRIDIS. Yes, I strongly support the Department's position on force structure in Europe. I have been involved in the decision-making process and am confident that my voice has been heard on this. I believe the announcement on this issue will be made very soon.

Post-Hearing Note: I do support the changes recently announced by DOD. The three BCTs remaining in Europe after 2015 offer capabilities that enable the EUCOM to build partner capacity and meet interoperability objectives while supporting the full range of military operations, including collective defense of our NATO allies under Article 5 of the Washington Treaty. This BCT mix will be complemented by other capability enhancements, including the forward deployment of Aegis ships, land-based missile defense systems in Poland and Romania as part of the EPAA, the forward stationing of special operations aircraft, and a permanent aviation detachment in Poland. Taken together, these measures will enhance and rebalance the U.S. force posture in Europe to make it more capable, more effective, and better aligned with current and future security challenges.

GEORGIA

91. Senator INHOFE. Admiral Stavridis, what is the EUCOM relationship with Georgia?

Admiral STAVRIDIS. EUCOM has a robust and enduring relationship with Georgia which continues to strengthen as we promote Georgia's defense transformation along Euro-Atlantic lines. To support this goal, EUCOM executes a wide-array of defense cooperation activities that support Georgia's defense reform, Euro-Atlantic integration, and expeditionary capabilities. The objective of U.S. assistance is to help Georgia develop its defense capabilities and advance its NATO integration goals, as well as provide training and assistance to their expeditionary forces in support of the International Security Assistance Force (ISAF) in Afghanistan. The new Georgian defense leadership has embraced the U.S. concept of an emphasis on training and education as the path for long-term improvement of its military capabilities. We also support Georgia through policy initiatives such as the U.S.-Georgia Charter on Strategic Partnership and the NATO–Georgia Commission. This partnership is essential to Georgia's security and regional stability.

92. Senator INHOFE. Admiral Stavridis, what is the current status of Russian forces in Georgia?

Admiral STAVRIDIS. Russia currently has forces stationed in the Georgian regions of Abkhazia and South Ossetia contrary to the August 2008 ceasefire brokered by French President Sarkozy.

The Russian Government announced after the 2008 conflict that it would expand its permanent military presence in Abkhazia and South Ossetia, areas which it recognized in August 2008 as independent states. In April 2009, bilateral agreements between Russia and the de facto separatist leaders in Abkhazia and South Ossetia agreed to long-term basing rights. New Russian bases in both territories were constructed in 2010 which continue to be fortified by the Russian military.

93. Senator INHOFE. Admiral Stavridis, what is the status of Georgia's request for the United States to provide weapons, such as small arms and Claymore mines, which I believe has been in DOS since 2008?

Admiral STAVRIDIS. For the status of those specific requests I would have to defer to my DOS colleagues. However, at EUCOM, we continue to strengthen our military relationship with Georgia and remain fully committed in supporting Georgia's sovereignty and territorial integrity. Our priority for security cooperation to Georgia remains to assist in the training and equipping of Georgia's military units which deploy and fight without caveats alongside the U.S. Marines in Afghanistan's Helmand Province.

We are also committed to providing comprehensive defense assistance to Georgia in the areas of doctrine, personnel management, education, and training to support defense reform and modernization. This approach supports Georgia's Euro-Atlantic aspirations as well as security and stability in the region.

QUESTIONS SUBMITTED BY SENATOR ROGER F. WICKER

NATO AND AMERICAN LEADERSHIP

94. Senator WICKER. Admiral Stavridis, on March 3, President Obama publicly stated that Qadhafi must go. American credibility and resolve, American traits that are consistently evaluated by al Qaeda, the Taliban, and the North Koreans, are already on the line. I am concerned that America's credibility abroad will be damaged if coalition efforts fall short of both protecting civilians and decisively facilitating regime change. I am concerned that the lack of clear consensus in Brussels on decisive next steps on Libya may lead our competitors or future adversaries to determine that the best way to limit NATO's effectiveness is to play the interests of member countries against each other.

This is a distressing thought given each member of NATO has its own unique geopolitical, economic, and energy interests. As such, what is your assessment of where the situation in Libya stands as a test case for NATO's effectiveness and relevancy in a post-September 11 world?

Admiral STAVRIDIS. First, I would like to state that there is indeed consensus within NATO on the operations in Libya. Within 5 days of the passage of UNSCR 1973, the NAC reached consensus on taking the lead of the arms embargo mission. Within 1 week of UNSCR 1973 passage, the NAC adopted the no-fly zone mission by consensus. Finally, in only 10 days, the NAC agreed to take the lead of the entire mission, including protection of civilians and civilian populated areas.

NATO has already been extremely effective in Operation Unified Protector. There are currently 20 NATO nations (plus three partner nations) actively supporting this operation and all agree with its execution. It is also worth noting that NATO is conducting this operation in addition to its other ongoing operations around the world, including Iraq, Afghanistan, the Balkans, and counter-piracy operations. This is a clear demonstration of NATO's effectiveness and relevancy in a post 9/11 world.

95. Senator WICKER. Admiral Stavridis, the United States has faced tremendous difficulty in the past rallying consensus and participation by our NATO allies in Afghanistan. Collective action is inherently complex and consensus-building often results in delayed military action. How difficult will it be to achieve consensus at NATO on next steps in Libya since President Obama has opted to let NATO allies take the lead on Libya policy?

Admiral STAVRIDIS. NATO has acted very quickly in response to the crisis in Libya. Within 5 days of the passage of UNSCR 1973, the NAC reached consensus on taking the lead of the arms embargo mission. Within 1 week of UNSCR 1973 passage, the NAC adopted the no-fly zone mission by consensus. Finally, in only 10 days, the NAC agreed to take the lead of the entire mission, including protection of civilians and civilian populated areas.

96. Senator WICKER. Admiral Stavridis, I understand that NATO currently has operational command of the no-fly zone over Libya but it is still unclear how NATO will define the scope of efforts to protect civilians on the ground. What policy and operational organizations within NATO are tasked with establishing clear rules of engagement for our pilots and warfighters with regard to attacking Qadhafi elements on the ground?

Admiral STAVRIDIS. SHAPE has produced the rules of engagement as part of the various operation plans it has produced. These were endorsed by the NAC before

execution of the mission. The subordinate Headquarters plan and execute their missions within the direction and guidance of these operation plans.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

LIBYA

97. Senator CORNYN. Admiral Stavridis, on March 28, Vice Admiral Gortney briefed the media that the United States has flown roughly half of all strike sorties in Libya, performed nearly 80 percent of all air refueling, almost 75 percent of aerial surveillance hours, and 100 percent of all electronic warfare missions. What proportion of strike and combat support sorties (refueling, intelligence surveillance, and reconnaissance, etc.) does the United States expect to continue flying after the transition to NATO command?

Admiral STAVRIDIS. As the President has said, the United States will begin to draw down its participation in the Libyan operations as NATO takes the lead on this mission. So I do expect to see a decrease in the percentage of sorties being flown by the U.S. However, the exact amount of support provided by any country to a NATO mission is ultimately a national decision. In the case of the United States, it is a question best addressed by the Office of the Secretary of Defense.

98. Senator CORNYN. Admiral Stavridis, after command is passed to NATO, can the coalition maintain an effective no-fly zone and execute its humanitarian mission without the United States providing the vast majority of aircraft, ships, personnel, and funding?

Admiral STAVRIDIS. Yes, I am confident that NATO and other partner nations have the capacity to execute the mission mandated by the UNSCR 1973 without the United States providing the vast majority of aircraft, ships, personnel, and funding.

99. Senator CORNYN. Admiral Stavridis, on March 20, Admiral Mullen appeared on Meet the Press and, when asked, confirmed what we all know to be true, that we are at war with Libya. Curiously, the White House and other administration officials, in briefings the following week to congressional offices, maintained that the United States is not at war. From your vantage point, is the United States at war with Libya?

Admiral STAVRIDIS. From my perspective, the United States is conducting combat and support operations under NATO command in limited military operations, aimed at achieving the three-fold mission defined in UNSCRs 1970 and 1973—enforce the arms embargo, enforce the no-fly zone, and protect the citizens of Libya.

100. Senator CORNYN. Admiral Stavridis, in a March 28 address on Libya, President Obama repeated his policy that Muammar Qadhafi needs to step down. In your assessment, if Qadhafi holds on to power, does that increase the likelihood that our involvement in Libya will become more protracted?

Admiral STAVRIDIS. NATO's Operation Unified Protector exists to execute the three-part mission outlined in the UNSCR 1973 to enforce an arms embargo and no-fly zone, and protect civilians and civilian populated areas. This mission exists independent of who is in power in Libya. I can tell you that the operation has a programmed 90-day assessment at which point we will evaluate how we are progressing in each mission area.

JOINT INTERAGENCY TASK FORCE MODEL FOR USE IN EUROPE

101. Senator CORNYN. Admiral Stavridis, your prepared testimony highlights EUCOM's counter-trafficking efforts. In your former role as commander of U.S. Southern Command (SOUTHCOM), you oversaw the work of Joint Interagency Task Force-South (JIATF-South), which is based in Key West and plays a lead role to counter trafficking from Latin America. Now that you are at EUCOM, it is my understanding that a similar entity has been created there, the Joint Interagency Counter-Trafficking Center-Europe (JICTC-Europe), based on the same concept as SOUTHCOM's JIATF-South. It is clear that the information sharing fostered by JIATF-South and related agencies has greatly increased America's ability to combat illegal trafficking of all kinds. Please comment on the overall significance of your JICTC-Europe initiative.

Admiral STAVRIDIS. EUCOM's JICTC will support U.S interagency efforts to counter illicit trafficking and terrorism and assist focus nations in building self-sufficient counter-trafficking and counterterrorism skills, competencies, and capacity.

The JICTC—our forum for facilitating this effort—is still in its early stages. It was at its initial operational capability stage as of mid-August 2010. JICTC coordinates its efforts with U.S. Government interagency representatives assigned to EUCOM Headquarters, as well as interagency representatives in Washington, DC. Our efforts to communicate the roles and mission of the JICTC have included one-on-one office calls, engagements, and briefings with key leaders across the U.S. Government and with the U.S. Embassy Country Teams in Europe. Additionally, we are educating our interagency partners regarding the Defense Department's counter-trafficking capabilities that can be leveraged to support their activities in the region. Unlike JIATF-South, the JICTC does not have a detect and monitor role, nor the ability to actively coordinate an interdiction.

102. Senator CORNYN. Admiral Stavridis, more broadly, do you think the Federal Government should follow suit and adapt the innovative JIATF model elsewhere within the U.S. Government?

Admiral STAVRIDIS. In my experience, most problem sets require interagency cooperation. The Joint Interagency Task Force model has proven very effective in addressing its stated problem sets. That particular model may not work for all missions. However, it is an example of how an appropriate interagency framework can be built to facilitate close, continuous, and increasingly necessary whole-of-government solutions and coordination for complex problems, such as the pernicious and widespread effects of global illicit trafficking.

103. Senator CORNYN. Admiral Stavridis, along the southwest border of the United States we suffer greatly from the inability of Federal, State, and local agencies from effectively and efficiently cooperating and sharing information. As a result, illegal narcotics and aliens continue to flow into the United States through the porous U.S.-Mexico border. What lessons learned in EUCOM's counter-trafficking operations could be effectively applied through a similar U.S. Government effort along the U.S.-Mexico border?

Admiral STAVRIDIS. Our experience in EUCOM is that the problem must be addressed both in the border areas as well as the broader areas through which the illicit trafficking occurs (the transit zone). As an example of how we approach this problem in EUCOM, we work with the Balkan nations to develop capacities to disrupt trafficking organizations and improve border management along the ingress route for heroin from Afghanistan. We also work with international detection and monitoring centers, such as the Maritime Analysis and Operations Center for Narcotics in Lisbon and the Center for Combating Drugs in the Mediterranean, to address the transit vector of cocaine from South America. I have established the Joint Interagency Counter Trafficking Center to improve coordination and information sharing with our interagency partners and to assist nations that lie along these border areas and transit zone through which the threat of illicit trafficking continues to pose a threat to our allies and partners in Europe, as well as the United States. Through the work of the JICTC, we are better able to make our expertise and experience more accessible to them.

MISSILE DEFENSE

104. Senator CORNYN. Admiral Stavridis, the EPAA strategy implemented by the Obama Administration calls for a missile defense system that can be adapted to provide better protection against emerging threats. You note in your written statement that "there is an existing and expanding threat from ballistic missiles to EUCOM's area of focus," and that EUCOM is working with the MDA to ensure that the infrastructure in Europe will be ready for each phase of the EPAA. There is little disagreement that Iran has acquired ballistic missiles from other countries and has developed other ballistic missiles indigenously. Regardless of their state of development, the Iranian regime's desire to pursue acquisition of weapons capable of reaching Europe and Israel is alarming. What is the exact status of the implementation of the EPAA throughout the EUCOM AOR?

Admiral STAVRIDIS. This is an issue which occupies a great deal of our attention in the EUCOM theater, and EUCOM is working with our partners in the DOS, MDA, Services, and components commands to ensure that we can implement and operationalize the EPAA.

For Phase 1, the USS *Monterrey* is already in theater laying the foundation to make Phase 1 operational. This ship represents the first asset deployed under the EPAA as well as the intercept capability planned for Phase 1. To enhance this capability, which is already in theater, EUCOM is fully supporting DOS's basing nego-

tiations for the AN/TPY–2 radar, and is working closely with the Joint Staff, Office of the Secretary of Defense, and U.S. Army Europe to ensure that deployment can occur as soon as possible once negotiations are complete.

For Phase 2, EUCOM is fully supporting negotiations led by DOS to establish basing and agreements necessary for the Aegis Ashore site in Romania, and working closely with the Navy and MDA as this development program continues.

For Phase 3, EUCOM is working with our key ally, Poland, to further define terms and conditions and lay the groundwork for the successful construction of an Aegis Ashore facility in that country.

In addition, EUCOM and our component commands have begun working with our NATO counterparts in developing the procedures and defining the systems we will use to cooperate in achieving the goals of the Lisbon Summit.

105. Senator CORNYN. Admiral Stavridis, at this time, how confident are you of our ability to protect Israel from ballistic missile attack originating in a nearby country such as Iran?

Admiral STAVRIDIS. The cooperation we have with Israel in this regard is strong, and I believe it will continue. I had a chance to see a missile defense exercise a year ago, and I am going to another missile defense exercise this summer. This is a capability on which EUCOM and the Israeli Defense Forces work very closely.

106. Senator CORNYN. Admiral Stavridis, the administration is maintaining the two-stage version of the GBI for deployment to Europe as a hedge against technical failure of the SM–3 IIA and IIB missiles. Do you support this hedging strategy?

Admiral STAVRIDIS. Yes. The hedging strategy outlined in the BMD Review Report is a prudent risk management strategy to respond to changes in the threat as well as development delays.

107. Senator CORNYN. Admiral Stavridis, when do you believe the administration will need to make a decision to deploy the two-stage GBI to Europe in order to counter a long-range Iranian threat to Europe and the United States?

Admiral STAVRIDIS. The United States has the capability to intercept a limited ballistic missile strike against the homeland already. In addition, the MDA was given direction in the BMD Review and has programmed funding to continue development of the two-stage GBI as a hedge against an accelerated threat, or if the SM–3 development was delayed. EUCOM and all agencies tasked with monitoring threat development are keeping a close eye on emerging technologies and how they are being used by our potential adversaries. In addition to maintaining vigilance, EUCOM is actively working with the MDA, DOD, and the Services to ensure that the hedging strategies in place provide the United States with the capability to counter threats should they emerge more rapidly than currently anticipated.

108. Senator CORNYN. Admiral Stavridis, a critical component of the administration's plans for the first phase of its missile defense effort in Europe is the basing of an Army-Navy/Transportable Radar Surveillance-2 forward based in Turkey by the end of this year, yet the Turkish Government has yet to agree to this deployment. What is the likelihood the Turkish Government will agree to host this radar and what is the plan if Turkey declines or delays such a decision indefinitely?

Admiral STAVRIDIS. A final decision on the location of the AN/TPY–2 in Southeast Europe is still pending. EUCOM is supporting DOS-led negotiations and interagency discussions. EUCOM and our Service component command, U.S. Army Europe, are working within DOD to plan for any eventual deployment decision, which we will then execute.

109. Senator CORNYN. Admiral Stavridis, the second phase of the EPAA calls for the deployment of the SM–3 block IB missile in Romania by 2015, yet the first flight intercept test of the IB missile has been delayed by at least a few months. Likewise, the EPAA schedule calls for deployment of the IIB missile in Poland by 2018. The IIB version of the SM–3 missile provides protection for all of Europe against long-range missiles from Iran. In light of what you know about the growing threat posed by Iran, what is your assessment of the strategic risks associated with a delay in deployment of the IB missile in Romania by 2015, and the IIB missile in Poland by 2018?

Admiral STAVRIDIS. The key for the Romania deployment is finalizing the negotiations and building the Aegis Ashore site. This is proceeding apace and my staff is very heavily engaged in supporting the negotiations, led by DOS that would allow the United States to base Aegis Ashore in Romania. If the SM–3 Block 1B missile

is delayed, the site can still be operated with the SM–3 Block 1 missiles available today.

ARMY COMBAT BRIGADES IN EUROPE

110. Senator CORNYN. Admiral Stavridis, the Pentagon reportedly intends to decide in the near future how many Army BCTs to keep in Europe, which could be as many as four or as few as two. Meanwhile, since 2002, two Germany based BCTs have essentially been in limbo while the Pentagon debates their fate. It now appears unlikely that these units, which had been scheduled to return to the United States by 2013, will meet that deadline. I wonder if our soldiers there receive the same high quality training that they would receive stateside at a post such as Fort Bliss, TX, where training opportunities are unparalleled due to its vast ranges and whose conditions accurately simulate those faced by soldiers in Afghanistan and Iraq. In your view, is delaying the return of these Army units from Europe the right course of action, given that our European allies have their own highly capable militaries?

Admiral STAVRIDIS. Yes to both questions. We have proven our mission readiness and training capacity during multiple brigade rotations over the past 8 years from numerous locations throughout Germany to include Grafenwoehr, Baumholder, Ansbach, and Schweinfurt. The brigade at Baumholder and the brigade being consolidated at Grafenwoehr both have immediate access to two of the largest and best training areas in Europe. These two locations offer training, deployment, and quality of life capabilities comparable to facilities anywhere in the United States. Grafenwoehr has firing ranges immediately available for the use of live fire, urban training, simulation, unexploded ordnance, Improvised Explosive Devices (IED) detection lanes and more. Soldiers in Europe have the added benefit of continuous opportunities to train with soldiers from allied and partner nations. These opportunities have proven invaluable in building coalition partnerships with both NATO and non-NATO countries, and enhancing unit interoperability which remains critical for our forces operating in Afghanistan and the unknown battlefields of tomorrow. Training and exercising in Europe also offers unique professional development for our future leaders. This same multi-national experience in coalition operations is unavailable to U.S.-based units who are scheduled to deploy to conduct periodic rotations at forward locations.

Keeping three BCTs in Europe contributes significantly to preserving the credibility of the U.S. commitment to NATO and the defense of our allies in Europe, particularly in light of the renewed emphasis placed on collective defense, crisis response, and promoting international stability in NATO's New Strategic Concept. European confidence in the U.S. commitment is essential to our leadership of the NATO Alliance as we continue to encourage substantive allied support for out-of-area operations and hedges against future uncertainty in a cost effective manner. Maintaining a broad range of ground force capabilities, consistent with a three BCT structure in Europe, will reassure our allies of America's continued commitment to Article 5, maintain U.S. leadership in NATO with the ability to shape the transformation of allied forces, and support U.S. objectives in countering threats emanating within and on the periphery of Europe.

111. Senator CORNYN. Admiral Stavridis, why are the previously mentioned Army BCTs still permanently stationed in Europe, and when will the Army bring them home?

Admiral STAVRIDIS. Consistent with the principles outlined in the 2010 Quadrennial Defense Review, the National Security Strategy, and the NATO New Strategic Concept, DOD conducted an assessment of its defense posture in Europe to ensure a balance of forces that will meet U.S. enduring commitment to NATO's Article 5, ensure a credible deterrent against all forms of aggression, and also maintain a robust capacity to strengthen allied and partner capacity for coalition operations. The Department will announce the outcome of these reviews very soon.

Post-Hearing Note: On April 8, 2011, DOD announced that it will retain three BCTs in Europe to maintain a flexible and rapidly deployable ground force to fulfill U.S. commitments to NATO, engage effectively with allies and partners, and meet the broad range of 21st century challenges. These three BCTs remaining in Europe after 2015, complemented by other capabilities, will enhance and rebalance U.S. force posture in Europe to make it more capable, more effective, and better aligned with current and future security challenges.

[Whereupon, at 12:53 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION OF APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, MARCH 31, 2011

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

DEPARTMENT OF THE ARMY

The committee met, pursuant to notice, at 9:32 a.m. in room SD–G50, Dirksen Senate Office Building, Senator Carl Levin (chairman), presiding.

Committee members present: Senators Levin, Lieberman, Reed, Akaka, Nelson, Udall, Hagan, Begich, Shaheen, Blumenthal, McCain, Inhofe, Sessions, Chambliss, Brown, Portman, and Ayotte.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Jonathan D. Clark, counsel; Jessica L. Kingston, research assistant; Michael J. Kuiken, professional staff member; Gerald J. Leeling, counsel; Jason W. Maroney, counsel; Michael J. Noblet, professional staff member; and William K. Sutey, professional staff member.

Minority staff members present: David M. Morriss, minority staff director; Adam J. Barker, professional staff member; John W. Heath, Jr., minority investigative counsel; Daniel A. Lerner, professional staff member; Michael J. Sistak, research assistant; and Richard F. Walsh, minority counsel.

Staff assistants present: Christine G. Lang, Brian F. Sebold, and Breon N. Wells.

Committee members' assistants present: Christopher Griffin, assistant to Senator Lieberman; Carolyn Chuhta, assistant to Senator Reed; Nick Ikeda, assistant to Senator Akaka; Ann Premer, assistant to Senator Ben Nelson; Gordon Peterson, assistant to Senator Webb; Casey Howard, assistant to Senator Udall; Lindsay Kavanaugh, assistant to Senator Begich; Chad Kreikemeier, assistant to Senator Shaheen; Jeremy Bratt, assistant to Senator Blumenthal; Anthony Lazarski, assistant to Senator Inhofe; Lenwood Landrum, assistant to Senator Sessions; Clyde Taylor IV, assistant to Senator Chambliss; Charles Prosch, assistant to Senator Brown; and Brad Bowman, assistant to Senator Ayotte.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody.

The committee today welcomes Secretary of the Army John McHugh, and Chief of Staff of the Army, General George Casey, Jr., for our hearing on the Army's fiscal year 2012 budget request and current posture.

This hearing marks the fourth and final appearance before this committee for General Casey as the Army's 36th Chief of Staff. In a few short days, he'll relinquish leadership of the Army and bring to a close his 41 years of dedicated and honorable uniformed service to our Nation.

General Casey's career has touched nearly every major military event of the last 4 decades, and his leadership has helped shape our military posture in the struggles that we face today. He and his wife, Sheila's, devotion to soldiers and their families, including the family programs that he has initiated, have resulted in improvements in Army quality of life that contribute to the force's resilience and readiness. For this, and for much more, we are grateful.

The Army that General Casey and Secretary McHugh will describe for us is as great today as it has ever been; combat-tested and proven, having met the challenges of the last decade with courage, determination, and professionalism. The Army remains, however, stretched by nearly 10 years of continuous combat, and must deal with many enduring and new challenges that will be no less daunting and will likely require similar sacrifice.

Let me open with a challenge that I don't believe the Army, or any of our Services, should have to endure. The Department of Defense (DOD), as with all Federal agencies, continues to operate under a Continuing Resolution (CR) that expires on April 8. If the current CR is extended for the whole year, then funding shortfalls will hurt all of the Army's operation, maintenance, construction, and investment accounts. Programs to improve facilities and take better care of wounded warriors' and soldiers' families could be delayed. Tough decisions made by the Army over the last year to cancel poor performing or unnecessary weapons systems and instead increase investment in recapitalization, upgrade, and reset programs will stall. We should take up and pass a fiscal year 2011 Defense appropriations bill. It's the right thing to do for our troops and our country.

Despite the difficulty of managing resources under a CR, the Army continues to meet the demand for trained and ready forces in support of operations in Afghanistan and Iraq. The drawdown of U.S. forces in Iraq has begun, but nearly 40,000 American troops will remain there until the conclusion of our complete withdrawal by this December.

The Army provides over 60,000 troops to operations in Afghanistan. Hard fighting will continue, even as we and our allies continue to build the Afghan security forces so that they may take more and more responsibility for their own security. We know that our troops deploying to Afghanistan or Iraq have the highest priority for resources to ensure that they are trained and ready before they go, to make sure they have what they need when they get there. But, this drives the Army to make near-term tradeoffs

among its many other resource needs. We're interested to hear from our witnesses how they're managing the challenges of CRs and what risks confront the Army if a regular appropriations bill is not enacted.

As resilient, adaptable, trained, and ready as our soldiers are today for their missions in Afghanistan and Iraq, the future beyond these operations holds real questions about the purpose, size, and structure of the Army. In a speech to cadets at the U.S. Military Academy last month, Secretary of Defense Gates argued that it is unlikely that the Nation will commit large land forces to future conflicts, and that the Army must "confront the reality that the most plausible high-end scenarios for the U.S. military will be primarily naval and air engagements." Secretary Gates cautioned that, in a strategic environment where we are unlikely to fight an enemy employing large armored formations, the Army will find it difficult to justify the number, size, and cost of its heavy armored brigades.

At about the same time, General Casey seemed to go in a different direction when he said he expects that, at the end of the next 10 years, the Army will still have 50,000 to 100,000 soldiers deployed in combat. The Chairman of the Joint Chiefs, Admiral Mullen, said that, for planning purposes, DOD assumes 6 to 10 combat brigades will likely be deployed.

We look forward to hearing our witnesses' views on these perspectives and how they may shape the Army's plans and priorities for the coming years.

Pressure to cut spending in general is being felt throughout the government and DOD. DOD's efficiencies initiatives is intended to take funds away from less important or inefficient programs or activities and to put them to higher current and future modernization priorities. The Army's share of the efficiencies initiatives is $28 billion over fiscal years 2012 through 2016, which the Army plans to achieve through weapons systems cancellations, construction delays, and organization realignments and consolidations. We're interested to hear Secretary McHugh's and General Casey's assessments of the efficiencies initiatives, its potential impact on the Army, and what actions they intend to take, if any, to ensure that the projected savings are realized.

It seems like only yesterday that we were concerned with growing our ground forces as quickly as possible, both to meet the demands of operations in Iraq and Afghanistan and to relieve some of the rotational pressures on soldiers and their families. People are the most important and precious asset throughout the Armed Forces. Dialing up or down the size of the Army is never easy, nor inexpensive. However, the Army needs to begin planning for the end strength reductions announced by Secretary Gates in January.

Under General Casey's leadership, the Army has made restoring balance a guiding theme and objective of significant effort and investment. Balance, as we understand it, seeks to increase the amount of time at home, resetting and training for other contingencies, relative to the amount of time deployed for operations in Afghanistan, Iraq, or elsewhere. More time at home station for training is critical to the Army's efforts to rebuild its strategic

depth, the desired readiness in the nondeployed force, such that it is capable of responding to any unforeseen contingency.

Although the Army continues to meet the demand for counterinsurgency and support operations in Afghanistan, Iraq, and around the world, and despite the amazing resilience of our troops and their families, the Army remains stressed in many ways. Given the planned Army drawdown, budget pressures, and force demands for operations in Afghanistan, we continue to face substantial risk, should we need the Army to respond to another contingency. We'd be interested to hear General Casey's report on the Army's progress towards restoring balance this year, and his assessment of Army readiness for unforeseen contingencies.

The Army needs to continue to rationalize and stabilize its near- and long-range modernization strategies and programs. In general, major Army modernization efforts have not been successful over the past decade or more. A recent study of Army modernization notes that, since 2004, the Army has spent from $3.3 billion to $3.8 billion per year to develop weapons systems that ultimately were canceled.

Over the last 2 years, at the direction of Secretary McHugh and under the leadership of Vice Chief of Staff of the Army, General Peter Chiarelli, and Under Secretary of the Army, Dr. Joseph Westphal, the Army has worked diligently through an objective and detailed series of capability portfolio reviews that has started it on a path towards achieving rational, stable, and affordable Army modernization strategies and programs. As a result of this analytical process, the Army has canceled less relevant, overambitious, redundant, or unaffordable weapons systems.

But, the Army is not out of the woods yet with its major acquisition programs. There are still significant challenges ahead with the management and funding of its modernization priorities, including development of a new ground combat vehicle. We're interested to hear our witnesses' assessments of the Army's review process, and how they plan to sustain the momentum achieved over the last 2 years.

Finally, no two leaders in the Army have cared more or worked more tirelessly than Secretary McHugh and General Casey in dealing with the human cost to soldiers and their families of the pressures and consequences of an Army in continuous combat for 10 years. A noteworthy priority of General Casey over his 4 years as Chief of Staff has been finding ways to mitigate the stress of multiple combat rotations and long separations on soldiers and their families. DOD and the Army set a goal that soldiers and units should have twice as much time at home as they would deployed, and that Army families would enjoy greater stability and less stress.

Wounded soldiers deserve, and are getting, the highest priority from the Army for support services, healing and recuperation, rehabilitation, evaluation for return to duty, successful transition from Active Duty, if required, and continuing support beyond retirement or discharge. The Army has established many new programs for the improved care of our wounded soldiers and their families. Despite the efforts of everyone, heartbreaking incidents of suicide continue. The committee is interested to hear Secretary McHugh's and

General Casey's updates and assessments of the Army's efforts in these areas, as well.

The Nation could not be more proud of our Army, its soldiers, and their families. The most important thing we can do to thank them for their service and sacrifice is ensure that they have what they need, when they need it, to do what we ask them to do. So Congress needs to pass a fiscal year 2011 Defense appropriation.

General Casey, thank you again for your leadership and for the service and sacrifices of your family in supporting you over all these years.

Senator McCain.

STATEMENT OF SENATOR JOHN MCCAIN

Senator MCCAIN. Thank you, Mr. Chairman.

Secretary McHugh and General Casey, welcome back to the committee.

Secretary McHugh, I believe this is your second appearance at our annual Army posture hearing. Thank you for your continued leadership.

General Casey, this will be your last appearance at our annual posture hearing, and you've spent the last 41 years in uniform, including nearly 4 years as Chief of Staff. Thank you for your years of service to our country. We all appreciate the many sacrifices that you and your family have made over the past decades.

Today, our Army is still at war. For almost 10 years, our soldiers have engaged ruthless and determined enemies on a worldwide battlefield. Our soldiers have fought exceptionally well and at great personal cost to themselves and to their families. Our soldiers turned the tide in Iraq 4 years ago. They're doing so again in Afghanistan. Their singular focus has been to bring the wars in Iraq and Afghanistan to a successful conclusion. Our focus, first and foremost, should be on winning those wars. I would like to hear from you how the Army directly provides those warfighters with the tools they need to win the current fight, and what resources the Army will need in the future.

But, as our soldiers are engaged in conflict abroad, our Nation faces a formidable financial crisis at home, a crisis that can't be ignored. The fact is, we are mortgaging our children's futures. As such, we must be vigilant to both provide the resources for our warfighters to succeed at the missions we've tasked them with and be good stewards of the taxpayers' dollars.

Secretary Gates' efficiencies initiatives is a step, I believe, in the right direction. I'd like to hear how the Army has supported the Secretary's efficiencies drive.

I'd also like to hear about what other programs, service contracts, or other organizations you believe could be reduced or eliminated, going forward, without hurting the war effort.

Success on the battlefield does not come without a cost. Equipment returning from Iraq will need to be repaired and recapitalized. Depleted stocks of Reserve and Guard equipment will need to be reconstituted and modernized. Most importantly, returning soldiers will need increased time to rest and recover before their next phase of training. I'd like to hear what steps you've taken to relieve the stress on both men and materiel, especially as Army end

strength declines. I'd like to also know how you intend to pay for it.

I would note, however, that despite the strain on the force, recruitment and retention remain historically high. This fact stands as a testament to the patriotism and resiliency of our servicemembers in the Army.

As we have witnessed in recent weeks, the global security environment remains anything but predictable. The Army needs a clear vision for the roles and missions it will have to undertake in the future.

In his speech to the cadets about what their future in the Army would look like, Secretary Gates expressed his predictions. He discounted the likelihood of another large land campaign like Iraq and Afghanistan, and forecast an Army, in coming years, that would most likely engage in short-duration, low-intensity operations. He also warned that the Army would have difficulty justifying the cost of its large, heavy formations. I'm interested in your views for the future of the Army and whether or not you share Secretary Gates' views.

The Army must also tailor a force today to meet its vision for the future. Through the capabilities portfolio review process, the Army has made recent strides to eliminate acquisition programs that failed to deliver increased capabilities at a reasonable cost and in a reasonable amount of time.

That said, I continue to be concerned by the Army's seeming inability to successfully manage its major defense acquisition programs. A recent study noted that, between 1990 and 2010, the Army terminated 22 major acquisition programs. The same study suggested that the Army has wasted between $3.3 and $3.8 billion in research and development (R&D) funds per year, every year since 2004, on programs that produced few tangible results. With this study's background, I was shocked to learn that the Army had asked for another $407 million in the fiscal year 2012 budget to continue developing the Medium Extended Air Defense System (MEADS) when you have decided to cancel the program and never field the system.

Let me be very clear. This kind of business-as-usual approach should be stopped. I expect that the Army will substantially improve its program management of other larger acquisitions, such as the ground combat vehicle. I'd like to hear how you intend to improve the management and oversight of the major Army acquisition programs so that something like MEADS doesn't happen again.

I also, Mr. Secretary, have been very troubled by recent reports concerning these heinous acts that were committed in Afghanistan by Army units. It's not the U.S. Army. We all know that. But, we also know how the actions of a few can affect the reputation of the many. So, I hope that you could discuss that issue a little bit with us this morning. It makes all of us grieve beyond words, not because there are occasional rogue elements within our military, but the damage it does to the finest institutions in America. I would appreciate your comments this morning about that, and what actions can possibly be taken.

It's our job to remind the American people of the outstanding service and courage and sacrifice that's being made by our men and women in the Army every single day.

I thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator McCain.

Secretary McHugh.

STATEMENT OF HON. JOHN M. MCHUGH, SECRETARY OF THE ARMY

Mr. MCHUGH. Thank you very much.

Mr. Chairman, Senator McCain, distinguished members of the committee, it's really wonderful to be back here in the halls of Congress again, and have the opportunity to be reminded of how lucky we are, as a Nation, to have such a body in Congress—in the House and the Senate—and particularly, although I'm somewhat prejudiced, a committee such as this, where, through all of the political turmoil and challenges of the moment, a body of men and women can come together and have one common cause; doing the right thing by our men and women in uniform. I want to particularly thank each of you for your steadfast support in that endeavor. Our 1.1 million soldiers and 279,000 civilians and their families are in your debt and very grateful for your leadership and the leadership of a Congress, and this committee particularly, that allows us to continue to field the greatest force for good the world has ever seen, in my judgment, the U.S. Army.

Today, we are an Army that continues, as has been noted in the opening comments of the chairman and the ranking member, at the forefront of combat, counterinsurgency, counterterrorism, and security assistance operations in nearly 80 nations on the face of this planet.

In Iraq, our soldiers and civilians began one of the largest and most complex logistical operations in our Nation's history. As we continue to draw down our forces to meet the December 31, 2011, deadline, we've already closed or transferred over 80 percent of the bases we once operated to Iraqi authorities. We've reduced the number of U.S. personnel by over 75,000, and redeployed more than 26,000 vehicles. Having visited Iraq very recently, I can tell you, firsthand, the enormity of the retrograde operations, and yet, the exceptionally high morale of our remaining forces as they continue to advise, assist, and train Iraqis to support that burgeoning democracy.

Simultaneously with drawdown operations in Iraq, the Army has surged an additional 30,000 soldiers to Afghanistan to defeat the al Qaeda terrorist network and the Taliban insurgency. This surge enabled our soldiers and our Afghan partners to seize multiple sanctuaries in the traditional insurgent heartland of southern Afghanistan. Additionally, during this past year, our forces have trained 109,000 Afghan National Army soldiers, as well as 41,000 Afghan National Police. Overseas contingency operations (OCO) are just one part of what your Army does.

Our soldiers and civilians from all Army components remain committed to protecting our Homeland, not only from the threat of enemies who would harm us, but also from the ravages of natural and manmade disasters. From National Guard soldiers assisting

with drug enforcement and border security, to the Army Corps of Engineers responding to the catastrophic oilspill in the Gulf of Mexico, the Army has been there to support local, State, and Federal partners in saving, protecting, and caring for our citizens.

Yet, our challenges have not been reserved simply for combat, border protection, or disaster relief. For, just as our soldiers and civilians conducted multiple operations here and around the world, the Army simultaneously continued its far-reaching efforts to modernize their equipment, transform units, and complete the unprecedented consolidations required under the recent Base Realignment and Closure program.

As the Army continues to fight global terrorists and regional insurgents, we must be ever mindful of the future and the enemies it may bring; hybrid threats and hostile state actors, to name just two. It's vital, therefore, that we have a modernization program, one that provides our soldiers with the full array of equipment necessary to maintain a decisive advantage over the enemies we're fighting today, as well as deter and defeat tomorrow's threats, at a price we can afford.

Our fiscal year 2012 budget request is critical to achieving this goal by supporting the extraordinary strides being made in the Army's state-of-the-art network, tactical wheeled vehicle, and combat vehicle modernization programs.

Regarding the network, we're requesting $974 million in procurement and $298 million in R&D for the Warfighter Information Network-Tactical (WIN–T), which will become the cornerstone of our battlefield communications system. This budget also contains $2.1 billion in procurement for joint and combat communications systems, including the Joint Tactical Radio System (JTRS).

As we look to modernize our vehicle fleets, we're asking for $1.5 billion for tactical wheeled vehicle modernization, and over $1 billion to support vital R&D for combat vehicle modernization, including $884 million for the ground combat vehicle and $156 million for the modernization of the Stryker, Bradley, and Abrams platforms.

Along with advances in equipment, the Army is seeking new methods to use and secure our scarce energy resources. Clearly, future operations will depend on our ability to reduce dependency, increase efficiency, and use more renewable or alternative sources of energy. We have made strides in this area, and we need, and we will do, more.

The Army has established a senior energy council, appointed a senior energy executive, and adopted a comprehensive strategy for energy security. Based on this strategy, we are developing more efficient generators and power distribution platforms, factoring in fuel costs as part of equipment modernizations, and developing a net-zero approach to holistically address our installations' energy, water, and waste needs.

Moreover, we're changing how we do business by undertaking comprehensive efforts to reform our procurement methods. In May 2010, the Chief and I commissioned an unprecedented Blue Ribbon Review of the Army's acquisitions systems from cradle to grave. As you noted, Senator McCain, we have a great deal of room for improvement. That panel provided us some 72 recommendations. We are currently analyzing the insightful report, and we'll use it as a

guide over the next 2 years to improve the efficiency and effectiveness of the Army acquisition process.

But, we haven't stopped there. To ensure that we purchase the right equipment to meet the needs of our soldiers, we instituted, as has been noted by both the chairman and the ranking member, a series of capability portfolio reviews to examine all existing Army requirements and transfer those programs that we found to be redundant, didn't work, or which were just too expensive. These broadbased reviews have already helped us to identify key gaps and unnecessary redundancies, while promoting good stewardship of our Nation's resources. We will continue those reviews as a permanent part of our fiscal responsibility program.

We remain committed to using every effort to obtain the right systems, supplies, and services at the right time and in the most cost-effective, streamlined manner possible. Our soldiers and our taxpayers deserve no less. We look forward to working closely with this committee as we continue to implement these sweeping changes.

Throughout it all, as this committee knows so very well, at its heart, the Army is people. Although our soldiers and civilians are better trained, led, and equipped, and more capable than ever before, as has been noted, our forces are clearly stretched and our personnel are strained from a decade of war. This is evidenced by yet another year of discouraging rates of suicide and high-risk behavior, not only among members of the regular Army, but the Reserve components, as well.

In response, under the direct supervision of Vice Chief of Staff, General Pete Chiarelli, the Army completed an unprecedented 15-month study to better understand suicide and related actions amongst our soldiers. In July, we published the first-ever health promotion, risk reduction, and suicide prevention report. It was a very candid, very open, honest, and, at times, stark study and assessment designed to assist our leaders in recognizing and reducing high-risk behavior, as well as the stigma associated with behavioral healthcare. The lessons from this holistic review have been infused into every level of command and incorporated throughout our efforts to strengthen the resiliency of our soldiers, families, and civilians.

Moreover, our fiscal year 2012 budget request provides $1.7 billion to fund vital soldier and family programs to provide a full range of essential services, to include the Army campaign for health promotion, risk reduction, and suicide prevention, as well as sexual harassment, assault response and prevention, and comprehensive soldier fitness programs.

Caring for our families and our personnel has to go beyond mental, physical, and emotional health. We're also committed to protecting their safety, both at home and abroad, from internal and external threats. As part of our continuing efforts to learn and adapt from the Fort Hood shooting, the Army has instituted a number of key programs to enhance awareness, reporting, prevention, and response to such threats. For example, we've implemented iWatch and iSalute programs to improve our ability to detect and mitigate high-risk behavior indicative of insider threat. To enhance interoperability with local, regional, and Federal agencies,

we have also fully implemented the National Incident Management System by 2014. We fielded the Federal Bureau of Investigation's eGuardian system, and require all installations to have emergency management equipment, such as E911 and mass warning notification systems.

Finally, Mr. Chairman, I'd be remiss if I didn't echo for a moment the comments that you made very aptly as to the continuing challenges provided by the CR. I could provide an entire list of those things that we have been unable to do, and the planning that we have been unable to conclude through that. If you'd care to speak about it in specifics, I'd look forward to it. But, suffice it to say, every day that passes without that issue being resolved mounts the challenges that we face.

I should say, given where we are at the moment, and the upcoming expiration of the CR, the only thing I can imagine worse than a year-long CR would be a government shutdown, in terms of what it would mean in providing for our soldiers. I was here for the shutdown in 1995. Most everyone on this committee understands what happened then. I can tell you, from the Army perspective and the military perspective, there was some luck in that the implementation of the shutdown didn't affect pay to soldiers. I doubt we'd be that lucky this time.

The fact of the matter is, and it's not well understood, that if we lapse over a payroll in a government shutdown, soldiers won't be paid. They won't be paid if they're at Fort Bragg, Fort Lewis, Fort Carson, or Fort Drum. They won't be paid if they're at Bagram, Afghanistan, Iraq, or wherever. We will not have the authority.

So, I say that only as a matter of encouragement to those of you on this committee who have been our champions in this effort. Certainly, to the extent we can provide you any kind of information that can carry forward, we are more than willing and, in fact, appreciative of the opportunity.

With that, I'd yield back, Mr. Chairman.

[The joint prepared statement of Mr. McHugh and General Casey follows:]

JOINT PREPARED STATEMENT BY HON. JOHN M. MCHUGH AND GEN GEORGE W. CASEY, JR., USA

INTRODUCTION

In the past decade, America's Army has been challenged and prevailed in some of the most daunting tasks in the history of our military. Soldiers from the Active Army, Army National Guard, and Army Reserve demonstrate indelible spirit, sacrifice, and sheer determination in protecting our national interests and supporting our friends and allies around the world.

In the coming years, our top priorities will be to maintain our combat edge while we reconstitute the force for other missions and build resilience in our people. The Army has made significant progress in restoring balance through the four imperatives we identified in 2007—sustain, prepare, reset, and transform. We are on track to achieve a sustainable deployment tempo for our forces and restore balance to the Army beginning in fiscal year 2012. We successfully completed combat operations in Iraq, transitioning from Operation Iraqi Freedom to Operation New Dawn while executing one of the largest wartime retrogrades in the Nation's history. Operation New Dawn marks the beginning of a new mission for our Army while demonstrating our ongoing commitment to the Government and people of Iraq. Concurrently, we surged soldiers to Afghanistan in support of a new strategic direction in this vital theater. Even with all we have done, there is still much work to do.

The war is not over yet, and we remain in an era of persistent conflict facing an uncertain and increasingly complex strategic environment. Hybrid threats made up

of conventional, irregular, criminal and terrorist capabilities will continue to test our forces. These threats will avoid our strengths and attack us asymmetrically. Therefore, we must continue to organize our formations, update our doctrine and prepare our forces for the full spectrum of operations.

Additionally we remain aware of the difficult economic conditions at home. These conditions will drive our efforts to transform our generating force into an innovative and adaptive organization. We must adapt our institutions to effectively generate trained and ready forces for Full Spectrum Operations, while seeking ways to improve efficiency and reduce overhead expenditures that demonstrate wise stewardship of our taxpayers' dollars. With the continued support of the American people and Congress, we remain committed to the readiness and well being of our soldiers, civilians, and family members. As the Strength of the Nation, the American soldier is the centerpiece of everything we do.

WHERE WE HAVE BEEN

For nearly a decade, the Army has been operating at an exhausting pace. High operational demands have stressed our ability to supply trained and ready forces during most of this period. The result was an Army out of balance, lacking strategic flexibility to respond to other contingencies and lacking the ability to sustain the All-Volunteer Force. This past year, the Army continued to make great strides toward restoring balance to the force.

The drawdown in Iraq and change of mission from Operation Iraqi Freedom to Operation New Dawn on September 1, 2010 represented a significant accomplishment made possible by the extraordinary determination, hard work and sacrifice of American soldiers, their families, and the civilian workforce. During Operation New Dawn, the remaining 50,000 U.S. servicemembers serving in Iraq will conduct stability operations focused on advising, assisting and training Iraqi security forces, all while engineering the responsible drawdown of combat forces in one of the largest and most complex logistical operations in history. The Army closed or transferred over 80 percent of the bases to Iraqi authorities, reduced the number of U.S. personnel by over 75,000 and redeployed more than 26,000 vehicles.

Concurrently, we implemented the President's direction to surge an additional 30,000 soldiers to Afghanistan to defeat the al Qaeda terrorist network and the Taliban insurgency. This surge enabled our soldiers and our Afghan partners to take back insurgent sanctuaries in the traditional insurgent Taliban heartland of southern Afghanistan. Additionally, during this past year our forces have trained 109,000 Afghan National Army soldiers, as well as 41,000 Afghan National Police. As a result, we are beginning to see an improvement in Afghan National Security Force capability.

Last year, the Army responded to three major natural and environmental disasters while continuing to support homeland defense. The Army provided humanitarian relief in response to the devastating earthquake in Haiti, the summer floods in Pakistan and the catastrophic oil spill in the Gulf of Mexico. Additionally, our National Guard soldiers were sent to the Nation's southern border to help control increased illegal activity. They assisted Federal law enforcement agencies responsible for drug enforcement and the security of our borders.

During this past year the Army continued to increase its knowledge and understanding of Full Spectrum Operations. Last October, the Army conducted the first full spectrum rotation against a hybrid threat at the Joint Readiness Training Center, Fort Polk, LA. This was the first time in 5 years that we have been able to conduct a training rotation focused on anything other than operations in Iraq and Afghanistan. As we continue to build dwell and increase the time soldiers have at home, more units will conduct full spectrum training rotations at the Combat Training Centers increasing our ability to hedge against the unexpected and restoring strategic flexibility to the force.

Though we remain heavily engaged, the Army is regaining balance. We are starting to be able to breathe again. We must continue efforts to fully restore balance while maintaining the momentum we have achieved over the past 4 years. The strategic environment continues to be complex, and the stakes are too high to become complacent or underprepared.

RESTORING BALANCING

Restoring Balance

Through the continued support of Congress and the American people, we will lessen the stress on America's Army by focusing on the imperatives we established 4 years ago. We must continue to sustain the Army's soldiers, families, and civilians;

prepare forces for success in the current conflicts; reset returning units; and transform the Army to meet the demands of the second decade of the 21st century.

Sustain

Our first imperative is to sustain our All-Volunteer Force. We must reduce the stress on soldiers, families, and civilians who have borne the hardship of 9½ years of conflict. In addition to addressing this high level of stress, the Army invests time, energy and resources into quality of life programs. We must continue to inculcate resilience in the force, providing soldiers, families, and civilians the skill sets necessary to deal with adversity.

Goals

The most important component required to restore balance within our Army is to increase the time between deployments, known as dwell time. A study completed in 2009 confirmed what we already intuitively knew: Soldiers require at least 2 to 3 years to fully recover, both mentally and physically, from the rigors of a 1 year combat deployment. Training and schooling necessary for a professional soldier to sustain warrior and leader skills are also very important. With these critical considerations, our interim objective is to achieve and then maintain a dwell time of at least 2 years at home for every year deployed for the Active component soldier and 4 years at home for every year mobilized for the Reserve component soldier. In 2011 we will examine the cost and benefits of increasing dwell to 1:3 and 1:5 respectively with a 9 month boots-on-the-ground policy.

In addition to increasing dwell time, the Army must continue to recruit and retain quality soldiers and civilians from diverse backgrounds. People are our most important resource, and to sustain an All-Volunteer Force it is essential to attract those with an aptitude for learning and then retain them as they develop the tactical, technical and leadership skills the Army needs. To grow and develop the Army's future leadership, we need appropriate incentives to encourage sufficient numbers of high quality personnel to continue to serve beyond their initial term of service.

Another important consideration is the health of the force. We must provide our Soldiers and Civilians, as well as their families, the best possible care, support and services by establishing a cohesive holistic Army-wide strategy to synchronize and integrate programs, processes and governance. There are myriad programs available to accomplish this, such as Army Family Action Plan, the Army Family Covenant and other community covenants. Our focus is on improving access to and predictability of services. We will enhance support for the wounded, families of the fallen, victims of sexual assault and those with mental health issues. Our effort to build an entire spectrum of wellness—physical, emotional, social, family and spiritual—will support achieving Army strategic outcomes of readiness, recruitment, and retention. The Army is also building resilience in the force by addressing the cumulative effects of 9½ years of war. We have designed a comprehensive approach that puts mental fitness on the same level as physical fitness by establishing a Comprehensive Soldier Fitness program, developing Master Resiliency Trainers and implementing a campaign for Health Promotion and Risk Reduction. The Army has a requisite duty to provide world class health care for our wounded, ill, or injured warriors and to successfully transition these soldiers and their families back to the Army or civilian life. This is coordinated through the Warrior Care and Transition Program and ably led by well resourced Warrior Transition Units. Our final and most solemn responsibility is to respect and honor the sacrifice of our fallen comrades by continuing to support the needs of their families.

Progress

- Achieved 101 percent of recruiting goals for 2010, exceeding both numeric goals and quality benchmarks for new recruits. Over 98 percent of recruits had high school diplomas, the highest percentage since 1992.
- Exceeded reenlistment goals: 114 percent for the Active component and 106 percent for the Reserve component.
- Decreased accidents and mishaps in several key categories, to include:
  - Off-duty fatalities down by 20 percent
  - On-duty critical accidents down by 13 percent
  - Army combat vehicle accidents down by 37 percent
  - Manned aircraft accidents down by 16 percent
- Expanded Survivor Outreach Services to over 26,000 family members, providing unified support and advocacy, and enhancing survivor benefits for the families of our soldiers who have made the ultimate sacrifice.
- Graduated more than 3,000 soldiers and civilians from the Master Resilience Trainer course.

• Surpassed 1 million soldiers, civilians, and family members who have completed the Army's Global Assessment Tool to begin their personal assessment and resilience training.

Fiscal Year 2012 Budget Highlights for Sustain

• Provides $1.7 billion to fund vital soldier and family programs to provide a full range of essential services to include the Army Campaign for Heath Promotion, Risk Reduction, and Suicide Prevention; Sexual Harassment/Assault Response and Prevention; and Comprehensive Soldier Fitness. In addition, this funding supports family services including welfare and recreation, youth services and child care, Survivor Outreach Services and education and employment opportunities for family members.

• Provides soldiers with a 1.6 percent military basic pay raise, a 3.4 percent basic allowance for subsistence increase, and a 3.1 percent basic allowance for housing increase.

• Continues to fund the Residential Communities Initiatives program which provides quality, sustainable residential communities for soldiers and their families living on-post and continues to offset out-of-pocket housing expenses for those residing off-post.

Prepare

Properly preparing our soldiers for combat against a ruthless and dedicated enemy is critical to mission success. To do so, we must provide the appropriate equipment and training to each Soldier and ensure units are appropriately manned. Our generating force must continuously adapt—tailoring force packages and quickly readjusting training, manning and equipping—to ensure units have the tools necessary to succeed in any conflict. At the same time, we are aggressively pursuing efficiency initiatives designed to reduce duplication, overhead and excess as well as to instill a culture of savings and restraint.

Goals

The Army identified four key goals necessary to adequately prepare the force for today's strategic environment. The first was to responsibly grow the Army. The congressionally-approved growth of the Army was completed ahead of schedule in 2009. However, after a decade of persistent conflict, a number of other factors—nondeployable soldiers, temporary requirements in various headquarters and transition teams, our wounded warriors, elimination of stop-loss—has impacted our ability to adequately man units for deployment. As a result, the Secretary of Defense approved an additional Temporary End Strength of 22,000 soldiers, 7,000 of whom were integrated in 2010. The Army will return to the congressionally-approved Active component end strength of 547,400 by the end of fiscal year 2013. The second key goal addressed training. The Army will continue its commitment to leader, individual and collective training in order to remain mentally, physically, and emotionally agile against a highly decentralized and adaptive foe. The third key goal is to provide the Army with effective equipment in a timely and efficient manner. We must implement a new materiel management approach to ensure a timely availability of equipment that not only protects our soldiers and maintains our technological edge, but does so prudently.

The final and most critical goal is to fully embrace our rotational readiness model—a process we call Army Force Generation (ARFORGEN). ARFORGEN will allow a steady, predictable flow of trained and ready forces to meet the Nation's needs across the full spectrum of conflict. Drawing from both Active and Reserve components, the ARFORGEN process allows us to consistently generate 1 corps headquarters, 5 division headquarters, 20 brigade combat teams, and 90,000 enabler soldiers (i.e., combat support and combat service support). When the current demand comes down, it will allow us to build and maintain the ability to surge 1 corps headquarters, 3 division headquarters, 10 brigade combat teams, and 40,000 enabler soldiers as a hedge against contingencies. ARFORGEN also allows a predictable and sustainable dwell time for soldiers. We are currently working to better align the generating force activities and business processes that support ARFORGEN.

Progress

• Trained and deployed 7 division headquarters, 16 brigade combat teams, 4 combat aviation brigades, and 8 multi-functional/functional brigades for deployments to Operation New Dawn and Operation Enduring Freedom in 2010.

• Increased Army inventory of Mine Resistant Ambush Protected vehicles to 20,000 vehicles.

• Deployed more than 4,300 Army civilians to Iraq and Afghanistan to support operations in both theaters.
• Discontinued the Stop Loss program; last soldiers affected by the policy will leave active duty in early 2011.

Fiscal Year 2012 Budget Highlights for Prepare

• Supports a permanent, All-Volunteer Force end strength of 547,400 for the Active component, 358,200 for the National Guard, and 205,000 for the Army Reserve in the base budget. Provides for a 22,000 temporary increase in the Active component in the Overseas Contingency Operations request (14,600 end strength on 30 September 2012).
• Includes $2.1 billion in procurement for Joint and Combat Communications Systems, including the Joint Tactical Radio System, and an additional $1.5 billion in Tactical Wheeled Vehicle modernization funding.
• Provides over $5.6 billion for the Army to implement training strategies in support of Full Spectrum Operations, designed to prepare units for any mission along the spectrum of conflict, i.e., to perform the fundamental aspects of offense, defense, and stability operations against hybrid threats in contemporary operational environments.
• Invests $1.5 billion in 71 UH–60M/HH–60M Black Hawk Helicopters—a critical step in modernizing the utility helicopter fleet. Provides a digitized cockpit, new engine for improved lift and range, and wide-chord rotor blades.
• Devotes $1.4 billion to procure 32 new and 15 remanufactured CH–47F Chinook Helicopters with a new airframe, Common Avionics Architecture System, digital cockpit and a digital advanced flight control system, as well as an additional $1.04 billion to modernize the AH–64 Apache.

Reset

In order to ensure a quality force and a level of readiness necessary for the complex range of future missions, we must continue to reset our units' soldiers, families, and equipment. This is especially critical given the tempo of deployments. It is a process that must continue for 2 to 3 years after the end of operations in Afghanistan and Iraq.

Goals

In order to achieve our reset goals, we continue every effort to revitalize soldiers and families by allowing them an opportunity to reestablish, nurture and strengthen personal relationships immediately following a deployment. This includes a review of our procedures for demobilization of Reserve component soldiers. We strive to make this post-deployment period as predictable and stable as possible. The Army also seeks to repair, replace, and recapitalize equipment. As we continue the responsible drawdown in Iraq while simultaneously building up capability to complete our mission in Afghanistan, it is critical that we efficiently replace all equipment that has been destroyed, and that we repair or recapitalize equipment impacted by extreme environmental conditions or combat operations. We will achieve this by adapting the production and manufacturing processes in our arsenals and depots, sustaining existing efficiencies, improving collaboration and eliminating redundancies in materiel management and distribution. This will save the Army money in equipment costs and lessen the strain on the supply lines into and out of combat theaters. We finished the reset pilot program which was designed to improve the efficiency and effectiveness of the reset process, and we will continue to apply lessons learned. As we drawdown in Iraq and eventually in Afghanistan, we will continue to focus on retraining soldiers, units, and leaders in order to effectively reset the force. Too often over the last 9½ years, the Army had to prioritize deployment over certain education and training opportunities for soldiers. Given the uncertain strategic environment we face in the future, it is critical that the Army focus on education and leader development as well as provide soldiers, units, and leaders training for full spectrum operations.

Progress

• Sponsored over 2,600 Strong Bonds events designed to strengthen Army families with over 160,000 soldiers and family members participating
• Completed the reset of 29 brigades' worth of equipment, and continued the reset of 13 more.
• Distributed 1.3 million pieces of equipment, closed or transferred 418 bases, drew down 16 Supply Support Activities and redeployed over 76,000 U.S. military, civilian and coalition personnel—all in support of the responsible drawdown of forces from Iraq.

- Deployed Army aircraft with Condition Based Maintenance plus (CBM+) technologies into combat theaters. CBM+ is a proactive maintenance capability that uses sensor-based health indications to predict failure in advance of the event providing the ability to take appropriate preventive measures. A cost-benefit analysis for CBM+ indicated that it has a Benefit-to-Investment Ratio of 1.2:1 given a 10 year operations period.

Fiscal Year 2012 Budget Highlights for Reset

- Provides $4.4 billion to reset Army equipment through the Overseas Contingency Operations (OCO) request.
- Continues to support training and sustainment of Army forces including individual skills and leader training; combined arms training toward full spectrum operations; and adaptable, phased training based on the ARFORGEN process.

Transform

In order to provide combatant commanders with tailored, strategically responsive forces that can dominate across the spectrum of conflict in an uncertain threat environment, the Army continues to transform our operating force by building versatile, agile units capable of adapting to changing environments. We continue to convert brigades to more deployable, tailorable, and versatile modular organizations while rebalancing our skills to better prepare for the future. This process not only positions us to win today's conflicts, but it also sets the conditions for future success.

To support the operating force, our generating force must become a force driven by innovation, able to adapt quickly and field what our soldiers and their families will require. We must transform the business systems of our generating force by developing a fully integrated management system, improving the ARFORGEN process, adopting an enterprise approach and reforming the requirements and resource processes that synchronize materiel distribution, training, and staffing. Transformation of the generating force is key to our ability to effectively manage, generate, and sustain a balanced Army for the 21st century.

Goals

Our plan identifies five goals necessary for effective transformation. The first is completing our modular reorganization. Our plan calls for converting all Army brigades from Cold War formations to more deployable, tailorable and versatile modular formations. Our reorganized units have proven themselves extremely powerful and effective on today's battlefields. The second goal involves accelerated fielding of proven, advanced technologies as part of our modernization of the force. The Army will develop and field versatile, affordable, survivable and networked equipment to ensure our Soldiers maintain a decisive advantage over any enemy they confront. In the Information Age, the Army must be networked at all times to enable collaboration with joint, combined, coalition, and other mission partners to ensure our soldiers have a decisive advantage. Third, we must institutionalize the investment in our Reserve component and obtain assured and predictable access to them, so that the Army can achieve the strategic flexibility and operational depth required to respond to emerging contingencies across the spectrum of conflict. We are systematically building and sustaining readiness while increasing predictability for Reserve component soldiers, families, employers, and communities through the ARFORGEN process. We must modify Army policies and update congressional authorizations in order to fully realize the potential of an operationalized Reserve component and capitalize on their significant combat experience. The fourth goal is the restationing of forces and families around the world based on the Base Realignment and Closure statutes. The Army is in the final year of this complex and detailed 5 year effort that has created improved work and training facilities for our soldiers and civilians as well as new or improved housing, medical, and child care facilities for our families. The last aspect of transformation is soldier and leader development, which is an important factor in maintaining the profession of arms. Today's Army has a tremendous amount of combat experience that must be augmented with continued professional education and broadening opportunities in order to develop agile and adaptive military and civilian leaders who are able to operate effectively in joint, interagency, intergovernmental, and multi-national environments.

Progress

- Reached 98 percent completion of the modular conversion of the Army. The fiscal year 2012 budget will support completion of this process.
- Restored nearly a brigade combat team's worth of equipment and its entire sustainment package in the Army Pre-Positioned Stocks program for the first time since 2002, greatly enhancing the Army's strategic flexibility.

• Provided identity management capabilities for the Department of Defense (DOD) and other U.S. Government and international partners through the DOD Automated Biometric Identification System. The nearly 1.3 million biometric entries enabled latent identification of approximately 700 Improvised Explosive Device (IED) events, 1,200 IED-related watch list hits, and 775 high-value individual captures in 2010.
• Issued soldiers in the 10th Mountain Division and 101st Airborne Division the Soldier Plate Carrier System—a lightweight vest that provides ballistic protection equal to the Improved Outer Tactical Vest in a standalone capacity while reducing the soldier's load, enhancing comfort, and optimizing mobility.
• Fielded 20 million Enhanced Performance Rounds, providing our soldiers with leap-ahead performance over the previous 5.56mm round. The Enhanced Performance Round provides excellent performance against soft targets, has an exposed penetrator that is larger and sharper to penetrate hard targets and is more effective at extended ranges. The round is also lead-free.
• Educated over 300 General Officers and Senior Civilian Leaders in business transformation concepts and management practices through the Army Strategic Leadership Development Program.
• Disposed of over 24,000 acres and closed 3 Active installations and 5 U.S. Army Reserve Centers and is on course to complete Base Realignment and Closure in fiscal year 2011.
• Supported DOD in Chemical, Biological, Radiological, Nuclear, and High Yield Explosives (CBRN) Consequence Management support required for a deliberate or inadvertent CBRN incident by transforming the CBRN Consequence Management Response Force (CCMRF) to a new response force within the CBRN Consequence Management Enterprise. The CBRN Consequence Management Enterprise consists of 1 Defense CBRN Response Force, 2 Command and Control CBRN Response Elements, 10 Homeland Response Forces, 17 CBRN Enhanced Response Force Packages, and 57 Weapons of Mass Destruction Civil Support Teams.

Fiscal Year 2012 Budget Highlights for Transform

• Provides $974 million in procurement and $298 million in continued Research Development Test and Evaluation of the Warfighter Information Network-Tactical which will become the cornerstone tactical communications system by providing a single integrating framework for the Army's battlefield networks.
• Provides $1.04 billion in support of the Army's Combat Vehicle Modernization Strategy including $884 million for the Ground Combat Vehicle and $156 million for the modernization of the Stryker, Bradley, and Abrams combat vehicles.

STRATEGIC CONTEXT

As America enters the second decade of the 21st century, the Army faces a broad array of challenges. First and foremost, we must succeed in Afghanistan and Iraq and continue to combat violent extremist movements such as al Qaeda and other terrorist organizations. We must also prepare for future national security challenges that range across the spectrum of conflict. All of this must be accomplished within the context of challenging global economic conditions.

Global Trends

Global trends will continue to shape the international environment. Although such trends pose both dilemmas and opportunities, their collective impact will increase security challenges and frame the conflicts that will confront the United States and our allies.

Globalization has spread prosperity around the globe and will continue to reduce barriers to trade, finance and economic growth. However, it will also continue to exacerbate tensions between the wealthy and the poor. Almost 85 percent of the world's wealth is held by 10 percent of the population while only 1 percent of the global wealth is shared by the bottom 50 percent of the world's population. This disparity can create populations that are vulnerable to radicalization.

Globalization is made possible through significant technological advances that benefit people around the world. Unfortunately, the same technology that facilitates an interconnected world is also used by extremist groups to proliferate their ideology and foment terrorism. Additionally, there are an increasing number of foreign government-sponsored cyber programs, politically motivated individuals, non-state

actors and criminals who are capable of initiating potentially debilitating attacks on the electronic infrastructure of our Nation and allies.

Population growth in the developing world creates new markets, but the accompanying youth bulge can create a population of unemployed, disenfranchised individuals susceptible to extremist teachings that threaten stability and security. Furthermore, the bulk of the population growth is expected to occur in urban areas. Future military operations are more likely to occur in densely populated urban terrain—among the people rather than around them.

The demand for resources such as water, energy and food will increase competition and the propensity for conflict. Even as countries develop more efficient uses of natural resources, some countries, particularly those with burgeoning middle classes, will exacerbate demands on already scarce resources.

Proliferation and failing states continue to be the two trends of greatest concern. Proliferation of weapons of mass destruction increases the potential for destabilizing catastrophic attacks. Meanwhile, failed or failing states that lack the capacity or will to maintain territorial control can provide safe havens for terrorist groups to plan and export terror. The merging of these two trends is particularly worrisome: failing states that offer safe haven to terrorists seeking weapons of mass destruction. Al Qaeda and affiliated terrorist groups already seek weapons of mass destruction and will use them against western interests given the opportunity.

Persistent Conflict

Persistent conflict has characterized the environment in which the Army has operated over the last 9½ years. This protracted confrontation among state, non-state, and individual actors, using violence to further their ideological and political goals, will likely continue well into the second decade of the 21st century. As a result, our commitments in the future will be more frequent and continuous. Conflicts will arise unpredictably, vary in intensity and scope and will be less susceptible to traditional means of conflict resolution. Concurrently, the Army's soldiers and civilians will respond to natural disasters and humanitarian emergencies in support of civil authorities both at home and abroad. The Nation will continue to rely upon the Army to be ready to conduct a wide range of operations from humanitarian and civil support to counterinsurgency to general war.

Violent extremism in various forms will continue to constitute the most likely and immediate threat around the world. A more dangerous threat will come from emergent hybrid adversaries who combine the agility and flexibility of being an irregular and decentralized enemy with the power and technology of a nation state. These security challenges, in whatever form they are manifested, constitute the threat that the Army and our Nation will face for the foreseeable future. Our Army must remain alert to changes in this volatile environment and build the agility to anticipate and respond to change by maintaining our combat edge.

THE NEXT DECADE

The Nation continues to be faced with persistent and ruthless foes that maintain a clear intent to attack us on our soil. Entering the future under these conditions, the Army remains a resilient but stretched force—one that has performed superbly while simultaneously transforming in the midst of a war. The high demand we have seen in Iraq and Afghanistan will likely recede over the next few years, but other demands will surely arise. Our soldiers and civilians will have more time at home, and that will necessitate a different type of leadership at our garrisons between deployments. Given this future, the Army's challenge in the second decade of the century is to maintain our combat edge while we reconstitute the force, and build resilience for the long haul.

Maintaining Our Combat Edge

Beginning in 2012 we anticipate having about as many BCTs available that are not earmarked for Iraq and Afghanistan as we will have of those deploying. It will be imperative that we remain focused on tough, demanding training at home station and at our training centers to ensure that our soldiers and units sustain their combat edge. This training must be accomplished at an appropriate tempo and while meeting the unique challenges associated with increased time at home. Those units who are not deploying to Iraq or Afghanistan will undergo full spectrum training and be available to combatant commanders for security cooperation engagements, exercises and other regional requirements as well as fulfilling our requirements for a Global Response Force and the CBRNE Consequence Management Response Force. To do this, the Army will need to revitalize home station and leader development programs. We must continue to challenge our young, combat-seasoned leaders who will lead our Army into the second decade of this century and beyond.

Another aspect of maintaining our combat edge involves codifying our experience and lessons learned. Institutionally, we must refine our doctrine and warfighting concepts. While our understanding of Full Spectrum Operations has matured, we must continue to clarify how we define and how we conduct Full Spectrum Operations across the spectrum of conflict from stable peace to general war. As units have more time at home, we will train against the wider range of threats and in a broader range of environments. We will use these experiences to drive the continued adaptation of the Army.

Reconstituting the Force

The Army must reconstitute the force, ensuring excellence in core competencies while building new capabilities to support an uncertain and complex future operating environment. Reconstitution requires not only completely resetting redeploying units, but also continuous adaptation of our forces as we move forward in a period of continuous and fundamental change. While the Army has almost finished transforming to modular formations and balancing the force, we continue to integrate the lessons learned from 9½ years at war with our expectations of the future. The Army's Training and Doctrine Command (TRADOC) commenced an in-depth study of our force mix and force design to ensure that we have the right capabilities in the right numbers in the right organizations for the future. We are committed to continually transforming our force to retain the flexibility and versatility it will need for the uncertain future environment.

Another area that will require continual adaption is our mix of Active and Reserve component forces. The Nation has been at a state of national emergency for 9½ years. As a result, the Army has had continuous access to the Reserve component through partial mobilization. The Army National Guard and Army Reserve have performed magnificently, and the relationship between components is better than it has ever been. Our soldiers have fought together and bled together, and more than ever, we are one Army—a Total Force. Our Nation cannot lose the enormous gains we have made.

Transforming the Reserve component into an enduring operational force provides a historic opportunity for the Army to achieve the most cost effective use of the entire force. To that end, the Army recently completed a study of what the future role of our Reserve component should be in an era of persistent conflict in which continuous deployment is the norm. The steady, consistent and recurring demand for Reserve capabilities during this decade has posed significant challenges for a force organized and resourced as a Strategic Reserve. In response, the Army recast its Reserve Forces from the part-time Strategic Reserve role to a fully integrated and critical part of an operational, expeditionary Army. We are seeking changes to achieve affordable, predictable and assured access to the Reserve component for the full range of assignments in the homeland and abroad. One thing is certain across every echelon of this Army; we cannot relegate the Army National Guard and Army Reserve back to a Strategic Reserve. The security of the Nation can ill afford a Reserve Force that is undermanned, underequipped, or at insufficient levels of training and readiness.

The other significant element of reconstitution—modernization—is designed to give our soldiers a decisive advantage in every fight. The goal of our modernization strategy is to develop a versatile mix of tailorable and networked organizations that operate on a rotational cycle. This enables us to routinely provide combatant commanders trained and ready forces to operate across the spectrum of conflict. This involves developing and fielding new capabilities while modernizing and recapitalizing old capabilities. Our top two modernization initiatives will be to develop, test and field the network and to field a new Ground Combat Vehicle in 7 years. Throughout this process, our industrial base will continue to identify and adopt improved business practices and maximize efficiencies to repair, overhaul, produce, and manufacture in support of modernization and recapitalization efforts.

Building Resilience

As we look toward the next decade, we must also build resilience in our people. The last 9½ years have taken a physical, mental, and emotional toll on our soldiers, civilians, and family members. No one has been immune to the impacts of war. This decade of experience, combined with the reality that our Nation is in a protracted struggle, underscores how important it is that we take advantage of our time at home to strengthen our force for the challenges ahead, even as we continue to deal with the continuing impacts of war. Although off-duty, high risk behavior is a continuing challenge, we have made significant progress in the last 10 years in reducing accidental fatalities. This highlights the resilience of our force as our soldiers find healthier ways to handle the stresses of Army life. In addition to the Army

Safety Program, last year the Army began two efforts designed to strengthen our soldiers, families, and civilians for the challenges ahead: Comprehensive Soldier Fitness and the Army Campaign for Health Promotion, Risk Reduction and Suicide Prevention. We will institutionalize the best of both of these programs into the force over the next year.

The Network

The last 9½ years of war have demonstrated that the network is essential to a 21st century, expeditionary Army. Networked organizations provide an awareness and understanding required by leaders who must act decisively at all points along the spectrum of conflict, and by soldiers on the ground who are executing the mission. The network is also essential for planning and operating with Joint, coalition and interagency partners. The network, therefore, is the Army's number one modernization effort.

The Army's portion of the DOD network, LandWarNet, must be able to provide soldiers, civilians, and mission partners the information they need, when they need it and in any environment—from the garrison to the tactical edge. To do so, it must be a completely integrated and interoperable network, from the highest to the lowest echelon, forming a true enterprise network. The Army is pursuing critical initiatives to build this enterprise capability, including an enterprise email, calendar-sharing and ID management service (through a partnership with the Defense Information Systems Agency), data center consolidation and Active Directory consolidation. These initiatives will increase warfighting effectiveness, improve network security, save hundreds of millions of dollars over the next 5 years and reduce infrastructure. Additionally, the Army is transforming business systems information technology to better support our business operations and strategic leader decision-making.

The Army is also changing the way it supplies network systems and capabilities to operational units by using an incremental approach to modernization. By aligning the delivery of new technology with the ARFORGEN process as it becomes available, we ensure the integration of network capability across our combat formations. This "capability set" approach will field enhanced performance in a more timely and efficient manner.

Ground Combat Vehicle

To operate in austere conditions against a lethal, adaptive enemy, our soldiers need a fighting vehicle that is capable of full spectrum operations with better levels of protection than our current vehicles. To meet that need, the Army is focused on developing a versatile ground combat vehicle that will meet an array of anticipated future requirements and see its first delivery in 7 years. It will provide the needed protection against a variety of threats, including that of Improvised Explosive Devices, and deliver soldiers to the fight under armor. Even with the significant capabilities that a new ground combat vehicle will provide, it comprises only one element of the Army's overall combat vehicle modernization strategy. Our strategy also addresses improvements to vehicles like the Paladin howitzer and Stryker combat vehicles, integration of the MRAP into our formations and prudent divestment of obsolete systems.

STRATEGIC CROSSROADS

Our Nation and its Army are positioned at a unique point in history. This is not quite like any other year. We must now consider the hard-won lessons of recent combat experience, current and anticipated resource constraints and the uncertainty of the future. The decisions we make will have far reaching and long lasting implications. This calls for deliberate and thoughtful choices and actions as we determine where to best invest our Nation's precious resources.

Transforming the Generating Force

Over the course of the past decade, the operational Army has evolved dramatically. The need for change was driven by a fundamental reality: daily contact with a decentralized, adaptive, creative and deadly enemy. The Army's generating force, which prepares, trains, educates and supports Army forces worldwide, is also working to rapidly address the demands placed on the organization by both the current and future operating environments. It has performed magnificently to produce trained and ready forces, even while seeking to adapt institutional business processes.

Furthermore, the Army is working to provide "readiness at best value" in order to help us live within the constraints imposed by the national and international economic situation. In short, the need to reform the Army's institutional management

processes and develop an Integrated Management System, while continuing to meet combatant commander requirements, has never been more urgent. Thus, to enhance organizational adaptive capacity, while wisely stewarding our resources, the Army initiated a number of efforts along three primary business transformation objectives: establish an enterprise mindset and approach; adapt institutional processes to align with ARFORGEN; and reform the requirements and resource process.

To enable business transformation and foster an enterprise approach, we established the Office of Business Transformation and developed enterprise functions that are facilitated by teams of leaders who focus on the domains of Human Capital, Readiness, Materiel and Services and Infrastructure. At the most strategic level, we established the Army Enterprise Board to provide a forum for Army senior leaders to address organizational strategic choices and tradeoffs. Additionally, we established our Business Systems Information Technology Executive Steering Group to facilitate an enterprise approach to information technology investments.

We are working collaboratively to reform our requirements and resourcing process in order to create an organizationally aligned set of capabilities. As part of that effort, we have initiated an Army Acquisition Review. This review will provide a blueprint for actions over the next 2 years to improve the efficiency and effectiveness of the Army acquisition processes. We've also commissioned a short-term task force to analyze costs, establish credible benchmarks and help us better understand not only where our investment dollars go, but also what we get in return. We are developing a systematic approach to the Army's business processes that will ensure that innovative ideas and efficiencies influence future budgets.

Furthermore, we instituted a portfolio review process that is bringing discipline to our acquisition programs by evaluating and realigning requirements with the reality of today and what we will need in years to come. This Capability Portfolio Review process is providing an overarching detailed analysis and set of recommendations to revalidate, modify or terminate each of our requirements, including research and development, procurement and sustainment accounts. These reviews are helping us identify gaps and unnecessary redundancies, while ensuring good stewardship of our Nation's resources. We are building a foundation that will identify savings, manage strategic risks, maximize flexibility and posture us even more effectively for the future.

Civilian Workforce Transformation

There are approximately 279,000 civilians in the Army. Adding the Army Corps of Engineers and personnel supported by nonappropriated funds, the number exceeds 335,000 civilians. That is about 23 percent of our total Army force. Army civilians live and work in communities throughout our 50 States and U.S. Territories and overseas theaters of operation. They comprise 60 percent of our generating force.

This generating force performs many of the essential tasks that support ARFORGEN so our soldiers can concentrate on their missions. Army civilians have deployed and stood in support of our soldiers during the most dangerous and difficult periods of conflict. In fact, over 4,300 civilians deployed to Iraq or Afghanistan in 2010. The Nation's ability to sustain the All-Volunteer Force will be difficult and challenged if we do not prioritize development and investment in our most important institutional asset, our people. Now, as never before, we increasingly call upon our Civilian Corps to assume greater levels of responsibility and accountability at organizations throughout the Army, and we must invest in them accordingly. The goal is to become a generating force driven by innovation, able to adapt quickly and to field what our Soldiers and their families will require. Therefore, the Army has embarked upon a Civilian Workforce Transformation initiative to pursue five lines of effort.

First, we will integrate requirements determination, allocation and resourcing processes that identify the civilian workforce capabilities. Second, we will improve civilian workforce lifecycle strategy, planning and operations to enhance mission effectiveness. Third, we will establish an integrated management system to support civilian human capital decisionmaking. Fourth, we will deliberately develop Army civilian leaders. Fifth, we will reform the civilian hiring process. By the end of 2011, the Army will implement a comprehensive competency-based Civilian Leadership Development Program and fully implement the Civilian Talent Management Program. These programs will ensure that employees and management understand what is required for success, with realistic career paths and developmental opportunities to achieve success.

The pay-off for this program is four-fold. For civilians, the transformation will provide an outline for success with the appropriate training and development opportunities to facilitate the achievement of their career goals within the Army. For Com-

manders, the Civilian Workforce Transformation will provide the right workforce with the right training and development for the current and future mission requirements. For the Army, it will provide a predictable and rational method to articulate requirements and make decisions about resourcing in a fluid environment. Finally, for the Nation, the transformation will provide the investment in human capital required to effectively manage the institutional Army now and in the future.

STEWARDSHIP, INNOVATION, AND ACCOMPLISHMENTS

Fiscal Stewardship

We take our responsibility to serve as good stewards of the financial resources the Nation has entrusted to our care very seriously, and we are taking action to improve our ability to manage those resources effectively.

To help our leaders and managers make better resource-informed decisions, we have placed renewed emphasis on cost management throughout the Army. At all levels, from installation to Army Headquarters, we have implemented training and professional development programs to give our people improved cost management skills and a greater understanding of the cost implications of their decisions. Training programs include a graduate-level Cost Management Certificate Course for carefully selected mid-level analysts, professional development courses for general officers and members of the Senior Executive Service, training incorporated into existing courses throughout the Army's formal schooling system and hands-on training in cost-benefit analysis. These programs have reached over 2,700 soldiers and civilians, and training continues.

In addition to providing training and professional development, we must give our people the essential tools that will enable them to carry out their cost management responsibilities. Toward this end, we have fielded the General Fund Enterprise Business System (GFEBS) to more than 11,000 users at 14 major installations. As reported by the Government Accountability Office, GFEBS development is on schedule and on budget. Much more than an accounting system, GFEBS is the Army's new business system. It gives managers a greatly improved capability to manage the cost, schedule and performance of their programs and, at the same time, is the centerpiece in our progress toward full auditability of our financial statements

Energy Security and Sustainability

Energy security and sustainability are operationally necessary, financially prudent and are key considerations for Army installations, weapon systems and contingency operations. Energy security means that the Army retains access to energy and can continue to operate when catastrophe strikes and energy supplies are disrupted, cut off or just plain difficult to secure. To remain operationally relevant and viable, the Army must reduce its dependency on energy, increase energy efficiency, and implement renewable and alternate sources of energy.

The Army has established a Senior Energy Council, appointed a Senior Energy Executive, created an Energy Security Office, and adopted a comprehensive energy security strategy. This strategy will not only lead to energy cost savings but help create a more sustainable force with increased endurance, resilience, and force protection. We will enhance our stewardship of our Nation's energy resources and less dependent upon foreign sources of fuel. The Army's logistical tail of the Operational Energy pipeline is a handicap that must be overcome through technological advances. We must leverage technology to improve our agility and flexibility against an irregular and decentralized enemy.

On Army installations, we are developing a holistic approach, called Net Zero, to address energy, water, and waste. Net Zero is a force multiplier enabling the Army to appropriately steward available resources, manage costs and provide our soldiers, families, and civilians with a sustainable future. In an era of persistent conflict, with a mission of stabilizing war-torn nations, a true stabilizing factor can be that of appropriate resource management. The Net Zero plan ensures that sustainable practices will be instilled and managed throughout the appropriate levels of the Army, while also maximizing operational capability, resource availability, and well-being.

We have taken a significant step by incorporating all fuel costs throughout the lifecycle of the equipment as we analyze various alternatives for modernization programs such as the next ground combat vehicle, the Joint Light Tactical Vehicle and the Armed Aerial Scout. This approach enables us to make informed decisions about various alternatives and define energy efficiency performance parameters in capability documents for our program managers and original equipment manufacturers. Of course, not all solutions will involve big pieces of equipment or new vehicles. We are also pursuing technologies on a much smaller scale, such as spray foam tent

insulation and shower water recycle systems—investments from which direct energy savings pay off in a matter of months.

We are also working on more efficient generators and power distribution. Development of hardware, software and controls to perform micro-grid implementation is underway for buildings at the Field Artillery Training Center at Fort Sill, OK. This technology also has potential for use in a deployed operational environment. The Army is preparing to field "smart grid" capabilities for tactical command posts and forward operating base camps that will enable generators to support the larger grid instead of a single end user. As they become scalable and deployable, renewable energy technologies can also be integrated into these smart grids.

THE PROFESSION OF ARMS

The last 9½ years of conflict have had significant impacts on the Army, its soldiers, families, and civilians. Many of these are well documented and are being addressed. There remain, however, other consequences that we seek to understand. We will examine the impacts of war on our profession of arms and take a hard look at ourselves—how have we changed as individuals, as professionals and as a profession.

The Army is more than a job; it is a profession. It is a vocation composed of experts in the ethical application of land combat power serving under civilian authority and entrusted to defend the Constitution and the rights and interests of the American people. The level of responsibility is like no other profession—our soldiers are entrusted to apply lethal force ethically and only when necessary. Also, unlike other professions, the profession of arms is practiced in the chaotic and deadly machinations of war. Along with that awesome responsibility comes both individual and organizational accountability, which we seek to examine as parts of our Profession of Arms.

The American Professional Soldier is an expert and a volunteer, certified in the Profession of Arms and bonded with comrades in a shared identity and culture of sacrifice and service to the Nation and Constitution. The Soldier adheres to the highest ethical standards and is a steward of the future of the profession. Contrasting this are state, non-state and individual actors who operate outside generally accepted moral and ethical boundaries. Because of this, the Army has received tremendous support from the American people and their elected representatives. We are forever grateful for that support, and we do not take it for granted. We understand that this generous support is predicated on the Army's continued professionalism, guided by our Army creeds, our service oaths and the Army values that anchor our conduct (Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, and Personal Courage).

In order to examine the impacts of our current experience on the Profession of Arms, the Army will continue a discussion at all levels in which we will ask ourselves three fundamental questions:

- What does it mean for the Army to be a Profession of Arms?
- What does it mean to be a professional soldier?
- After 9 years of war, how are we as individual professionals and as a profession meeting these aspirations?

The dialogue will help inform our understanding on what it means to be a professional soldier in an era of persistent conflict.

CONCLUSION

The professionalism, dedicated service, and sacrifice of our All-Volunteer Force are hallmarks of the Army—the Strength of our Nation. Soldiers, their families, and Army civilians continue to faithfully serve our country as we prevail in one of the most challenging times in our Nation's history.

The Army is achieving its goals to restore balance in fiscal year 2011. We will be transitioning to a period where we must reconstitute the force for other missions; build resilience in our soldiers, families, and civilians and diligently maintain our combat edge. We are modernizing the force for the future by developing and fielding versatile, affordable, survivable, and networked equipment to ensure soldiers maintain a decisive advantage over any enemy they might face.

We are responding to the lessons our operating force learned and the changes it made over the past 9½ years by adapting the institutional Army to effectively and efficiently generate trained and ready forces for full spectrum operations. The sector of the Army that trains and equips our soldiers, the generating force, must be driven by innovation and be able to adapt quickly and field what our soldiers and their families will require. We must continue to improve efficiency and reduce overhead expenditures as good stewards of our Nation's valuable resources. We recognize that

institutional change is not only about saving money, and efficiencies are not simply about improving the bottom line. Institutional change is about doing things better, doing them smarter and taking full advantage of the progress, technology, knowledge, and experience that we have available to us.

With the trust and confidence of the American public and the support of Congress with appropriate resources, America's Army will remain the Strength of the Nation.

2011 Reserve Component Addendum to the Army Posture Statement

Sections 517 and 521 of the National Defense Authorization Act (NDAA) 1994 require the information in this addendum. Section 517 requires a report relating to implementation of the pilot Program for Active Component Support of the Reserves under Section 414 of the NDAA 1992 and 1993. Section 521 requires a detailed presentation concerning the Army National Guard (ARNG), including information relating to implementation of the ARNG Combat Readiness Reform Act of 1992 (Title XI of Public Law 102-484, referred to in this addendum as ANGCRRA). Section 704 of the NDAA amended Section 521 reporting. Included is the U.S. Army Reserve information using Section 521 reporting criteria. The data included in the report is information that was available 30 September 2010.

Section 517 (b) (2) (A). The promotion rate for officers considered for promotion from within the promotion zone who are serving as active component advisors to units of the Selected Reserve of the Ready Reserve (in accordance with that program) compared with the promotion rate for other officers considered for promotion from within the promotion zone in the same pay grade and the same competitive category, shown for all officers of the Army.

	AC in RC (%)*	Army Average (%) **
FY 2009		
Major	(56 of 63) 88.9%	94.1%
Lieutenant Colonel	(16 of 20) 80.0%	87.9%
FY 2010		
Major	(57 of 67) 85.1%	92.1%
Lieutenant Colonel	(10 of 12) 83.3%	88.7%

*Active component officers serving in reserve component assignments at time of consideration.

**Active component officers not serving in reserve component assignments at the time of consideration.

Section 517 (b) (2) (B). The promotion rate for officers considered for promotion from below the promotion zone who are serving as active component advisors to units of the Selected Reserve of the Ready Reserve (in accordance with that program) compared in the same manner as specified in subparagraph (A) (the paragraph above).

	AC in RC (%) *	Army Average (%) **
FY 2009		
Major	(2 of 4) 50.0%	6.0%
Lieutenant Colonel	(0 of 1) 0.0%	7.2%
FY 2010		
Major	(6 of 123) 4.9%	5.7%
Lieutenant Colonel	(0 of 7) 0.0%	10.7%

*Below the zone active component officers serving in reserve component assignments at time of consideration.

**Below-the-zone active component officers not serving in reserve component assignments at time of consideration.

Section 521(b)

1. The number and percentage of officers with at least two years of active-duty
before becoming a member of the Army National Guard or the US Army Reserve Selected Reserve units.

ARNG officers: 21,725 or 51.5 percent of which 1,998 were FY10 accessions

Army Reserve officers: 21,378 or 58.8 percent of which 589 were FY10 accessions

2. The number and percentage of enlisted personnel with at least two years of active-duty before becoming a member of the Army National Guard or the U.S. Army Reserve Selected Reserve units.

ARNG enlisted - 101,896 or 31.9 percent of which 8,281 were FY10 accessions

Army Reserve enlisted - 63,670 or 37.5 percent of which 5,592 were FY10 accessions

3. The number of officers who are graduates of one of the service academies and were released from active duty before the completion of their active-duty service obligation and, of those officers:

a. The number who are serving the remaining period of their active-duty service obligation as a member of the Selected Reserve pursuant to section 1112(a)(1) of ANGCRRA:

In FY10, there were two Service Academy graduates released from active duty before completing their obligation to serve in the Army Reserve.

b. The number for whom waivers were granted by the Secretary of the Army under section 1112(a)(2) of ANGCRRA, together with the reason for each waiver:

In FY10, under section 1112(a) (2) of ANGCRRA the Secretary of the Army granted no waivers to the Army National Guard.

In FY10, under section 1112(a) (2) of ANGCRRA the Secretary of the Army granted two waivers to the Army Reserve. The waivers afforded Soldiers the opportunity to play a professional sport and complete their service obligation.

4. The number of officers who were commissioned as distinguished Reserve Officers' Training Corps graduates and were released from active duty before the completion of their active-duty service obligation and, of those officers:

a. The number who are serving the remaining period of their active-duty service obligation as a member of the Selected Reserve pursuant to section 1112(a)(1) of ANGCRRA:

In FY10, there are no distinguished Reserve Officers Training Corps (ROTC) graduates serving the remaining period of their active-duty service obligation as a member of the Selected Reserve.

b. The number for whom waivers were granted by the Secretary of the Army under section 1112(a)(2) of ANGCRRA, together with the reason for each waiver:

In FY10, the Secretary of the Army granted no waivers.

5. The number of officers who are graduates of the Reserve Officers' Training Corps program and who are performing their minimum period of obligated service in accordance with section 1112(b) of ANGCRRA by a combination of (a) two years of active duty, and (b) such additional period of service as is necessary to complete the remainder of such obligation served in the National Guard and, of those officers, the number for whom permission to perform their minimum period of obligated service in accordance with that section was granted during the preceding fiscal year:

In FY10, there were 20 ROTC graduates released early from an active-duty obligation. The following is a breakdown of the ROTC graduates that are completing the remainder of their service obligation in a Reserve Component.

a. ARNG: 1
b. USAR: 19

6. The number of officers for whom recommendations were made during the preceding fiscal year for a unit vacancy promotion to a grade above first lieutenant, and of those recommendations, the number and percentage that were concurred in by an active duty officer under section 1113(a) of ANGCRRA, shown separately for each of the three categories of officers set forth in section 1113(b) of ANGCRRA (with Army Reserve data also reported).

There are no longer active and reserve component associations due to operational mission requirements and deployment tempo. Active component officers no longer concur or non-concur with unit vacancy promotion recommendations for officers in associated units according to section 1113(a). However, unit vacancy promotion boards have active component representation.

In FY10, the ARNG recommended 1,913 ARNG officers (Title 10; Title 32; ADSW; AD; M-Day) for a position-vacancy promotion and promoted 1,913. The number consists of 265 U.S. Army Medical Department, 1,595 Army Promotion List and 53 Chaplains. Of the 1,913 promoted officers, 1,053 were M-Day Soldiers consisting of 175 U.S. Army Medical Department, 844 Army Promotion List and 34 Chaplains.

In FY10, the Army Reserve recommended 63 officers for a position-vacancy promotion and promoted 63.

7. The number of waivers during the preceding fiscal year under section 1114(a) of ANGCRRA of any standard prescribed by the Secretary establishing a military education requirement for non-commissioned officers and the reason for each such waiver.

In FY10, 1,607 ARNG Noncommissioned Officers received a promotion to the next rank without the required military education (based on a waiver

agreement that extends the time Soldiers have to complete the educational requirement). Of those, 648 completed their military education requirements. The majority of waivers were deployment related.

In FY10, 486 Army Reserve Noncommissioned Officers received a military education waiver (based on a waiver agreement that extends the time Soldiers have to complete the educational requirement). Of those, 257 waivers received approval based on deployment and/or operational mission requirements.

Waiver consideration is case-by-case. The criteria for waiver consideration are: (1) eligible for promotion consideration, (2) recommended by their State (for ARNG), (3) disadvantaged as a direct result of operational deployment conflict, and (4) no available training quota. This includes Soldiers deployed or assigned to Warrior Transition Units (WTU) (Medical Hold or Medical Hold-Over Units) with a medical condition. Some waiver requests did not meet the criteria.

The Secretary of the Army has delegated the authority for the waivers referred to in section 114(a) of ANGCRRA to the Director, ARNG and to the Commander, U.S Army Reserve Command. The National Guard Bureau and the U.S. Army Reserve Command maintain details for each waiver.

8. The number and distribution by grade, shown for each State, of personnel in the initial entry training and non-deployability personnel accounting category established under section 1115 of ANGCRRA for members of the Army National Guard who have not completed the minimum training required for deployment or who are otherwise not available for deployment. (Included is a narrative summary of information pertaining to the Army Reserve.)

In FY10, the ARNG had 47,804 Soldiers considered non-deployable for reasons outlined in Army Regulation 220-1, Unit Status Reporting (e.g., initial entry training; medical issues; medical non-availability; pending administrative or legal discharge; separation; officer transition; non-participation or restrictions on the use or possession of weapons and ammunition under the Lautenberg Amendment). The National Guard Bureau (NGB) maintains the detailed information.

In FY10, the Army Reserve had 48,229 Soldiers considered non-deployable for reasons outlined in Army Regulation 220-1, Unit Status Reporting (e.g., initial entry training; medical issues; medical non-availability; pending administrative or legal discharge; separation; officer transition; non-participation or restrictions on the use or possession of weapons and ammunition under the Lautenberg Amendment). The U.S. Army Reserve Command (USARC) maintains the detailed information.

9. The number of members of the Army National Guard, shown for each State, that were discharged during the previous fiscal year pursuant to section 1115(c)(1) of ANGCRRA for not completing the minimum training required for deployment within 24 months after entering the National Guard. (Army Reserve data also reported.)

The number of ARNG Soldiers discharged during FY10 pursuant to section 1115(c)(1) of ANGCRRA for not completing the minimum training required for deployment after entering the Army National Guard is 131 officers and 265 enlisted Soldiers from all U.S. states and territories. NGB maintains the breakdown by each state. The numbers represent improvement driven by the Recruit Force Pool (RFP) and by miscellaneous administrative actions. The RFP initiative changed the way ARNG accounts for Soldiers. ARNG does not count Soldiers until the accession process is complete and they have an assigned position. Administrative improvements included an aggressive effort to eliminate Negative End Strength (defined as Soldiers who have been on the NOVAL Pay list for three months or more, have expired ETS dates, in a Non-MOSQ status for 21 months or more, or in the Training Pipeline with no class reservation). These improvements helped the ARNG meet the End Strength Ceiling of 358,200 by the end of FY10 by moving those Soldiers into the Inactive National Guard (ING).

The number of Army Reserve Soldiers discharged during FY10 for not completing the minimum training required for deployment after entering the Army Reserve is 30 officers and 62 enlisted Soldiers. Under AR 135-175, Separation of Officers, separation actions are necessary for Officers who have not completed a basic branch course within 36 months after

commissioning. Under AR 135-178, Separation of Enlisted Personnel, separation actions are necessary for Soldiers who have not completed the required initial entry training within the first 24 months.

10. The number of waivers, shown for each State, that were granted by the Secretary of the Army during the previous fiscal year under section 1115(c)(2) of ANGCRRA of the requirement in section 1115(c)(1) of ANGCRRA described in paragraph (9), together with the reason for each waiver.

In FY10, there were no waivers granted by the Secretary of the Army for the U.S. Army Reserve or the Army National Guard.

11. The number of Army National Guard members, shown for each State, (and the number of AR members), who were screened during the preceding fiscal year to determine whether they meet minimum physical profile standards required for deployment and, of those members: (a) the number and percentage that did not meet minimum physical profile standards for deployment; and (b) the number and percentage who were transferred pursuant to section 1116 of ANGCRRA to the personnel accounting category described in paragraph (8).

a. The number and percentage who did not meet minimum physical profile standards required for deployment:

In FY10, 163,457 ARNG Soldiers underwent a Periodic Health Assessment (PHA). There were 7,936 or 4.8 percent of personnel identified for review due to a profile-limiting condition or failure to meet retention standards.

In FY10, 162,749 Army Reserve Soldiers underwent a Periodic Health Assessment (PHA). There were 15,025 or 9.2 percent of personnel identified for review due to a profile limiting condition or failure to meet retention standards.

b. The number and percentage that transferred pursuant to section 1116 of ANGCRRA to the personnel accounting category described in paragraph (8).

In FY10, the ARNG identified 7,936 or 4.8 percent of Soldiers for a review due to a profile limiting condition or failure to meet retention standards; and transferred to a medically non-deployable status.

In FY 10, the Army Reserve identified 15,025 or 9.2 percent of Soldiers for a review due to a profile limiting condition or failure to meet retention standards; and transferred to a medically non-deployable status.

On 23 August 2010, the Department of Defense implemented a change to how the Army measures Individual Medical Readiness (IMR). The new way of measuring medical readiness by classifying Soldiers into Medical Readiness Categories (MRC) reduced the number of Soldiers considered medically non-deployable (MND) in the reserve component. This information is available through the Army's medical readiness database, MEDPROS.

12. The number of members and the percentage total membership of the Army National Guard shown for each State who underwent a medical screening during the previous fiscal year as provided in section 1117 of ANGCRRA.

Public Law 104-106 (NDAA 1996), Div A, Title VII, Section 704 (b), February 10, 1996, repealed Section 1117 of ANGCRRA.

13. The number of members and the percentage of the total membership of the Army National Guard shown for each State who underwent a dental screening during the previous fiscal year as provided in section 1117 of ANGCRRA.

Public Law 104-106 (NDAA 1996), Div A, Title VII, Section 704 (b), February 10, 1996, repealed Section 1117 of ANGCRRA.

14. The number of members and the percentage of the total membership of the Army National Guard shown for each State, over the age of 40 who underwent a full physical examination during the previous fiscal year for purposes of section 1117 of ANGCRRA.

Public Law 104-106 (NDAA 1996), Div A, Title VII, Section 704 (b), February 10, 1996, repealed Section 1117 of ANGCRRA.

15. The number of units of the Army National Guard that are scheduled for early deployment in the event of a mobilization, and of those units, the number that are dentally ready for deployment in accordance with section 1118 of ANGCRRA.

Public Law 104-106 (NDAA 1996), Div A, Title VII, Section 704 (b), February 10, 1996, repealed Section 1118 of ANGCRRA.

16. The estimated post-mobilization training time for each Army National Guard combat unit (and Army Reserve unit), and a description, displayed in broad categories and by State of what training would need to be accomplished for Army National Guard combat units (and AR units) in a post-mobilization period for purposes of section 1119 of ANGCRRA.

Per January 2007 direction from the Secretary of Defense reserve component unit mobilizations are now limited to 400-day periods, including post-mobilization training time, a 30-day post-mobilization leave and five days out-processing. Timely alert for mobilization–at least one year prior to mobilization–is crucial. Many training tasks previously conducted during post-mobilization occurs in local training areas before mobilization. First Army, in CONUS, manages and directs post-mobilization training for reserve component conventional forces conducts the theater-specified training required and confirms the readiness of mobilized units to deploy. A unit's

post-mobilization training time depends on how many of the pre-mobilization tasks they complete in pre-mobilization. Whatever pre-mobilization tasks they do not complete during pre-mobilization training, they will complete the remaining tasks at the mobilization station.

First Army Pre-Deployment Training in support of Combatant Commanders' guidance identifies four categories of deploying units. CAT 1 includes units that rarely, if ever, travel off a Contingency Operating Base/Forward Operating Base (COB/FOB). CAT 2 includes units that will or potentially will travel off a COB/FOB for a short duration. CAT 3 includes units that will travel and conduct the majority of their missions off a COB/FOB. CAT 4 is maneuver units with an Area of Operations (such as BCTs). The pre-mobilization tasks per category increase up to CAT 4. A CAT 4 unit spends between 58-60 training days at mobilization station for post-mobilization training. The target is 45 training days. A CAT 4 unit is required to perform a Combat Training Center (NTC or JRTC) culminating training event (30 days) during post-mobilization in order to meet validation requirements and deploy.

Army goals for post-mobilization training for reserve component headquarters and combat support, and combat service support units range from 15 to 45 days, depending on the type/category of the unit, and does not include administrative and travel days. Post-mobilization training conducted by First Army typically consists of counterinsurgency operations; counter-improvised-explosive-device training; convoy live-fire exercises; theater orientation; rules of engagement and escalation-of-force training; and completion of any theater-specified training not completed during the pre-mobilization period. Below is an outline of typical post-mobilization periods for various units:

Unit Structure	Post-MOB TNG Days	
	Legacy	Current
Military Police Battalion (I/R)	90	53
Engineer Company (Construction)	90	58
Medium Truck Company	90	49
Transportation Detachment	90	37
Infantry Battalion	174	71
Expeditionary Sustainment Command	168	37

17. A description of the measures taken during the preceding fiscal year to comply with the requirement in section 1120 of ANGCRRA to expand the use of simulations, simulators, and advanced training devices and technologies for members and units of the Army National Guard (and the Army Reserve).

During FY10, the Army Reserve and Army National Guard continued to synchronize the use of existing and ongoing live, virtual, and constructive training aids, devices, simulations and simulators (TADSS) programs with the training requirements of the ARFORGEN training model. By synchronizing the use of TADSS with ARFORGEN, the ARNG continues to improve unit training proficiency prior to mobilization.

To support the training requirements of M1A1 Abrams and M2A2 Bradley equipped Brigade Combat Teams (BCT's) the ARNG continued to use the Advanced Bradley Full-Crew Interactive Simulation Trainer and Abrams Full Crew Interactive Simulation Trainer, which provide full crew-simulations training for M1A1 and M2A2 units. The ARNG continued fielding Tabletop Full-fidelity Trainers for the M2A2 units and cross leveling of the Conduct of Fire Trainer XXI for M1A1 units. When fully fielded, these devices, in addition to the Conduct of Fire Trainer-Situational Awareness (COFT-SA) and Conduct of Fire Trainer Advanced Gunnery Trainer System (CAGTS) will be the primary simulation trainers to meet the virtual gunnery requirements of M1A1 and M2A2 crews.

In order to train all ARNG units on the tactics, techniques, and procedures (TTPs) of convoy operations, the ARNG has fielded the Virtual Convoy Operations Trainer (VCOT). The VCOT with geo-specific databases provides commanders with unique and critical mission rehearsal tool. Currently, all 54 States and Territories have received this capability, providing a mobile training capability available to all Soldiers throughout the ARNG.

To meet basic and advanced rifle marksmanship requirements, the ARNG is continuing to field the Engagement Skills Trainer (EST 2000). This system is the Army's approved marksmanship training device. The ARNG is also continuing the use of its previously procured Fire Arms Training System (FATS) until EST 2000 fielding is completed. The EST 2000 and FATS also provides static unit collective gunnery and tactical training, and shoot/don't shoot training. These systems also support units conducting vital homeland defense missions.

The Army Reserve has a number of low-density simulators it employs to reduce expensive "live" time for unique combat service support equipment. For example, Army Reserve watercraft units train on the Maritime Integrated Training System (MITS), a bridge simulator that not only trains vessel

captains but the entire crew of Army watercraft. Other simulators include locomotive simulators used by Army Reserve railroad units and a barge derrick simulator for floating watercraft maintenance units.

The reserve components supplement their marksmanship-training strategy with the Laser Marksmanship Training System (LMTS). The use of LMTS helps to develop and maintain basic marksmanship skills, diagnose and correct problems, and assessing basic and advanced skills. The ARNG has over 900 systems fielded down to the company level. The LMTS is a laser-based training device that replicates the firing of the Soldier's weapon without live ammunition. EST 2000 systems have been fielded to many Army Reserve Engineer and Military Police organizations to enable full use of its training capabilities by units with high densities of crew-served weapons their at home stations.

The Improvised Explosive Device Effects Simulator (IEDES) supports the training requirements for the detection, reaction, classification, prevention and reporting of Improvised Explosive Devices. The ARNG also continues to field IEDES kits. The configuration of IEDES kits are set to simulate Small, Medium, Large, and Extra Large Explosive signatures. The IEDES kits provide realistic battlefield cues and the effects of Explosive Hazards to Soldiers in both a dismounted and mounted operational status.

The ARNG continues to develop its battle command training capability through the Battle Command Training Capability Program (BCTCP). This program provides live, virtual, constructive and gaming (LVC&G) training support at unit home stations via mobile training teams. Units can also train at Battle Command Training Centers (BCTC). The BCTCP consists of three BCTCs at Camp Dodge, IA; Fort Indiantown Gap, PA; and Fort Leavenworth, KS, and a regional Distributed Mission Support Team (DMST). The Army Campaign Plan 2010 requires the ARNG to train 172 units (Brigade equivalents and above). The BCTCP synchronizes ARNG battle command training capabilities to help units plan, prepare and execute battle staff training. The objective is to develop proficient battle command staffs and trained operators during pre- mobilization training.

In order to provide the critical Culminating Training Event for the U.S. Army Forces Command (FORSCOM) Army Force Generation (ARFORGEN) Cycle, the ARNG has implemented the Exportable Combat Training Capability (XCTC) Program. The ARNG XCTC program provides Battalion Battle Staff training to the level organized, coupled with a theater immersed, mission focused training event to certify company level proficiency prior to entering

the ARFORGEN Available Force Pool Defined as Certified Company Proficiency with demonstrated Battalion Battle Staff proficiency, competent leaders, and trained Soldiers prepared for success on the battlefield.

18. Summary tables of unit readiness, shown for each State, (and for the Army Reserve), and drawn from the unit readiness rating system as required by section 1121 of ANGCRRA, including the personnel readiness rating information and the equipment readiness assessment information required by that section, together with:

a. Explanations of the information:

Readiness tables are classified. The Department of the Army, G-3, maintains this information. The states do not capture this data.

b. Based on the information shown in the tables, the Secretary's overall assessment

of the deployability of units of the ARNG (and Army Reserve), including a discussion of personnel deficiencies and equipment shortfalls in accordance with section 1121:

Summary tables and overall assessments are classified. The Department of the Army, G-3, maintains this information.

19. Summary tables, shown for each State (and Army Reserve), of the results of inspections of units of the Army National Guard (and Army Reserve) by inspectors general or other commissioned officers of the Regular Army under the provisions of Section 105 of Title 32, together with explanations of the information shown in the tables, and including display of:

a. The number of such inspections;

b. Identification of the entity conducting each inspection;

c. The number of units inspected; and

d. The overall results of such inspections, including the inspector's determination for each inspected unit of whether the unit met deployability standards and, for those units not meeting deployability standards, the reasons for such failure and the status of corrective actions.

During FY10, Army National Guard Inspectors General and other commissioned officers of the Regular Army conducted inspections of the Army National Guard. The total number of ARNG units that were inspected were 1,193, plus an additional 26 United States Property and Fiscal Offices (USPFOs), totaling 1,219 inspections. Regular Army Officers assigned to the respective States and Territories as Inspectors General executed the inspections. The Department of the Army Inspector General, 1st US Army, U.S. Army Forces Command (FORSCOM); Communications-Electronics Command (CECOM); and various external inspection agencies conducted the remaining 128 inspections. Because the inspections conducted by Inspectors General focused on findings and recommendations, the units involved in these inspections did not receive a pass / fail rating. Requests for inspections results must go through the Inspector General of the Army.

During FY 10, the Chief, Army Reserve, directed the Inspector General to conduct special assessments in the areas of Rear Detachment Operations (RDO) and Post Deployment Health Reassessment (PHDRA). Commissioned officers of the Army Reserve inspected 81 units. Because the inspections conducted by Inspectors General focused on findings and recommendations, the units involved in these assessments did not receive a pass/fail rating. Requests for inspections results must go through the Inspector General of the Army.

20. A listing, for each ARNG combat unit (and US Army Reserve FSP units) of the active-duty combat units (and other units) associated with that ARNG (and US Army Reserve) unit in accordance with section 1131(a) of ANGCRRA, shown by State, for each such ARNG unit (and for the US Army Reserve) by: (A) the assessment of the commander of that associated active-duty unit of the manpower, equipment, and training resource requirements of that National Guard (and Army Reserve) unit in accordance with section 1131(b)(3) of the ANGCRRA; and (B) the results of the validation by the commander of that associated active-duty unit of the compatibility of that National Guard (or US Army Reserve) unit with active duty forces in accordance with section 1131(b)(4) of ANGCRRA.

There are no longer formal ground combat active or reserve component associations due to
ongoing theater operational mission requirements and deployment tempo.

First Army, as FORSCOM's executive agent, and the 196th Infantry Brigade, as U.S. Army Pacific's executive agent, executes the legislated active duty associate unit responsibilities through both their pre-mobilization and post-mobilization efforts with reserve component units. When reserve component units mobilize, they are thoroughly assessed in terms of manpower, equipment, and training by the appropriate chain of command, and that assessment is approved by First Army or USARPAC as part of the validation for unit deployment.

Validation of the compatibility of the Reserve Component units with the active duty forces occurs primarily during training and readiness activities at mobilization stations, with direct oversight of First Army, USARPAC, and FORSCOM.

21. A specification of the active-duty personnel assigned to units of the

Selected Reserve pursuant to section 414(c) of the National Defense Authorization Act for Fiscal Years 1992 and 1993 (10 USC. 261 note), shown (a) by State for the Army National Guard (and for the US Army Reserve), (b) by rank of officers, warrant officers, and enlisted members assigned, and (c) by unit or other organizational entity of assignment.

Title XI (FY 10) Authorizations				
	OFF	ENL	WO	TOTAL
U.S. Army Reserve	97	110	8	215
TRADOC	50	3	0	53
FORSCOM	979	2165	101	3245
USARPAC	30	49	1	80
TOTAL	1156	2327	102	3593

Title XI (FY 10) Assigned				
	OFF	ENL	WO	TOTAL
U.S. Army Reserve	21	117	1	139
TRADOC	36	3	0	39
FORSCOM	671	2296	83	3050
USARPAC	31	54	1	86
TOTAL	759	2470	85	3314

As of September 30, 2010, the Army had 3,314 active component Soldiers assigned to Title XI positions. Army G-1, and U.S. Army Human Resources Command carefully manages the authorizations and fill of Title XI positions. The states do not capture this data.

Chairman LEVIN. Thank you very much, Secretary McHugh.

General Casey.

STATEMENT OF GEN GEORGE W. CASEY, JR., USA, CHIEF OF STAFF OF THE ARMY

General CASEY. Thank you, Mr. Chairman, Senator McCain, members of the committee.

First, I appreciate your comments about this being my final hearing. But, this being Washington, I've learned that nothing's final. I was told by the House Armed Services Committee chairman, that that would be my last hearing, and they managed to squeeze one

in next week. I say that just to state a fact, not to encourage this committee to top them. [Laughter.]

Chairman LEVIN. We welcome the reminder, General. [Laughter.]

General CASEY. Yes. Thank you.

Also, before I start, I'd like to introduce three guests that represent important segments of our Army family here. On the left is Ruth Stonesifer. Her son, Christopher, was killed in a helicopter crash along the Afghan-Pakistan border in 2001. She has committed herself to helping other survivors, most recently as the president of the Gold Star Mothers.

Thank you, Ruth.

Sitting next to her is Sergeant Joel Dulashanti. Sergeant Dulashanti was wounded in 2007 in Afghanistan by a sniper and lost his leg. He spent the last 4 years here in the Washington area rehabilitating himself. For 2 of those years, he's worked in the Army legislative liaison office. Now, the good news for Joel is, he's getting a pardon this summer, and he will go to Fort Benning, Georgia, to become an instructor in our airborne school.

Lastly, to his right is First Sergeant Damien Anderson. First Sergeant Anderson is a two-tour veteran of Iraq. He is a master resilience trainer. He recently completed a 10-day course at the University of Pennsylvania to give him the skills to help our soldiers be more resilient.

So, I'd just ask that you welcome them.

Chairman LEVIN. We do, in fact, welcome them. We thank them very much for their service.

Ms. Stonesifer, thank you for what you're doing, and for your son's service and sacrifice.

I know I'm speaking for all of us on the committee when I say we are grateful to all of you and your families.

General CASEY. Thank you, Mr. Chairman, thank you.

For the last 4 years, you've heard me say that the Army was out of balance, that we were so weighed down by our current demands in Iraq and Afghanistan that we knew we couldn't do the things that we needed to do to sustain this All-Volunteer Force and to prepare ourselves to do other things. Today, thanks in large measure to the support of this committee, I can tell you that we've made great progress toward the goals we set for ourselves in 2007. As an Army, we're starting to breathe again. We're emerging from a decade of war and transformation with a well-equipped combat-seasoned total force that, while still stretched by the demands and lingering effects of a decade at war, is able to begin preparing for the challenges of the second decade of the 21st century.

Let me just give you a quick update on some of the progress. First, we've completed both the permanent end strength increase that was directed by President Bush in 2007, and the temporary end strength increase of 22,000, authorized by Secretary Gates in 2009. This allowed us to meet the plus-up in Afghanistan before we were out of Iraq without having to increase the deployed time for our soldiers.

Second, our growth plus the drawdown in Iraq have enabled us to significantly improve dwell, the time that the solders spend at home between deployment. This a critical component of sustaining an All-Volunteer Force in a protracted conflict. For the better part

of 5 years, we were returning soldiers to combat with just 1 year at home. We knew that wasn't sustainable, and we've been working to bring the dwell to 2 years at home as quickly as possible.

I can tell you that, beginning the 1st of October this year, given what we know about projected demands, our Active units will deploy with an expectation of 2 years at home, and our Reserve component soldiers will deploy with an expectation of 4 years at home. That's a huge milestone for us. We'll continue to work to our long-term goal of 3 years at home between combat deployments.

Third, this year, we will also largely complete the largest organizational transformation of the Army since World War II. We'll finish the modular conversion of all but a handful of our 300 brigades, and finish rebalancing soldiers away from Cold War skills to skills more relevant and necessary today, to the tune of about 160,000 soldiers.

Taken together, today we have a fundamentally different Army than we had on September 11, 2001. We had a great Army then. Today, we are a more versatile and experienced force.

Fourth, to enhance this versatility, we have developed a fundamentally different way of building readiness to provide trained and ready forces to combatant commanders, the Army Force Generation (ARFORGEN) model. It's an output-based readiness model that fully integrates the Guard and Reserve, that brings the kind of predictability we need to sustain our All-Volunteer Force, and that allows us to build the readiness we need to both meet current demands and hedge against unexpected contingencies. ARFORGEN is also a more effective and more efficient way of building the readiness we need when we need it.

So, after a decade of very hard work, we have a force that's the right size, that's organized into versatile, modular organizations, that's operating on a predictable rotational cycle, and that is beginning to have sufficient time at home to train for the full range of missions, and to recover from a decade at war. That would not have been possible without your support and the support of the American people. So, thank you.

This fiscal year 2012 budget marks a transition point for us in which we can begin shifting our focus away from restoring balance to sustaining the balance that we, together, have so painstakingly restored to this force. Sustaining that balance is particularly critical now, because this war is not over.

The fiscal year 2012 budget that we're presenting today enables us to do three things: to maintain our combat edge; to reset and reconstitute our force; and to build resilience into this force for the second decade. I'd like to say a few words about each of these. But, in short, the budget, as submitted, enables us to sustain the balance that we have, together, restored to this great Army. I do remain concerned about the outcome of the 2011 budget and its corresponding impact on this year's budget.

So, just a few words about each of the three elements.

First of all, maintaining our combat edge. It's critically important that we maintain the edge that we've honed over a decade at war, because I believe we are in a period of persistent conflict and also one of continuous and fundamental change. That change is driven by rapid technological advances and adaptive enemies. Critical to

our ability to maintain this combat edge will be an affordable modernization strategy that provides the equipment to our soldiers to give them a decisive advantage over any enemy that they face.

This budget lays out such a program. I'd just like to highlight two key areas.

No matter where our soldiers are, no matter what type of environment they're operating in, they need to know where they are, they need to know where their buddies are, and they need to know where the enemy is; and when they shoot at them, they need to strike the enemy with precision. They also need protective mobility. This budget contains funding that will begin fielding some of the key elements of the network that will enable our soldiers in any environment. These include the JTRS and the WIN–T. The budget also includes funding for a new ground combat vehicle that provides protection against improvised explosive devices, that has the capacity to carry a nine-man squad, that is capable of operating across the spectrum of operations, and that can be developed in 7 years.

Maintaining our combat edge also requires training for the full spectrum of operations. This training is conducted at both a home station and at our combat training centers. It will be critical to ensuring we sustain our combat experience and restore the ability to deploy rapidly for the full range of missions. It will require moving operations and maintenance (O&M) dollars from the OCO budget to the base budget over the next several years.

It's also important that we consolidate the gains that we've made in our Reserve components. If you think about it, half of our guardsmen and reservists are combat veterans. I've never seen the relationship between the Active component and the Reserve component better than it is now. We are working together to establish an effective paradigm that allows us to leverage the substantial investments and experience of our Reserve components.

The second major point is reconstituting the force. I see two elements to this. One is the continuous resetting of forces returning from Iraq and Afghanistan. We have over 110,000 soldiers deployed today, and they and their replacements and their equipment will need to be reset over time. Reset isn't a one-time shot. It's a process that's necessary for every returning unit and will require sustained funding for 2 to 3 years after we're out of Iraq and Afghanistan to ensure that we reconstitute the force fully and restore readiness to next-to-deploy forces. We haven't had that ability for 5 or 6 years, so it's important that we restore that ability.

Third, and finally, is building resiliency into this force for the long haul. We've been at war for almost a decade. The cumulative effects of that war are still with us and will be with us for a while. This budget contains fundings for programs like the Comprehensive Soldier Fitness health promotion, risk-reduction, suicide prevention, the Army Family Covenant, survivor outreach services, and sexual assault prevention, that will allow us to continue to build resilience into this force. We remain, as I know you do, fully committed to the well-being of our soldiers, families, and civilians.

So, Mr. Chairman, in conclusion, I'd like to leave the committee with two thoughts as I complete 40 years of service to this great country.

First, we're at a key transition point, as we move from a decade of war and transformation to a decade of sustaining a force at war in a period of declining resources. Together, we have built a great Army. But, it's an Army still stretched and recovering from the last decade of war as it continues to prosecute a war in two theaters.

It took us a decade to get to where we are today. We recognize that the country is in a difficult financial position, and we have and we will continue to work hard to use the resources that you provide us as effectively and as efficiently as possible. But, we are at war, and this war is not over. So, we need to proceed with caution, because the last thing any of us wants to do is to create a hollow Army while we're fighting a war.

Second, Mr. Chairman, I want to thank the members of this committee for your enduring support of our Army. You visited our troops and their families in their homes and in war, you've helped us bury our dead, and you've seen, firsthand, through all the change, hardship, and demands of war, what has remained constant is the courage, the selfless service, and the sacrifice of our soldiers, families, and civilians. I couldn't be prouder to have worn this uniform for the past 40 years and to have served alongside the great men and women of this Army. I am humbled and particularly proud to have led them in this last decade. It's been the greatest honor of my career.

So, thank you very much for everything you've done for your Army. I look forward to taking your questions.

Chairman LEVIN. Thank you so much, General Casey. We again want to express our gratitude. Each member of this committee has seen your dedication and your commitment during all these years, and we really appreciate that, and are grateful for that.

Let's try 7-minute rounds this morning. It'll be a lot tighter this afternoon, by the way, I would indicate to everybody. We were able to get Secretary Gates and Admiral Mullen this afternoon for a limited period of time particularly because of Secretary Gates's schedule. We want to alert everybody to hone down those questions, because we're going to have to have a much more limited period for each of us this afternoon.

Senator McCain and I both referred to a speech that Secretary Gates made at West Point last month, when he said that it's unlikely that the Nation will commit large land forces to future conflicts, that the Army needs to confront the reality that the most plausible high-end scenarios for the U.S. military will be primarily naval and air engagements, and that, "The Army will be increasingly challenged to justify the number, size, and cost of its heavy formations."

Let me start with you, General, because you've already spoken out it seems with quite a different approach. So, let me ask you to react, if you would, to Secretary Gates's comments.

General CASEY. I don't necessarily disagree with Secretary Gates's comment, Senator. I took the West Point speech as Secretary Gates causing us to look forward, to look beyond where we are today. I can tell you that we have already reduced the size of our armored formations by 40 percent. We've reduced the supporting artillery formations by almost 60 percent, and the sup-

porting sustainment formations by 60 percent. So, we have already taken a big chunk out of our armored formations.

About 6 months ago, we began a complete review of all of our force structure, looking at: Do we have the right types of forces, the right mix of forces, and the right mix between the Active component and the Guard and Reserve? We are just wrapping that up. We did it purposefully because the work that we did, that has driven the modular reorganization of the Army, was great work, but it was done in 2003. We all know we've learned a heck of a lot in the last 8 years. We wanted to make sure that we were appropriately applying those lessons. So, we are looking at whether or not we have the right mix.

But, I would tell you, Senator, the thing that I believe we have to move away from, as a Department, is, for 60 years, the central organizing principle of DOD and the Army has been conventional war. We were designed to build the systems to prosecute conventional war. We're not doing that now. I believe the central organizing principle needs to shift to versatility, and that we need to structure our forces so that we have a versatile mix of heavy, light, Stryker, and enabling forces so that we can put together force packages for a wide range of contingencies that are going to face us. I think we all accept the fact that the uncertainty and the complexity of the environment we're operating in today is certainly greater than I've experienced in my 40-year career.

So, we're looking hard at versatility, and we're making sure that we have the right mix of forces to give us that versatility.

Chairman LEVIN. Part of that versatility would be the importance of the Army's doctrine on the new advise-and-assist brigades, which have played a critical role in the last few years in terms of the transition to full Iraqi security responsibility and, I'm sure, playing an important role in Afghanistan, as well.

Now, building the security forces of foreign forces has traditionally been a Special Operations Forces (SOF) mission. But, both in Iraq and Afghanistan, general purpose forces have been performing this mission for some time in the form of these advise-and-assist brigades. Let me just ask both of you, very quickly, do you support the role of general purpose forces as advise-and-assist brigades in Iraq and Afghanistan? General?

General CASEY. I do support that, Senator.

Chairman LEVIN. Okay.

General CASEY. It's the reality that we're doing it.

Chairman LEVIN. Secretary McHugh?

Mr. MCHUGH. Yes, sir, I do, fully. I just visited one of the six we have in Afghanistan, General Dave Perkins, and they're doing magnificent work. I think we're fully structured and have the resources to do it, and do it very well.

General CASEY. If I could just follow up, Senator, I support it, but I don't necessarily think we need specialized formations to do it. As you see what we've done with the advise-and-assist brigades, we have adapted a modular brigade and given them some additional folks and have been able to do that. That's the versatility that I think we need to sustain.

Mr. MCHUGH. I agree with that.

Chairman LEVIN. I think you made reference to the need for energy efficiencies, Mr. Secretary, and you made quite a point of it, and I couldn't agree with you more. But, the situation is that, when it comes to actually implementing those efficiencies, you have a long way to go too as you mentioned about some other aspect.

The Marine Corps made a point about this issue when they deployed an infantry company to Afghanistan that was equipped with renewable power systems to recharge batteries and electronics and provide energy-efficient lighting. The fuel used for that company of the Marine Corps in Afghanistan has decreased 90 percent. Two patrol bases now operate entirely upon renewable energy. Lightweight solar panels are rolled up and carried in the troops' rucksacks. This allows combat patrols to maneuver in the mountains of Afghanistan for weeks without a battery resupply.

Now, the Marine Corps is actually using technologies that were developed by the Army. It seems as though the actual deployment of those technologies is not happening as quickly in the Army. Or is it? Have they just made a better point of publicly talking about how the actual deployment and implementation is advancing?

Mr. MCHUGH. I should say, we're delighted to help our Marine Corps brethren do better. They actually gave us, the Army, credit for that, and we appreciate their openness.

I do think that this is a multifaceted problem. I don't want to underestimate the need for the Army to do better. We need to. I said that in my opening statement, and I promise you we will. However, I have a letter that I signed out this week coming back to you. You asked those very important and, I think, very apt questions. We, in fact, have deployed a good number of the systems cited in your letter that the Marine Corps has deployed as well. Our public relations (PR) effort, apparently, was not what it should be. In fact, I had a meeting just last week with the Assistant Secretary of the Army for Installations, Environment, and Energy, Ms. Hammock, to try to ensure that we keep this panel, Congress, and the public, better informed as to what we're doing.

We call that program the REPS program. We have 100 fielded right now. We're working hard to field more. It's a great success. We actually think we can refine it and do even better. We have micro-grids out there as well. The micro-grid program is basically focused amongst our SOF. They seem to be positioned best to use them.

You noted, Mr. Chairman, in your letter that part of the challenge for the Army is the size of force. The Marine Corps is configured in a way that, in some instances, allows them to use our equipment more effectively or more broad-basedly.

I think it's important to note, we just—I believe, a few weeks ago—opened a technology village in Bagram, and we're using that as a basing platform to bring in these new technologies, many of which were mentioned in your letter, by the Marine Corps, and to deploy them theaterwide to make sure that we're doing that. We feel very confident about our ability to do better. The fact that we have challenged our forward operating bases (FOB) and our combat outposts to reduce their energy consumption by 30 to 60 percent, which is a pretty big number when you're at war.

So, I promise you, we're going to do better in informing this committee, Congress, and the American people as to what we're doing. Having said that, I can talk about a whole bunch of programs.

We have 126 renewable projects across our post camps and stations. Some of the things we're doing in solar and voltaic processing systems, micro-grids, et cetera. We have a ways to go. Of all the Services, I would candidly admit we're the most challenged. But, we're working it very hard.

Chairman LEVIN. That's an important news story, and a good-news story. We are glad to hear it.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

Again, thank you, General Casey, and thanks to the individuals you brought with you for their continued service.

General Casey, what is your estimate of the effectiveness of the 30,000-soldier surge into Afghanistan?

General CASEY. Senator, I believe it has been effective. It has been particularly effective in the areas where we have put them in. As General Petraeus has said, it has halted the Taliban momentum and begun to restore our momentum in the areas where we've put them in. So, I believe it has had its intended effect at the tactical level.

Senator MCCAIN. Are you overall optimistic about the future of our involvement in Afghanistan, General?

General CASEY. I am, Senator. I believe it's going to take a while; but, after my experience in Iraq, I know that these things take a while. If we stick this out, I believe that we will ultimately be successful in delivering an Afghan Government that is seen as represented by its people and has security forces that can keep al Qaeda out and maintain domestic order. But, it's going to take a while.

Senator MCCAIN. There is a commitment to begin some withdrawals the middle of this year, I believe in July. Do you have an estimate or idea of how large that withdrawal should be?

General CASEY. I do not, Senator. That's something that's going to be done in theater.

Senator MCCAIN. So, your estimate of the situation on the ground doesn't give you an idea or thoughts as to how large our withdrawal should be?

General CASEY. No, Senator. I wouldn't want to second-guess General Petraeus on that. He's much closer to it. But, my broad sense is that it will likely start relatively small.

Senator MCCAIN. Would you talk to us a little bit about the situation with these pictures that have come to light. I don't have to describe it to you.

Go ahead.

General CASEY. We share your distress. The pictures are reprehensible. They are not indicative of the conduct of the million soldiers that have deployed in combat in the last decade.

Senator MCCAIN. What actions that are being taken?

General CASEY. Twelve of those soldiers are pending court-martial charges now. There have been some convictions already. Five of the soldiers have been charged with murder, one convicted. We believe we are pursuing this to the full extent of the law.

I think you should also know that the Secretary directed a look at the chain of command above those soldiers, and that investigation is coming to a conclusion.

Senator MCCAIN. So, there will be some command responsibility here.

Mr. MCHUGH. That would be an assumption, Senator. I really don't have the granularity on what the investigation will show. But, I think the important part is, we are looking very hard at it. I think there are some serious questions as to the culpability and responsibilities of overseeing a unit that was engaged in this kind of activity. We'll take that wherever the facts and the truth lead us.

I do get, frankly, distressed when I read reports that I think are, at best, premature, perhaps somewhat irresponsible, that the Army is just going to hold a few lower-ranking soldiers, in this case, responsible, that we're not even looking at higher command. That's simply untrue.

I can't tell you who may be charged with what. But, we are absolutely looking at the higher chain of command. It's just the reality, Senator, when you have an absolutely heinous case such as this, it starts at the ground level and works its way up. That is what we're doing.

The Chief and I are going to take a brief, I believe next week, on just the very fact that you brought up. A lot of people have compared this situation to Abu Ghraib. I would tell you, in some ways, it's worse. Abu Ghraib didn't go to the extent that some of these acts did. But, I think it's an unfair comparison. This was not something the Army was lying back and ignoring. By the time Der Spiegel published the first round of articles, we were well into the convictions.

No one finds this more distasteful, more harmful, than a soldier in theater, because it makes their job harder and more dangerous, and they detest it as much as we do. We're going to go wherever the truth and the path takes us.

Senator MCCAIN. Thank you, Mr. Secretary. That's a very strong and helpful statement. We continue to be puzzled and, frankly, stunned that something like this could happen. Once you reach some conclusions, we'd appreciate it, if you'd come over and tell us. I never thought a My Lai-type thing would ever happen again. So, I think members of the committee, as well as all Americans, would be interested in how something like this could happen. Obviously, you'll be taking steps to make sure that nothing like this ever is repeated.

General Casey, since I have you for the last time, in your opinion, how useful would it be for Congress to pass an authorization for the use of military force for Operation Odyssey Dawn in Libya?

General CASEY. That's an interesting question, Senator. I'd ask you to hold that question until this afternoon. I think you have the right people to answer that.

Senator MCCAIN. You don't want to——

General CASEY. I don't want to set up the Chairman and the Secretary. [Laughter.]

Senator MCCAIN. Well, thank you.

I hope this MEADS issue, Mr. Secretary, will be resolved. Maybe you could say a few words about that as I conclude my questioning.

Mr. MCHUGH. I will, Senator. I will tell you the optics of it, from far enough away, are puzzling. I think you're looking at this as most logical people would: why would the Army, over 2 years, spend some $800-plus million so we could withdraw the program in 2014 instead of withdrawing right now? I asked that very question.

Senator, the Army is the Executive Agent here. The program was negotiated above the Army and continues as an international cooperative agreement amongst the United States, Italy, and Germany.

The reason for the extension and the request this year, which would be followed by a second request in 2013, is that to withdraw now brings penalties. You can't do the assessment as to the exact amount of penalties until it's actually executed and certain negotiations are finalized. But, it's likely the termination cost in 2012 would be in excess of $800 million as well. So, it was the thought that we will spend an equal amount of money until 2014. The international agreement allows partners to withdraw at that time. The good news about the $800 million that would be spent getting us to 2014 is, it does allow us to take away whatever technology capability package is available.

This has been an underperforming program. It's been around since the mid-1990s. It's about 15 years old. The agreement phase we're in right now was created and agreed to in 1996. It's rarely met the thresholds of development that was desired to be. So, I think the right decision is to get out. But, given the fact we spend $800 million now to get out, and we'll have nothing, let's spend $800 million to get out later. It also helps us to work more cooperatively with our two important allies and walk away with some kind of technical package. It makes more sense.

Senator MCCAIN. The only thing that I don't think taxpayers understand, and I don't either, is why we would have a situation where termination costs would cost the taxpayers as much as to continue. As you said, it's been a troubled program since the 1990s. Why would we enter into such a situation, where it would cost us just as much to terminate it—and it's being terminated because of nonperformance—as it does for us to continue? When we go out and we buy a product, and the product doesn't meet the specifications or the schedule or the contract provisions, then we terminate it, we don't pay them any money.

Mr. Chairman, we need to look at this kind of arrangement, that it costs us more to terminate a bad program than it does to continue it.

I don't know if you have any answer to that, General.

Mr. MCHUGH. I wasn't around in 2006. It wasn't an Army-negotiated agreement. I suspect at the time there were high hopes. Whatever the cause, it never materialized.

Chairman LEVIN. Why don't we ask whoever did negotiate the agreement. Who was it? What department? Was it the Department of State?

Mr. MCHUGH. I'm sure there was multi-agency involvement.

Chairman LEVIN. We'll ask our staff to give us a report on the history of this program, and how is it that that kind of language

gets into a contract, as Senator McCain has requested. We'll find out what agencies were involved, and get a staff report on the history of that.

Senator MCCAIN. Thank you.

Chairman LEVIN. Thank you, Senator McCain.

Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Secretary, thank you for your continuing service.

General Casey, thanks so much for your 40 years of extraordinary service. It's been a real pleasure for me to get to know you personally over the last several years. I think you have every reason to feel real pride as you leave the service of the Army and the country, in not only the quality of your leadership but what you've presided over. In your time, both in Iraq and then, of course, as Chief of the Army, the Army has faced, I think, some of its greatest challenges ever, and also had some of its greatest successes ever. I think this will be seen as one of the great periods in the great history of the U.S. Army. Part of it is exactly what you said a while ago, which is that this was a conventional Army trained for conventional warfare that suddenly faced the most unconventional kind of warfare and made a transition—admittedly it took a little time—that was remarkable and has been successful and has now brought us to a period of historic accomplishment, I think, in Iraq, which I believe is part of the reason why the uprisings are occurring in the Arab world today. Somebody in Lebanon said to Senator McCain and me—we were there about a month ago—once that statue of Saddam was pulled down in Baghdad, not only people in Iraq, but throughout the Arab world, began to lose their fear of their dictatorial leaders and began to believe that they had the capacity to change their lives. Of course, you presided in your time as Chief over the surge in Iraq, and now the surge in Afghanistan, and over a remarkable generation of Army troops. I can't thank you enough for that.

I wanted to ask you in the nature of an exit interview when you come to the moment of transition with General Dempsey, what are you going to say to him that you most hope he protects in the next period of time in the Army? Then, what are you going to say is unfinished business that you want him to make sure he finishes?

General CASEY. Oh, that's great. I'm making those notes as we speak here, Senator.

I'm going to tell Marty I think his greatest challenge will be to preserve the gains that we, together, have built over the last decade. You know what's happening with the budget. You know about the end strength reduction that is on the table, albeit conditions-based, on the withdrawal in Iraq and Afghanistan.

End strength is a key factor for the Army. We have to have the right size Army that can meet our commitments at a 1-year-out/2-years-back cycle. That's a new dimension that we haven't had to deal with before. But, it also has to be the right size so we can afford to equip it, to train it, and to sustain the soldiers and families. Finding the right size so that we can have a balanced force, still meet the demands, and do it at a sustainable deployment tempo, that's the art that he's going to have to take on here to move the Army forward.

I believe the biggest thing that he needs to protect is the dwell.

Senator LIEBERMAN. Right.

General CASEY. I can't overstate the fact that we are still dealing with the impact of 10 years at war. We've had over 100,000 soldiers diagnosed with traumatic brain injury. Fortunately, 95-plus percent is mild or moderate. We've had over 45,000 soldiers diagnosed with post-traumatic stress, and 29,000 soldiers wounded. There is something that has to be done and sustained.

The other thing I'd mention—and Ruth Stonesifer is over here—we've lost, just in the Army, over 4,300 soldiers, leaving over 20,000 family members.

All of that needs to be dealt with and taken care of. He can't take his eye off that ball, and he needs to stay focused on the dwell.

Senator LIEBERMAN. I appreciate the answer.

Let me ask you a followup question about the dwell time, because you've helped to educate a lot of us on the importance of this question. Obviously, dwell time is a result of a lot of different variables. What's the demand on the Army? How many troops do we have in Afghanistan, for instance? How many troops do we have in the Army? You're right that Secretary Gates has proposed a reduction in the end strength, as of 2015, but conditions-based.

I've been wondering whether there would be value in Congress, by legislation, requiring a certification for the attainment or a sustainment of a satisfactory dwell ratio before any end strength cuts are enacted. Obviously, we will look and see, what are the demands in Iraq, Afghanistan, or anywhere else in the world? The dwell-time ratio has been so significant; I think you've made that case; I wonder if we should establish a formal certification process.

General CASEY. I'd have to think about that, Senator. My initial reaction would be that anytime Congress puts another constraint, it limits flexibility. I believe that we have drawn a new baseline now and we can't knowingly accept an end strength that would cause us to do less than that.

Senator LIEBERMAN. Right.

General CASEY. We could do it for short periods of time in an emergency, but I don't think we should accept an end strength that would allow us to do less than 2 years at home.

Senator LIEBERMAN. Two years at home for 1 year in battle; and, for the Guard and Reserve, I know your aim was 5 years at home, but 4 is a good standard.

General CASEY. I think it is. It's interesting what the Guard and Reserve leadership is telling us now. They think 5 years at home is too long, because it's easier to lose that combat edge over a 6-year cycle, and that 4 is feeling about right to them. It's the right balance between maintaining their skills and maintaining their jobs and their families.

Senator LIEBERMAN. Thank you.

I want to ask you if you would just speak a little bit about the kinds of acquisition program difficulties the Army has had over time. I was particularly surprised when the ground combat vehicle competition was canceled and then restarted. I just want to ask you generally, what do you take away from the experience you've had, particularly in your time as Chief of the Army? Again, what

would you say to those who follow you about how to get this acquisition process to run better this time?

General CASEY. Thank you, Senator. I will tell you that I personally learned an awful lot from the Future Combat Systems (FCS) program. One of the first things I learned was that anything that takes longer than two chiefs' tenures to do won't work. What I found I had to do is, I had to reeducate myself and the Army about the program when I returned from Iraq. It had gotten off and adrift.

The second big thing that I've learned is that we, the Army, tend to overreach. We want the best for our soldiers, so we go out there and think we can deliver on technology that's just not ready to deliver. I think the FCS is a good example of that. We tried to press too hard and rely on technology that just wasn't ready. Then the integration problems just were insurmountable.

The other thing that the Secretary and I both realized was that, over the last 2 decades, we've allowed our acquisition skills and our professional acquisition corps to atrophy. That's why the Secretary charged this study to look at ourselves. We asked Mr. Decker and retired General Wagner to give us a soup-to-nuts look. That's the report that Senator McCain quoted about our lack of success in the acquisition process.

We're using this report, much like we use the Gansler Report on contracting, as a springboard to improve our process. But, it's going to take some time.

We've learned an awful lot, and we're trying to adapt it, because, as Senator McCain said, we recognize that resources are going down, and we have to use the ones that you give us efficiently.

Senator LIEBERMAN. Thank you.

Mr. MCHUGH. Senator, may I add a word there?

Senator LIEBERMAN. Please.

Mr. MCHUGH. The ground combat vehicle request for proposal (RFP) cancellation surprised a lot of people. I would respectfully suggest that it was actually a good-news story, because what we found, as we went forward with the initial RFP was that we were recreating the very pitfalls that the Chief just outlined, with respect to the FCS. The original RFP contained over 990 core requirements, many of which had heavily dependent requirements upon immature technologies, just as the FCS did. We said, "Well, here we go again." So, we pulled back the RFP. The acquisition experts, including Dr. Ash Carter in DOD, sat down and brought that down to 162 core requirements, put it back out, injected competition, let the industry know that we encouraged commercial off-the-shelf technology, allowed for biodegradable fuels and hybrid engine development to be part of that, and allowed the tier-two requirements to be traded for cost. I think it showed we've, at least for the moment, learned a lot of very important lessons, particularly out of FCS, but in a lot of other programs that have failed over the last decade.

Senator LIEBERMAN. Good enough. Thank you. Thank you both.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

If I had more than 7 minutes, I would elaborate a little bit on the great job that both of you have done; you, General Casey, the personal attention you've always given me in responses; you're really hands-on. In fact, I say this about your whole team. Under Secretary Westphal has been very helpful. You just have a very responsive group there. General Casey, I just want to thank you for all that you have done, personally, for me and our relationship.

It's been an interesting discussion on the FCS because frankly, I don't agree with any of that stuff, but I'm a little closer to where you guys are now. We worked through this thing. One of the areas that we really needed work on, of course, was our non-line-of-sight (NLOS) cannon capability. Right now, the Paladin Integrated Management (PIM), as I understand, is taking that portion of the FCS role and is on schedule, and it will continue to be on schedule. Would both of you agree with that position?

Mr. MCHUGH. I certainly would. I would tell you, however, that is a program that is jeopardized by a CR. But we feel that we're going to be able to maintain the milestone C coming up for June 2013. We're going to work hard to make sure that happens because, as you noted, that is our cannon capability for the near future.

Senator INHOFE. Yes, I am very familiar with that. Do you agree with his comment on that, General Casey, in terms of the significance of the PIM program, as well as where it is on track?

General CASEY. I do, exactly.

Senator INHOFE. Then getting on to some of the other areas of the FCS. In looking at the budget briefing that we had, "The Army's combat vehicle modernization strategy represents a holistic approach to the development of the ground combat vehicle replacement of the M–113 family of vehicles and the incremental modernizations of the Bradley, Abrams, Paladin, and Stryker." So, we're still looking down the road to getting to where we thought we were getting with the FCS. Is that an accurate way of characterizing it?

General CASEY. If you think about where we started with the Bradley and the Abrams, we started back in the late 1960s, early 1970s, and the frames for both of those vehicles are pretty much how they were back in the late 1960s or early 1970s, but they're different vehicles.

Senator INHOFE. Yes.

General CASEY. What we're looking for with a ground combat vehicle is a new baseline. After 50 years, we need a new baseline to go forward and modify and adapt. That's the only way I can see credibly going forward: use existing technologies that are 40 to 50 years better than we started, build a new base, and then continue to update it as technology matures. That is the strategy.

Senator INHOFE. I think I agree that that's where we are today. But, I was sitting next to you on the House Armed Services Committee when they canceled the Crusader. Senator McCain talked about termination costs. We know, when we shift in the middle of the stream, there are going to be costs. But, I just hope that we are around to be able to make sure that we continue.

Let me just mention one success story from my observation and have you comment on it, because it didn't just happen, somebody

had to make it happen. I look at our deployment of our National Guard. We'll have 3,200 redeploying over there. The last time they deployed, I think, was the first part of 2009, and I had the opportunity to really be there. In looking at this deployment this time, it's going much smoother than it did before. I know you've heard this from other people. I'm not sure who's accountable for it. Just comment on that and also the Yellow Ribbon Program, in terms of these deployments, on our Guard.

General CASEY. As I mentioned in my opening statement, Senator, the improvements in the Guard and Reserve have been huge. Probably back in 2008, we studied the deployment of five National Guard combat brigades, and we learned an awful lot. The Guard and Reserve took those lessons and applied them to how they'd man the units, to how they make sure that when the people show up they're medically ready.

Senator INHOFE. Yes.

General CASEY. We've made great improvements to the training. I give credit to the Guard and Reserve leadership for taking on these challenges and learning from them. Because, what we're doing with the Guard and Reserve today is fundamentally different than we set them up to do earlier in this decade. It's not a Strategic Reserve. It's an operational augmentation to this Active Force. That's how we've been using them and they've made great improvements in their process.

Senator INHOFE. It's not going unnoticed, because, just at the troop level and all the way up to Bud Wyatt; I know he's been very active in this thing, too. I applaud you guys for getting that done.

I would say this to you, Secretary McHugh, that you're faced with what's on fire today. You can't really look into the future. Senator McCain made a statement, I think he was quoting Secretary Gates' statement at West Point when he talked about the probability of fighting against the large mechanized formations of the future, and all that. What he didn't say was what Secretary Gates said later in that speech. He said, "However, our predictions about future conflict had a perfect record. We've never been right." I remember my last year in the House Armed Services Committee, I think I was seated next to you, we had someone testify in 1994 that in 10 years we'd no longer need ground troops. So, do you spend much time looking into the future? I say this to you, Secretary McHugh. Because it's hard to do; we have so many problems today. But, how do you view that? Are you looking to try to determine what our needs are going to be 10 years from now?

Mr. MCHUGH. I'd like to be imperfect and maybe get one right. We do. I think it has value. Whether it's on the Army side, in trying to envision the next battlefield to help, through the U.S. Army Training and Doctrine Command (TRADOC), prepare our soldiers for the unknown, or whether it's through the so-called large group and the Office of the Secretary of Defense (OSD) and the Quadrennial Defense Review and other planning documents, I think it's responsible to sit down and do that.

But, having said that, it's a challenge that we've rarely been able to hit a home run upon. I think that's why the Chief's earlier comments as to the direction of the Army are so very important. What we're trying to do is array ourselves into combat formations and

Brigade Combat Teams (BCT) that provide us the greatest amount of flexibility so that wherever that army that we're going to have to face arises, we're able to put the right forces with the right equipment on the ground to do the job effectively and efficiently, as they've always done.

The other thing the Chief and I have started to work on—and I'm looking forward to working with General Dempsey, because he's coming out of command at TRADOC—is that what we also need to do is ensure we have a training and education system that prepares the soldiers of tomorrow to have the kind of flexibility, the leadership, the great judgment, and the comfort level in an environment of uncertainty that the soldiers of today have gotten in combat. Secretary Gates mentioned this, and I think it's the most important part of his speech, and it got lost in some of the other discussions and comments he made, we have to ensure when we bring these young, amazing soldiers back, we're providing them a training environment that challenges them and lets them feel fulfilled and, hopefully, trains them to be as good as the trained and experienced force of today is.

Senator INHOFE. Yes, I think it makes a lot of sense. We're making every effort you are. But, what I said about looking into the future is not just the Army. We have the same problems in the other Services.

My time has expired. But, I would hope that, as we try to do a better job here and get this budget thing under control, that you continue with your progress at the Knowledged-Based Organization Military Training Center. We were over there during New Year's. I'm just most impressed with the progress that's been made there. It's a great program. I hope it can continue.

Thank you very much.

Chairman LEVIN. Thank you very much, Senator Inhofe.

Senator Reed.

Senator REED. Thank you very much, Mr. Secretary and General Casey.

I, too, want to thank you, General, for your extraordinary service to the Nation and to the Army, and to your unwavering support for the soldiers that you lead and the example you've set for them. Thank you very much.

One of your contributions, among many, will be the effort underway for the Profession of Arms to look seriously at what it means to be a professional soldier, both an officer and a noncommissioned officer (NCO). I know General Dempsey has instituted a survey. It's part of it. But, in your final appearance here before the committee, can you give us some ideas of what you'd like to see accomplished, not only in the survey, what's your concept of the Profession of Arms at the moment?

General CASEY. Senator, we came up with this notion last year. We asked ourselves what has been the impact of a decade at war on the Army as an institution and on our leaders and soldiers as individuals? Because intuitively we felt you're not at war for 10 years without having some significant impacts and changes. We wanted to get out ahead of what was going on within the Army, because we all know our culture's changed, but we're not exactly sure how it's changed. So, we launched on this track.

The Secretary and I kicked it off in October at our annual conference. General Dempsey has had the mission to basically bring it into effect. He has started with a white paper, which is pretty good. It's a little academic. But, it causes you to go back and think about the things that underpin a strong institution. So, we're having that dialogue at all of our advanced courses, staff colleges, war colleges, and across the Army at our divisions. The survey is intended to get a little more than anecdotal evidence about how our culture has changed.

What I hope to get out of this is an assessment of where we are and how we've changed, but I think we're going to get inputs that will allow us to update, for example, our efficiency reports. Are the values that we have historically valued, are they still the right ones? So, things like that will also come out of this. I think it'll make us a better Army as we go forward.

Senator REED. Thank you.

Mr. Secretary, do you have any comments? Because you're a big part of this, also.

Mr. MCHUGH. I totally concur with what the Chief said. We know one thing for certain: we've changed over the last 10 years. We need to understand how that change has occurred, and most importantly, what we need to do to manage it and to form it in a way that gives us validity as what we are, an institution in combat arms and professionals.

Senator REED. Thank you, Mr. Secretary.

One of the issues that came up in our hearing with the Supreme Allied Commander in Europe and the U.S. Transportation Command (TRANSCOM) Commander is the issue of the cyber dimension of warfare. It's been amazing, the kind of deployment of technologies, both in the military realm and civilian realm, that pose potential threats. It also had me stop and think about the dependency—and this might go in terms of the culture—that soldiers have on systems that, when we started our military careers, didn't exist. To the extent that we have to have as redundancy some of the old skills, like reading a compass and figuring out on a map where the heck we are, which was always a challenge to me, are you beginning to cope with integrating these new technologies, but continuing to have old skills as a fallback? Because there's a scenario in which nothing's working. Now the enemy has the advantage because they never had this stuff in the first place. Are we prepared for that concept?

General CASEY. I think, Senator, what you're going to see is that as we have more time at home to spend training against hybrid threats, rather than just preparing for Iraq and Afghanistan, we're going to exercise that capability more than we have in Iraq and Afghanistan. We all share the same concern, particularly those of us who wandered around lost like you did as a lieutenant. So, we're going to see that play out.

One of the real challenges we've had is because the growth of information technology has been so rapid, we're trying to keep enough structure in the program so that we don't waste resources, but, at the same time, allow individual initiatives to leverage the technologies. The Vice Chief has recently completed an effort that has clearly spelled out the division of labor within the Army for

who's responsible for doing which part of the information technology effort. I think it's going to help us out as we go forward.

Senator REED. Mr. Secretary, your comments there?

Mr. MCHUGH. There are some things that we've looked at that we would have to talk about in a closed session. I would just say, your question is very well-placed. The last thing we need to forget is the enemy has a vote. If he can endure in a certain environment where we can't, we've caused a real potential for catastrophe.

So, while I think we're absolutely headed in the right direction with our network systems and with our reliance upon making each soldier an independent, wired-in communication device, we have to make sure that, for whatever reason, either by some failure of technology or by covert or overt action of an enemy, those are taken away, that we can still prevail.

As the Chief said, I think the opportunity to better ensure that is as we come back to home station and we can get back to a more full-spectrum training scenario.

Senator REED. Thank you, Mr. Secretary.

Circling back a bit to just one final point about the Profession of Arms, and for the record, I'm just probably establishing what you're already doing. We're also talking to the families, to the spouses, and to the children about the Profession of Arms because they've always been a great part of the Army. But, even more so, in my recollection, and going back 2 or 3 decades, is that part of this conscious effort, too, as to what they expect out of the profession, what they contribute?

General CASEY. I'm going to give you credit for that, Senator. Right now, it's not. But, I think it's a great insight. I think it's something we'll add to it.

Thank you.

Senator REED. I know when to quit, when I'm ahead.

So, congratulations, General Casey. Thank you for your service.

Mr. Secretary, thank you for your great service.

Chairman LEVIN. Thank you, Senator Reed.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman, for holding this hearing.

Certainly, Mr. Secretary and General Casey, thank you for appearing once again.

Obviously, General Casey, I know you're retiring soon and coming to a really good State, Massachusetts. I appreciate that. Have fun in your retirement. I want to say that you positioned our Army and its families in a good place during incredibly challenging circumstances. So, I want to thank you for that. I've enjoyed personally getting to know you. I appreciate the many times that you've come to the office or answered questions. You and your staff have been exceedingly professional. You have a couple of good men right behind you, working and watching your back. So, I appreciate that.

That being said, sir, I want to follow up a little bit on the MEADS program. We had a hearing the other day on that program. I have to be honest with you, the fact that we're paying that amount of money basically to stop a program, I find amazing. When we're talking about billions of dollars of overruns, and I got so frustrated in the hearing, I actually had to leave, because I was

afraid of what would appear on YouTube. When I asked, "Well, what are we getting for our 14 years and the billions of dollars?" He said, "Well, we're getting some really good technology. We're getting some interesting things." I said, "Well, like what? You know, is it new?" He says, "Yeah, it's new." "Well, but what?" What, tangibly, could we benefit, after spending that amount of money, that we couldn't make up with the amazing businesses we have in the United States?

So, my first question is: are there serious negotiations with Italy and Germany to try to mitigate the damages and not pay the full $800 million? Or what?

Mr. MCHUGH. There are constant communications. As I said earlier, the Army is not the birth parent of this program.

Senator BROWN. No, I get it.

Mr. MCHUGH. We are the Executive Agent.

Senator BROWN. I was zeroing right in, believe me, on the other appropriate folks.

Mr. MCHUGH. We signed the checks. The Army very strongly endorsed the termination, largely for the reasons that you state. But, for whatever reason, when this program was reconfigured—I believe it was in 2006—amongst the United States, Italy, and Germany, that was the agreement, that they would go through what has been called proof-of-concept. As best I can tell, that's really a calendar date, not any substantive moment in development. Any withdrawal before that was apportioned according to each country's contributions over the life of the program.

I mentioned earlier, we really don't know to the dollar and cent what a withdrawal cost would be. If someone does, I'm not aware of it. Reasonable calculations are that it would be somewhere north of $800 million. In part, that would have to be negotiated.

My understanding is, our two partners are not at this moment interested in early termination. So, that left our people with the choice of, do we pay the $800 million-plus withdrawal, whatever it may be, or do we spend what will probably be a similar amount through 2014, which is the magical proof-of-concept calendar date? That would provide some goodwill with our two partners, which I think we could all agree has some value. I'm not sure what the pricetag of that would be. But, it would also give us a technology package.

I can't sit here, Senator, and tell you what that technology package will be comprised of.

Senator BROWN. Neither could the previous person.

Mr. MCHUGH. Yes, but I'm not telling you how whiz-bang great it will be. [Laughter.]

Senator BROWN. No, listen. I'm not throwing any blame. I guess my message is, first of all, let's not do contracts like this again. It just makes no sense, especially when we're relying on other countries to do things for us or with us. In this instance, along the way, the alarm bells should have gone off every year as it got further and further behind. When we're talking 14 years by the time we get it done, the technology is virtually obsolete. We're doing the same thing already. We don't know it. So, that's my only comment on that.

I'd like to shift gears for a minute. I'm wondering, do you have a plan to compete for the new version of the M–9 semiautomatic pistol or do you plan to buy more Berettas? The reason I ask, the industry has invested a lot of money in preparing for competition. But there's still a lot of confusion. I'm wondering if either one of you can comment on that.

General CASEY. Senator, replacing the M–9 is not one of our top procurement priorities. As we're going back now and looking through how to allocate our procurement assets, that's not one of our top priorities. It's not something that we're actively seeking right now.

Senator BROWN. How about the M–4 carbine competition? How is that going?

Mr. MCHUGH. We haven't put it to competition, as yet. As I'm sure you're aware, Senator, we have a two-phased M–4 program. One is the improvement program of the existing. We're working with industry to try to incrementally build in new improvements while we are going through RFP development. We hope to put the RFP on the street for the next generation very soon. We consider that a requirement, and we fully intend to go forward.

Senator BROWN. General Casey, I know that your top modernization priority is to build the network that reflects the requirements of today's force and future threats. Can you comment on how important the WIN–T communications program is for the Army? When will that program be in the hands of soldiers?

General CASEY. WIN–T is the backbone of the whole network. It provides us the broadband wide-area coverage. WIN–T Increment 1 will finish fielding this year. WIN–T Increment 2 will begin fielding next year. The whole network—the JTRS and elements of WIN–T Increment 2, are going to start to come together over the course of fiscal year 2012. That's a huge milestone for us.

Senator BROWN. I've been to Natick Labs a bunch of times; I see the technology of everything that's going on. I'm concerned a little bit about getting so technology-centric that we actually get away from the basics. You know, basic soldier skills. I'm hoping that's still going to be a priority.

General CASEY. I think we'll still be able to soldier when this is all over, Senator.

Senator BROWN. Thank you, sir.

Chairman LEVIN. Thank you very much, Senator Brown.

Senator Akaka.

Senator AKAKA. Thank you very much, Mr. Chairman, and thank you for your leadership of this committee.

I want to add my welcome to Secretary McHugh, and thank you for your distinguished leadership; and also, General Casey, for your 4 decades of service to our country, and your incredible commitment to the Army and to our Nation. We are really grateful for all of that. I want to say that it has been an honor working with you on issues related to the Army and our national security.

I also want to thank the men and women of the Army, civilian and military, Active, Guard, and Reserve, and their families, for all that they do.

Secretary McHugh, the Military Leadership Diversity Commission noted that the Services have not yet found a way to continu-

ously develop leaders who are as diverse as our country. Secretary McHugh, what are your thoughts on the study? Can you talk about what the Army currently does, as well as any future plans to increase diversity?

Mr. MCHUGH. I think the study made some excellent points. In baseline recruiting, we're actually doing pretty well, in terms of the various segments of our population we're bringing in. Across the board, while we're slightly challenged in a few of the categories, we're pretty much where we need to be, and we want to make sure we sustain that.

Where I think we have to work very hard is, as the study pointed out, promoting officers up through the ranks who represent that same level of diversity. We have some absolutely incredible minority officers—and if I started naming them, I'd make someone angry that I forgot them—but, great leaders who have performed magnificently in the highest echelons of our Army and the highest echelons of our joint assignments as well. We need to work with them to provide a pathway by which we can promote more effectively and bring officers through.

I'm speaking now from my days on the West Point Board, I think Congress can be enormously helpful in going out and actively utilizing their full allocation of nominations to the U.S. Military Academy in promoting young minority soldiers. I don't think anybody on this committee would be so challenged, but without naming names, there are a broad array of Members in both houses who don't take advantage of that. While the Reserve Office Training Corps (ROTC) and other officer accessions programs are important, and we try to reach out and inform minority student populations of the great opportunities they provide, obviously, West Point is our number-one generator of officers and leaders of tomorrow. To see those billets go unfilled is crushing. You could help us to spread that message.

We have a long way to go in making sure that our officer development program produces more minority representation. That's pretty much in line with the study's findings.

Senator AKAKA. Thank you very much for your statement.

General Casey, upon completing deployments and returning to the civilian world, many in the Guard and Reserve are experiencing problems which were not previously diagnosed. You did mention how the Guard has helped itself in readiness. My question is: what happens after they have the impact of action? We know that sometimes post-traumatic stress disorder and other effects do not immediately surface. In your opinion, what can be done to better assess and treat these returning soldiers as they transition back from their deployments?

General CASEY. That's a great question, Senator, because what we see is, when the guardsman and reservist goes home and goes off Active Duty, his security blanket, his support network that has sustained him or her through combat, evaporates. It's a much more difficult challenge than it is for the Active Forces, who stay with their organizations.

I would tell you that we have tried to come at this a couple of ways. One, is by the post-deployment assessments and reassessments, to keep coming back to that. Two, is by increasing the counselors, behavioral health counselors, that are available to our

guardsmen and reservists, especially in dispersed locations. Three, is the Comprehensive Soldier Fitness Program that Sergeant Anderson represents. One of the things we did with this program was to put the assessment online so any guardsman and reservist, in the privacy of their own home, can go online, take the assessment, and get an assessment of where they stand in the five key areas of fitness: physical, emotional, social, spiritual, and family. If they perceive a problem in one of those areas, then it allows them to connect, online, to self-help modules. There are about five self-help modules in each of those areas. So in the privacy of their own home, they can go in and get pointers on how to do this, and then contact the master resilience trainer back at their unit.

The Comprehensive Soldier Fitness Program is designed to help our soldiers not get in the dark place to begin with, and to build the resilience to take them forward.

So, those are the things, the primary elements that we're working on here. As I said, it is a much tougher nut to crack than with the Active Forces. But, the Guard and Reserve are working it very hard.

Senator AKAKA. Thank you.

General Casey, you've witnessed many changes in the Army over the course of your career. General, beyond dwell time and resets, what are the biggest challenges facing the Army over the next 5 or 10 years?

General CASEY. Senator, I really believe it's maintaining the right size and capable force in a period of declining resources. That is going to be my successor's greatest challenge, to find the right balance between the resources that are available and the size of the force to meet the demands at an appropriate deployment tempo. That's why I worry, because our track record on this isn't good. If you look back through our history, as the wars end, the budgets come down, and we incrementally slice the resources available.

I called Shy Meyer, who was my predecessor in the 1980s, who came to Congress and said the Army was hollow. He did that 8 years after the last combat battalion left Vietnam, because of 8 years of slicing. What I worry about is the resources are coming down, we know that, but we have to proceed carefully; otherwise, 8 years from now, we'll turn around and look over our shoulders and say, "What the heck happened to the Army?" That, I think, is the greatest challenge for all of us.

Senator AKAKA. Thank you very much for your responses.

Thank you very much, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Akaka.

Senator Ayotte.

Senator AYOTTE. Thank you, Mr. Chairman.

I want to share everyone's comments, General Casey, for your distinguished service to our country. I don't think we can commend you enough for what you've done and the leadership that you've provided to our brave men and women.

Secretary McHugh, thank you very much for your service.

I also wanted to say thank you to Ms. Stonesifer, for your sacrifice and for what you are doing for our country, as well as our

wounded warrior, Joel, who's with us here today. We're all grateful for what you're doing on our behalf.

I wanted to follow up, General Casey and Secretary McHugh, as well, on the question that Senator Akaka had asked you about our Guard and Reserves. One of the concerns that I have is, we've seen disturbingly high rates of unemployment and suicide rates; in particular, with the Guard and Reserve, because we've used them as an operational force, and there are unique challenges, when they come home, because those types of support systems that may be in the Active Duty, on a base setting, aren't there for when they come home from a deployment.

I know, General Casey, you described some of the program that you've put in place, called the Comprehensive Soldier Fitness Program. I have to say, I commend you for doing that, but I don't think it's enough. Because, if you think about the problems that our guardsmen and reservists face, to ask them to come home in a situation where they need that direct support, to conduct an online system, we're going to be missing people.

One thing that I wanted to point out is, in New Hampshire, we have a Deployment Cycle Support Program that is a public-private partnership that has been quite successful. In fact, we've kept metrics of it. It has served, since 2007, 800 families and over 4,000 individuals. One of the things that was very inspiring for me about this program is, this week I received word that the life of a New Hampshire National Guard soldier who was on the verge of suicide was saved, due to the proactive predeployment intervention of this Deployment Cycle Support Program and a care coordinator who reached out affirmatively to prevent a suicide.

So, I would say to you, this is a very strong track record and, I think, a model for what we should be doing. I know that there are several other States that also have these types of pilot programs.

Senator Shaheen and I have written to you, Secretary McHugh, about this program, as well as Chairman Mullen.

What we got back, basically, is a commendation for the program, but that in June it will likely end unless we get some commitment for resources for it.

So, my question to both of you is: have you had a chance to look at this program? What do you think of it? I think this is a pilot we should be looking at across the country. I'm obviously committed to seeing this through for our National Guard men and women who are serving overseas right now and coming home from deployments. Across the country, as we use the Guard and Reserve as an operational force, we need to make sure those systems are in place so that we're preventing suicides, reducing homelessness, unemployment, and getting them the things that they deserve, given the service that they've given for us. So, if the both of you would comment on that, I'd deeply appreciate it.

Mr. MCHUGH. I'd be happy to start off, Senator. First of all, I'm thinking back now on exactly how I worded my response. I hope I didn't give the impression that there's somehow no value in New Hampshire's program. In fact, it's unquestionably a national leader.

Senator AYOTTE. No, you did not give that impression.

Mr. MCHUGH. Okay. Good.

Senator AYOTTE. I want to be clear.

Mr. MCHUGH. It still wasn't very helpful. The fact of the matter is, both from a CR perspective, but more real is the PB–12, it wasn't an issue when it was drawn up, and it is just not resourced.

Overall, we do have to work harder, as the Chief said earlier, as to how we can reach out to Guard and Reserve people who go back and don't have, traditionally, the kind of support and proximity to a big base, where you have all the kind of behavioral healthcare specialists, where you have access to a wide range of things that Guard and Reserves in rural communities that are predominantly found in New Hampshire or back in my northern New York old congressional district don't have, as well.

So, I promise you, we're going to continue to work those. Part of the thing we want to look at is the effort that you gave. But, our funding opportunities are set by the budget cycles, and that won't present itself for some time.

You've mentioned some of the stresses that they feel. We tend to forget about that. At least when the full-time Army comes back, they generally continue to have a job; they're still in the Army. But, our guardsmen and reservists often go back to the current pressures of the economy that are certainly felt by the Active component and their families. But, the fact of having a job is a great relief to them.

I believe you're involved in the Hire a Hero Program, to some degree. Anything that can be done privately to provide jobs for these great redeploying soldiers is a terrific effort.

So, I promise you, we're going to continue to work it. But, we do have some funding-cycle challenges.

Senator AYOTTE. I very much appreciate that, Mr. Secretary. I would like to work with you on it, because I think it has to be a public-private partnership. There are those in the private sector that will join with us so that we can maximize resources to make sure that those services are there in a cost-effective manner. So, I would very much look forward to working with both of you on that. Obviously, we wish General Casey would continue. But, Secretary McHugh, I very much look forward to working with you, and certainly your successor, General Casey, on this issue which I think is so important if we're going to continue to have the Guard operate as an operational force, as you've described it, which I anticipate will continue.

As a followup to that, there has been a recent announcement, a DOD proposal, to look at how the Guard and Reserve are used, and to come up with a hybrid-type proposal. I don't know a lot about the proposal. I understand it's a new proposal, and wondered if you could describe for us what that would entail and what we would envision. As I understand it, it's a proposal to look at having some reservists stay in longer than the traditional time they would serve, or to have longer-type requirements to maintain in the Reserves.

General CASEY. I'm not familiar with the specifics of the approach that you describe, Senator, but I can tell you what we're doing, because, it's clear to us that none of us wants to go back to having the Guard and Reserve going back to a Strategic Reserve.

We have too much money invested in them over the last decade, and they have too much experience.

So, the question is: can we design a system that builds the readiness we need when we need it and, at the same time, sustains the experience of the Guard and Reserve over time? Starting October 1 of this year, we will actually have as many brigades available and not deploying to Iraq and Afghanistan as we do. So, we'll start having guardsmen and reservists who could be available, but they may not deploy. So, the question we've asked ourselves is: what's the appropriate level of readiness to bring those guardsmen and reservists to? It's about cost as well. We're working to figure out which portions of the Guard and Reserve can get ready quickly, because of the nature of their skills. We might want to have more of those and less of the Guard and Reserves that have complicated skills that require integration across a number of functions.

This is the process I described in my opening testimony. But, it's something I think has great promise. But, again, none of us wants to see the Guard and Reserve to go back to being just a Strategic Reserve. It took us a decade to get them where they are today.

Senator AYOTTE. Thank you very much, General Casey, and also Secretary McHugh.

As we go forward in looking at how the Guard and Reserve are being used, I do hope that we will seek strong input from the leaders of the Guard and Reserve, as well, as we make those decisions.

General CASEY. They are fully integrated into this.

Mr. MCHUGH. They're an integral part of our planning process. We wouldn't even begin to think about doing it without them.

Senator AYOTTE. We deeply appreciate that.

Thank you so much for answering my questions today.

Chairman LEVIN. Thank you, Senator Ayotte.

Senator Udall.

Senator UDALL. Good morning, gentlemen. Terrific to have you here.

I have, of course, some questions, but let me first start with some acknowledgments. It's been an exciting and important week for all of us in Colorado, and I wanted to highlight the reasons why.

Secretary McHugh, I received your letter this week regarding the Army's plans for the Pinon Canyon maneuver site in Colorado. I want to thank you for your response and tell you that I sincerely believe that your assurances are exactly what Fort Carson soldiers and the southern Colorado's ranching community need to move forward. Our soldiers need to conduct tough, realistic training that will keep them safe in combat. Our ranchers need to be able to develop their property and work their land. I know that your explanation of the Army's intent will make it easier for all those needs to be met. I'm grateful for your leadership.

Mr. MCHUGH. It might be described as lack of plans, not plans.

Senator UDALL. Yes, we'll make sure the record shows that.

Then I want to thank you both publicly for the great news about the addition of a combat aviation brigade (CAB) at Fort Carson. This, no doubt, will be a great benefit to the 4th Infantry Division (ID), and to Colorado.

I want to trumpet the 4th ID. It's an incredible organization, has some of the finest leaders in the Army. The CAB will make them

even stronger. I'm looking forward, as I know thousands of Coloradans are, to welcoming all these new soldiers to the best hometown in the Army.

Then, General Casey, I want to join with everybody here on the committee and all on the House Armed Services Committee, for also the great privilege of serving with and thanking you. It's been an honor to work with you. The Nation owes you and your family a tremendous debt. Your sacrifice and devotion to duty are truly inspirational.

I'll never forget first meeting you in Baghdad and the way in which you carried yourself, briefed us, and gave us a chance to see what was happening, at a particularly tough time. You stayed the course and set the stage for the successes that we now have in Iraq. So, I want to extend my personal gratitude to you.

Then I want to follow up and start with a question. General Casey, I want to speak to something that you have great passion for, which is dwell time for soldiers. I want to make sure I help you reach your goal of providing 2 years at home for every year that a soldier is deployed. While we move towards that goal, I know we are doing everything we can to improve suicide prevention programs for our troops. Fort Carson has recently seen some very promising numbers that have included some significant reductions in their suicide rate. I know you're stalwart in saying one suicide is one too many. But, I know there are some lessons to be learned from what we're seeing at Fort Carson, and would welcome your sharing those with us.

Then a follow-on would be, I know we have this Mobile Behavioral Health Team on post. Is the Army considering adding programs like that at other posts?

General CASEY. The answer to the last one is yes, Senator. In fact, we've been rotating behavioral health providers around the Army to the different posts as part of the deployment life cycle, as the other Senator talked about here earlier. So, I think you're going to continue to see that. We're really forced to that, because there's still not enough behavioral health providers available across the country. That is a way that we're maintaining those skills.

We've devoted a lot of effort to suicide prevention, going back several years. One of the first things we did, back in 2007, was to launch a campaign to reduce the stigma of getting help for behavioral health issues and for depression. We've started to make a dent. We just recently completed an annual Army survey where two-thirds of the sergeants and above said that they believed their chain of command would support them if they got behavioral healthcare. That's a huge, huge change for us. There's still reservations, and we have more work to do.

The other thing, I think, that has helped us in suicide prevention is the great work that our Vice Chief did, sponsoring that 15-month study that was a hard, candid look at us. There were some warts that we needed to fix. But, I believe that openness and willingness to address the issue has really helped us and is starting to turn the tide. Last year, in 2010, we had a slight downturn. We're not declaring victory yet. But, that's a significant look.

Now, we've had a significant upturn in National Guard suicides. I will say, the Guard has really jumped on that. They've produced

their own campaign plan. They've hired suicide prevention coordinators in every State. They're putting in hotlines and reaction teams. There's a reaction team in Indiana, I'm told, that has already reacted to over 300 cases. So, everybody is moving on that.

The other thing that's helped is, the Vice Chief holds periodic video teleconferences with all the senior subordinate leaders in the Army. They share different techniques that they're doing among the different installations. So, we're getting good cross-leveling of good ideas.

Mr. MCHUGH. I have just a couple of additions. We support 90 behavioral healthcare studies and analysis within the Army. In fact, since 2007, we've increased our money and our dedication to those efforts by 83 percent.

Probably the most important study we do is a 5-year longitudinal study, a $50 million study, conducted by the Institute of Mental Health, that is groundbreaking in its scope. It's groundbreaking in the latitude it has in access to medical files of virtually every man and woman in uniform. We're very hopeful it can bring the kind of medical breakthroughs that we've seen in other areas, like taking aspirin a day for heart attacks, et cetera. I can't tell you what the great victory is now, but we're cooperating fully, and very excited about that.

The frustrating thing for me is that, 8 months ago, we had a behavioral healthcare specialist requirement of about 4,200. We were at about 3,800 at that time. I checked back about 5 months later. I said, "How many behavioral healthcare specialists do we have on board?" They told me 4,400. I said, "So, we're 200 above our requirement." Well, no. The requirement has gone up to 5,800. Now I check back and that requirement has grown again to 6,100. It's frustrating chasing the ever-increasing goal. But, it's an important development, because it shows us we're deadly serious about providing the numbers that we need. We're preparing to send two behavioral healthcare specialists and two technicians with every brigade that deploys into theater. We're providing behavioral healthcare specialists and access to the most remote FOBs in Afghanistan. To always be in competition for that next specialist is a very frustrating chase. But, we're going to stay in that chase and continue until we can declare that victory that is eluding us to this point.

Senator UDALL. Thank you for all those updates. My time has expired, but I did want to make two additional short comments.

General Casey, again, I want to acknowledge that your leadership has let other leaders emerge, as well. They're leaders in their own right, they didn't need to emerge in the way I suggested. But, General Chiarelli, General Graham, who served with such distinction at Fort Carson, and General Hamm, have all, in their own ways, led in this important fight, as well.

Second, the civilian world has been touched increasingly by suicides; my own family, for example. There are parallel undertakings in our society, writ large, to understand this and prevent this wherever we can.

Finally, General Casey, I'll continue to sing your praises, and I'll probably also continue to ask you questions whenever I can, even after April 11th, because you will, no doubt, be called upon to con-

tinue to comment and provide insight and provide leadership. So, again, thank you. It's been a privilege for me to get to know you.

Thank you.

Chairman LEVIN. Thank you, Senator Udall.

Senator Sessions.

Senator SESSIONS. Thank you.

I would follow up with Senator Udall's comments, General Casey, how much I appreciate your leadership, how much I have observed you commit yourself to service to the men and women in uniform. I visited you several times when you were in Iraq during a very difficult time. You've made it one of your priorities to focus on the quality of life of the men and women in the Army. I think you've made great progress in that. I know you appreciate the partnership your wife has given to that effort.

Maybe I'll ask you. Tell me how you feel about your efforts, in terms of quality of life, deployment times, how that's impacted the Army during your leadership. Also, perhaps you would share with us contributions that your wife and your family have made to the U.S. military. I think it would be healthy for us to appreciate the kind of leadership you and your family have given to the country.

General CASEY. Thanks, Senator. I would tell you, I believe that the efforts that we have made with the families are a critical component of us arriving where we are today, after a decade at war. When I first got here, 4 years ago, my wife and I hit the road and went around, all across the Army, all around the world, visiting soldiers and families. What I took away from that was that the families were the most brittle part of the force. We'd just announced 15-month deployments. They were really strapped.

I still remember, to this day, talking to a group of family members at Fort Bragg. This woman stood up and said, "General, we need some help. I'm a family readiness group leader. The first one's hard. The second one's harder. The third deployment is harder than the first two. We need some help." It was at that point that I came back and said we need to put paid family readiness group assistants in every family readiness group. We invested $170 million for it, and did it quickly. They saw it. By that October, the Secretary and I put together the Army Family Covenant, where we committed ourselves to supporting the families in five key areas. Then we doubled the amount of money that we put toward soldier and family programs. We've sustained that over time. It took us about a year to get legs under that Army Family Covenant, but the families started to see the impact of it. Frankly, they saw that the country cared about their sacrifices.

So, I personally believe that the efforts that were made by the families and supported by this committee have been a huge element in our ability to come out of this decade here in a fairly balanced fashion. I'm very proud of that.

My wife, Sheila, has been a driving force and a voice for families. She speaks very, very practically with all the family readiness group leaders as we travel around. She's been able to energize support across the country, and I give her great credit for that.

Senator SESSIONS. Secretary McHugh, thank you for your leadership. I believe you're doing a great job. I enjoyed serving with you on the West Point Board. I know how committed you are to the

Army and to the men and women who serve our country. I think President Obama should be commended for giving you the opportunity to serve in this important position. I think he chose wisely, and I'm proud of that.

Both of you probably know, and have indicated, that we have a debt problem in America. The Chairman of the Joint Chiefs has said that debt represents the greatest threat to our national security. Frankly, that's accurate. Forty cents of every dollar we spend today is borrowed. The plans that we see, even with the President's budget, do not change the unsustainable course that we are on.

Just for example, interest on our debt last year was around $200 billion. The Congressional Budget Office (CBO) just completed its analysis of the President's 10-year budget; and in the 10th year, CBO projects that interest on the debt will amount to $900 billion; more than Medicare, more than the Defense budget. This is why people are saying we're on an unsustainable course.

Being on the Senate Budget Committee as ranking Republican and having to deal with these numbers, I'll tell you what question I get most often from the news reporters—probably Senator Levin gets it, too—which is, "Well, is DOD immune? You're a big Defense hawk. Are you willing to acknowledge that DOD is going to take cuts, too?" I have to say, "Yes, DOD is not immune. It's going to have to tighten its belt, also." I think Secretary Gates has led on that in a number of ways.

But, I share your concern, General Casey, that we could make some mistakes as we extract ourselves from Iraq and Afghanistan, as we draw down our forces and seek to get our financial house in order. I appreciate your leadership and your planning and your thinking so that what we do to contain cost is smart and the best way to go about it. We have no dollar to waste. We should not make cuts that are counterproductive, that end up costing us more than if we hadn't made them. That would make no sense at all.

One of the issues that I'm a bit concerned about is our strength of our deployments in Europe, and whether or not we can afford that, and whether or not we should continue that. There is a March 2011 Government Accountability Office (GAO) report titled, "Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue Plans." That's a pretty good title for a report, Secretary McHugh, that sounds like some of our titles.

Mr. MCHUGH. They could have saved a few words in the title.

Senator SESSIONS. Anyway, it has a good motive, and it stated that DOD plans to reduce forces in Europe are being reconsidered. DOD recently held up the planned return of two Army brigades from Germany, pending an announcement of the North Atlantic Treaty Organization (NATO) Strategic Concept, as well as the results of ongoing U.S. assessments of the Global Defense Posture. GAO showed that leaving these two brigades in Europe could cost DOD between $1 billion and $2 billion over 10 years, compared to bringing them back to the United States.

I would also say, those of us who are concerned about jobs and the health of the American economy, we have to all be aware that when that money is spent in the United States, it creates economic activity in the United States. When it's spent in a foreign county,

it's a wealth transfer. It's a drain on the economic growth potential of the country.

So, I would ask you, what about this?

I do note that a number of years ago, I led a congressional delegation to Europe to participate in briefings over how these drawdowns would occur. I was very supportive of it. It came about the same time we were doing base realignment and closure in the United States. It made a lot of sense to us. We told foreign leaders, and they seemed to acknowledge that we were going to be drawing down.

In terms of this one particular item, are we changing our plans to draw down in Europe and in other places around the world? Can we do that? Should we change the plans that are out there?

Mr. MCHUGH. I can't tell you we are changing, because I can't tell you what the plans are. I can tell you that what you cited as the analysis process and our interaction with NATO is absolutely correct. From the Army's side, we have four BCTs there. I think GAO tended to simplify the analysis a little bit, and it's probably a matter of timing, but they tended to overlook some of the things that the Army has done. It costs us about $465 million just to base the military construction (MILCON) to bring a BCT back.

I don't know as they calculated what it meant for training rotations, where you want to partner up with your NATO allies to train as you will go to war. That has to occur in one way or another. Either we pay to get our troops to Europe or we assist our allies to bring their troops over here for that kind of training. I know they couldn't have possibly made a value judgment on the efficacy of having troops available, geographically, as we're seeing them begun to be utilized in Libya. Of course, that's more than an Army issue. It involves naval posture and the laydown of our air assets.

So, it's a big issue.

Senator SESSIONS. Wasn't there a plan to draw down two of the four brigades?

Mr. MCHUGH. Absolutely.

Senator SESSIONS. Is that being reevaluated?

Mr. MCHUGH. It is being evaluated.

Senator SESSIONS. Reevaluated. A decision was made to bring——

Mr. MCHUGH. I can't speak as to how the first decision was made. I assume they did evaluate it. In that context, yes, annually is being reevaluated. It's being discussed with our partners. That's not an Army decision to make, and it's not an Army announcement.

Senator SESSIONS. Doesn't the budget call for MILCON in Germany?

Mr. MCHUGH. Our MILCON budget does nothing but sustain what will be, under any circumstance, legacy forces. We do not put any MILCON against those two brigades.

I should note, as well, in Germany alone, we've already closed 90 Army facilities. We have plans to close another 30. That, just in sustainment, saves us about $265 million a year. That's already done.

Senator SESSIONS. That was inevitable as result of the Soviet Union's collapse. But, regardless, I just want to tell you, I think that Congress is going to be looking hard at that. You're going to

have to make some tough decisions. If you can save any money by bringing those brigades home, they ought to be brought home, in my opinion, mainly for an economic benefit to the United States. We just have a tough time.

General Casey, I think we've had cooperation from our European allies. We're happy to have that. Military men and women in uniform always go out of their way to thank them. But, they haven't been that reliable. The Germans didn't even support the no-fly zone in Libya. They don't allow their soldiers to fire their weapons. I know they have troops in Afghanistan, and we're supposed to say we're thankful, and we are thankful, but, really, give me a break.

I think we have to ask more of our European allies. The Japanese are paying 40 percent of our Navy and base supports in Japan when we deploy our military there. We're not having the same kind of support out of Europe.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Sessions.

Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman.

Thank you, to both of our gentlemen here today, for your testimony.

Secretary McHugh, thanks for your service in the House, but thank you so much for your service in this new position.

General Casey, 40 years, we're so honored with your service. I really appreciate the time to have gotten to know you. Thank you so much.

I'm interested in the status of the ongoing investigation of the sudden infant deaths that have taken place at Fort Bragg in North Carolina. I'm very concerned about this situation. I want to ensure that the Army produces a comprehensive and timely report that gets to the bottom of this issue and provides answers for our families at Fort Bragg.

This is an issue of family readiness. We don't want soldiers from Fort Bragg to worry about the safety of their families when they're deployed. The well-being, safety, and health of our military, and especially our families and their members, is my top priority. I know this is something that the Army is looking at closely. I also understand that the Army is working on its own investigation to follow a report issued by the Consumer Product Safety Commission (CPSC) in February.

Can you share with me the status of the Army's investigation and the projected timeline to complete this report? What will the report discuss? To what extent will the Army utilize the CPSC's report in your analysis?

Mr. MCHUGH. First of all, Senator, we deeply appreciate both your interest and your support. I assure you, our concern is equal to yours and many others of the Fort Bragg community. It is incredibly frustrating to see the loss of 12 infants, 2 of whom perished while living in the same house, and not be able to find the answer.

The Army scientific analysis actually started off this process. We brought what we thought was every available resource to bear and came up negative, with no answers beyond what the medical diagnoses were, with respect to the infants who had been lost.

The CPSC that you mentioned is the most trusted Federal agency to look at these kinds of analysis. We're very hopeful that their comprehensive look would help us better understand what might be at play here, whether it was environmental; there is a lot of talk about Chinese wallboard. We recently had a death of an infant who did not live in a home that had been refurbished with this Chinese wallboard, so that would rule that out, by specifics. But, there was no scientific analysis they did that showed any environmental issues; no ground, no pesticide, nothing they could identify that might in any way demonstrably add to the circumstance and result in infant deaths.

As a third measure, I directed what we call an epidemilogical consultation study, which is, in essence, a specialized team, and they're a very comprehensive, multidisciplinary team, with chemists, with environmental specialists, with architects. They look at the baseline data and do their own analysis. They have begun that work. I expect we'll have a final report from them in the relatively near future.

Now, I don't have any information on their feedback, but I've not heard anything that would suggest they have found a definitive answer. If we knew that, I assure you, we'd be working on it right now.

When you look at this statistically; and I don't like to do that, because we're not talking about statistics, we're talking about three children. I can only imagine the grief of their families. But when you look at it statistically, the infant mortality rate amongst the Fort Bragg community is actually below that of the surrounding Cumberland County, I believe.

Senator HAGAN. Right.

Mr. MCHUGH. I'm not sure what that tells us. It doesn't solve the mystery. It doesn't solve the cluster issue.

I can tell you this. When we run out of things to do, if someone thinks of something else we can do, please let us know. We don't want to leave any stone unturned. But, quite honestly, from a scientific analysis perspective, we're getting to the end of what we know to be the available investigatory tools.

There was an article recently in a newspaper, where the implication was that we didn't do a particular test, a so-called chamber analysis. First of all, the industry experts with whom we have spoken said that's not the gold standard test. The one CPSC did is the gold standard test. But, in fact, the Army, in its original testing, did do a chamber test. So, we've done that, as well. We've asked the publisher of the magazine to correct that. I'm not sure if they have or they haven't. But, I want to assure you, we did that chamber test.

Senator HAGAN. I was not aware of that aspect.

Mr. MCHUGH. It's a recent development. I wasn't aware, either. I said, if we hadn't done it, we're going to. They came back and have shown that we have.

But, if there's something we haven't done, we need to know about it. I promise you, we'll continue to work with you at every possible opportunity. If there's an answer out there, we sure as heck want to find it.

Senator HAGAN. Secretary McHugh, thank you so much. I can tell that you're very concerned about this, too. Obviously, it is a family readiness issue. All of these families, when this happens again, as it has done recently, it raises the concern and the question and the issue of the what-ifs. So, I appreciate the earnestness with which you have replied, and the seriousness that you're taking on this issue.

We certainly are awaiting the results of this new report. I really appreciate the fact that you have looked into this and looked at that other, that chamber analysis, that that's been done, too. I think that's positive. Thank you.

General Casey, as you reflected in your prepared statement, successful implementation of the repeal of Don't Ask, Don't Tell is a matter of professionalism, leadership, and respect. I understand that last week you spoke with Army units about their opinions on how the training program implemented last month was going. How are these units adapting to the training? Is the training well received and successful?

General CASEY. Thank you, Senator. I did, I went up to Fort Riley, KS, and I met with different levels of the leadership. I talked to a group of soldiers. I talked to a group of company-grade officers, NCOs, and then to a group of battalion and brigade officers and NCOs.

The things I took away were the following: first, the training is simple, and it's effective, and it's starting to break down the misconceptions that the soldiers had in their minds. That was played back, frankly, by every level. So, I think that's a very positive thing.

The second big takeaway for me, though, was, until a leader has to deal with it, or a soldier is confronted with it, it's an intellectual discussion. So, what I took away was, this is the start of the process. We're still doing equal opportunity and race relations, and still doing gender-bias training, so we're going to be doing this for a while. We have directed that, for our fiscal year 2012 sexual assault and harassment training, it be prepared in a gender-neutral way. That's how we intend to go forward.

Those are the two main things that I took away. The third thing I would tell you is, the main concerns are not surprising. Billeting. Basically, if they find they have to live with a gay/lesbian soldier. I emphasized to the commanders that we're not going to have segregated billets, but the commanders do have discretion to adjust the billets to suit people's needs and benefits. People understand that benefits aren't going to change substantially unless the Defense of Marriage Act is repealed. But, they're very apprehensive about the fact that they perceive that might happen.

Then, the last thing I'd say is, there still is a lot of concern among the very religious element of our population. They're wrestling harder with this, I would think, than the others.

So, those were the four big takeaways from my visit.

Senator HAGAN. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator Hagan. Thank you for raising that issue with the General.

Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman.

Secretary McHugh and General Casey, thank you both very much for being here, and for all that you do to ensure that our men and women in the military are prepared to serve every day.

I know that my colleague, Senator Ayotte, has already had a chance to ask you about something that we're very concerned about in New Hampshire. One of the benefits of having two of us from the same State on the committee is that we can double-team you. So, I do want to reemphasize what she had to say about the New Hampshire National Guard's Full Cycle Deployment Program, and I appreciated your remarks, Secretary McHugh, about it being a national leader.

You may already know this, but the data that they have collected on the program is very impressive, because what they found is that the military members involved in New Hampshire's Full Cycle Deployment Program are eight times more likely to be treated for previously untreated mental health issues. They're four times more likely to stay married. They're four times more likely to stay in the military. They're five times less likely to be homeless. So, clearly, it has had a huge success rate. I think, most importantly, the program has a suicide prevention component that means that every single returning Guard member who is considered at risk of suicide is in an active prevention program.

I know you pointed out that you're requesting $1.7 billion to fund soldier and family programs. I just wondered if you had considered whether there was any component of that that might be used as a grant program to really help some of these State initiatives that have been very successful.

General CASEY. The short answer is, I had not considered any of that $1.7 billion going to grant programs. But, a portion of that $1.7 billion does go to the guardsmen and reservists for their family support, family readiness programs, and for suicide prevention programs. That is not strictly for the Active Force.

Senator SHAHEEN. Right.

General CASEY. It is for the total force.

I really appreciate the initiative that the State has taken on this, and especially the public-private partnership nature of it. It's important in two ways, that the private partnership allows you to do things that we can't necessarily do. But, and this is one of the main reasons why I think we have to continue to find the best way to use the Guard and Reserve, because it ties the population to what we're doing.

Senator SHAHEEN. Right.

General CASEY. When they're actually contributing, I think it's a huge statement. Our soldiers see that. It sends a signal to them that the American public appreciates what they're doing, and that's priceless.

So, I had not considered a grant program. It's something we certainly can take on board and think about.

Senator SHAHEEN. I would urge you to think about that, given that there are State initiatives, not just in New Hampshire, but in other States around the country, that may use the unique circumstances in those States to develop programs that are directed at those unique circumstances that may address some of those

needs in a way that's different and, in some cases, I hesitate to say, better, but than some of the national initiatives.

I know you're aware that this program had been funded through congressionally directed spending, and, given the changed circumstances in Congress, that's not going to be available any more. It's one of those things that I think we should still be funding through congressionally directed spending. But, since I'm not in the majority on that, I understand that that's changed. Hopefully we can find a way to deal with these kinds of successes, even though we're not able to do that sort of earmarking.

I also wanted to just express what I know others here have said about the MEADS program, and just urge, again, that the administration and you all look at how we can get our international partners to help us cooperate to address the issues that have been raised with that program.

Finally, one of the other areas that I've been very concerned about is what's happening with R&D and with the new development of the engineers and the scientists and the mathematicians that the military's going to need for the future. In New Hampshire, we have a very strong defense industry. We have the Army Corps' Cold Region Lab. As you all know, so much of the innovation and the technological advances in the country have come from the R&D that the military has done. DOD employs about 67 percent of all Federal scientists and engineers, and 90 percent of all Federal mechanical engineers, which is an extraordinary number. Unfortunately, the average age of our DOD engineers is 53.

So, what are we doing, given the current personnel and hiring freezes, to ensure that we're attracting the new engineers and mathematicians and scientists that we're going to need for the future? Are you confident that we're able to bring in the people that we need?

Mr. MCHUGH. I wished I could say I was. But, this is an area of incredible challenge, not just for the U.S. military for the Nation, as I know you're aware. Our access to that pool becomes more and more difficult with each passing year. It's much more than that now, but the Military Academy at West Point was, at one time, totally an engineer school. We have a little license on those young people when they graduate, and we try to make good use of them. Similarly, through the ROTC program, we're looking very carefully to make sure that we're sustaining programs on campuses where those kinds of students tend to come from.

But, I think the challenge for us, particularly, is in the civilian area. We are bound by certain pay bands that, many times, are not competitive with the outside sector. That becomes more and more true as supply-and-demand realities come to bear, as well.

We want to use every available resource and opportunity, but, like the Nation as a whole, this is an area of great challenge right now that's only going to become more difficult.

Senator SHAHEEN. Thank you. My time is up. But, notwithstanding the concern that everyone here has expressed, and I know we all understand about the debt and deficit situation of the country, this is an area where I think we would be very interested in working on what else we need to do to make sure that we're train-

ing the future scientists and mathematicians that we need for the country. Thank you for your response.

Chairman LEVIN. Thank you, Senator Shaheen.

Senator Begich.

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

First, to General Casey, as everyone has said here, thank you very much for your service and what you have done for our country, but also the work in the last 2 years with our office. I just want to say, personally, thank you for that.

Also, I'd take this moment, only because sitting behind you is one of our former fellows, Lieutenant Colonel Jim DeLapp, and I know he's going off to command. I hope the year he spent with us did not cause any problems for his advancement, but I'm hoping it enhanced his opportunities. We were very pleased. The Fellows program is a fantastic program that I hope every Senator takes advantage of, because it really does bring some incredible talent to our offices. Hopefully, we don't spin them the wrong way, and that they can continue to have forward advancement after they finish with us.

General CASEY. Actually, we're very satisfied with the program, too. It's what we call a broadening experience for our young leaders.

Senator BEGICH. Yes.

General CASEY. It's very productive for us, as well. Thank you.

Senator BEGICH. Very good.

Mr. Secretary, as we've had a conversation over the last couple of days, another thank you in regards to this 16th Aviation Combat Brigade. Thank you for all the work you've done there, even though we had a split with Washington, I think, at the end, it is a statement by the Army, how Alaska fits into the global picture of national defense. I can tell you, the folks in Fairbanks were very happy to hear the news in regards to the continued stationing of a significant portion of those assets there in Alaska, for both of you. Mr. Secretary, thank you for the conversations we've had over the last year, and tolerating those conversations from our office. I greatly appreciate that.

Mr. MCHUGH. I appreciated the input. One of the very first Hill visits I had, when I became Secretary, was to your office. You were very gracious in seeing me. You pressed that issue early and, I should say, often. I thank you for that kind of engagement. It does help us to focus on what we need to focus upon; that is, the strategic location, the value of what happens up around Fort Wainwright in the great State of Alaska. I think it was a good decision. I appreciate your support in that. We're looking forward to a good, long, happy future in the great State of Alaska.

Senator BEGICH. Great. Thank you very much.

I want to add a little bit to what Senator Shaheen said. We introduced a piece of legislation on science, technology, engineering, and math (STEM), but it made me think of an idea, and I just want to put this to you. I'm wondering if there's a value, as we look at DOD authorization, if we need to look at on-school bases, and maybe, some specialized program regarding STEM. Obviously they're all military dependents going to those schools, and the high likelihood is, there's a higher percentage that are dependents that

will go on to military service. Maybe there's a value to look at those and see if there's a way to incentivize, within those schools that are on base, the STEM education.

I think it's worth exploring, because I agree 100 percent with Senator Shaheen that this a huge gap. Like you said, it's not just in the military, it is nationally. We are so far behind. But, in our military infrastructure, maybe there's a way to enhance the educational opportunities that we do have for our young people who are dependents of military personnel, and STEM is a great opportunity.

I don't know if you have any quick comments on that.

Mr. MCHUGH. We firmly commit ourselves to looking at every option and every potential avenue to help expand this pool and to help put more young people in the programs that'll produce the engineers that we, as a military and the Nation as a whole are going to need. So, we'll take a look at that. I don't want to sit here now and tell you that's an idea that can absolutely work. But, it's certainly an idea that we will take a look at.

Senator BEGICH. That's all I'm asking, because it just jogged me, as I'm sitting here and listening, there's maybe something to merge there.

General CASEY. Let me, if I could, just chime in here.

Senator BEGICH. Sure.

General CASEY. It's also something that lends itself to public-private partnership.

Senator BEGICH. Absolutely.

General CASEY. Getting the industries involved in the school, I think, is a high payoff.

We recently started five pilot programs with the National Association of State Boards of Education and Junior ROTC. We just kicked it off with Secretary Duncan in Kentucky a couple of weeks ago. What we tried to do is get the National Association of State Boards, so there's a local commitment to the program, a cadet corps, like Junior ROTC, that puts the values and the civics and the physical aspects to it, and then to match that with business, putting in things that drive math and science skills. I think that has a lot of promise.

Senator BEGICH. That's great to hear that. I'd be anxious, as you explore it and see if there's some additional work we can do. I think that's a great initiative.

Mr. Secretary, you know one of the subjects I'm going to bring up is Fairbanks housing. I'm sure you're prepared for this, but it's the 801 housing. The GAO report talked about how to deal with the inventory, and maybe not depleting, but consider additional leases or long-term leases. In Alaska specifically, we have the Birchwood property, which expires in 2018, a private-sector development, and you know a lot about it.

But, I guess, with not knowing the total footprint, and I know there's been some discussion of some new developments that might be on that property, I'm going to continue to push that. In order for that good public-sector/private-sector partnership that's there and an important tax base for our Fairbanks community and, I think, a quality housing project that can and should provide housing for the military. What is the status? What is the long-term out-

look, in regards to that lease? I actually meant to talk to you about this on the phone, but I was so happy about the other news, I didn't want to go down another path.

Mr. MCHUGH. I appreciate the question. As you may be aware, we've notified your office, but you're busy. I visited there, personally in an effort to try to have a full and most complete understanding of that. Very frankly, what we try to do is provide the local commander a lot of leeway, because he is the one who's in charge of helping to plot the future of that base and obviously is a person who's most concerned about its future viability. After housing analysis, looking at available equal-value, equal-quality residences throughout the outside-the-gate community, looking at pricing and looking at the condition of homes and, most importantly, looking at the property upon which those 801 housing lease units sit, as one of the few pieces of land where permafrost on the base does not exist, where they can actually go in and use it to create the kinds of facilities that we feel very strongly are necessary to ensure the future liability of the base itself. We have notified the leaseholder that our intent is not to renew the lease past the upcoming termination date, and that his requirements under the lease are known to him, and expected that he'll follow through.

Senator BEGICH. As yesterday was a good-news day, today is not a good-news day when I hear that, and here's why. Our bases are not measured in hundreds of acres in Alaska, they're measured in thousands of acres. Fairbanks has a high percentage of permafrost and various elements; and Alaska is known to build on anything, everywhere. So, I understand that they have a plan, which we learned about recently, but no long-term funding for it. The type of facility they're thinking about on there is difficult, not only in these times, but in past times, to get resources for. I'll be very frank with you, I'm concerned about the plan that showed up, after a year of discussion, and has a pricetag of over $220-plus million. It's a small percentage of land that the proprietors of the property indicated that they would utilize and upgrade to the level that the military wanted, as well as provide the pricing that they want, at any point, at any time. I'm a little disturbed, just to be frank with you, because of how it's evolved.

I agree with you, the local commander shifts out every 2 years. When I was Mayor, I went through four different commanders in Anchorage. So, I'm concerned. I just want to stress that with you greatly here.

Mr. MCHUGH. I appreciate that, Senator. I can't sit here right now and tell you what the Future Years Defense Program is for that particular plan, but I promise you, we'll take a look at it, and we'll try to get you a better laydown as to what we see is the way forward.

I'm not an engineer, I don't play one on TV, but our engineers have said that, while it's true, you can construct on permafrost. Obviously, Alaska's a pretty good example of that. It adds pretty dramatically to the cost, et cetera, et cetera. This was always the way forward. The terms of this lease are not a surprise to anyone.

Senator BEGICH. No, I understand that.

Mr. MCHUGH. We are concerned, as well, while having units is one thing, many of the units no longer meet the minimal standards

of size that we have in the Army. I don't want to treat you unfairly and give you pieces here and there. I promise you, we'll get back to you with a more complete answer.

[The information referred to follows:]

In reference to the question about Birchwood being built on permafrost, the Fairbanks area is considered to be in a discontinuous permafrost area, meaning that depending on the location, the land may or may not have permafrost. There are some visual key indicators where the probability of permafrost is much higher. Two of those indicators are, areas where nothing but black spruce trees are growing and north facing slopes. An examination of Fort Wainwright's historic photo archive shows the entire northern portion of Birchwood (north of Swanson Loop) was completely cleared of permafrost prior to 1956 and was used primarily as a pipe laydown yard and open-air storage. The area of Birchwood south of Swanson Loop had not been stripped, but had been significantly cleared prior to 1956.

Although Fort Wainwright has a land area of over 1 million acres, the cantonment area is significantly less. The main cantonment area consists of approximately 13,408 acres. Additionally, once on the cantonment area, developable land is significantly reduced due to acreage for the airfield, flight restriction zones, range areas, wetlands, historic districts, and areas where there is no utility infrastructure.

The Birchwood site is the last piece of significant developable land in the cantonment area at Fort Wainwright. The land at the Birchwood site has been master planned for specific facility types that will require replacement in the out years once the Birchwood housing is demolished in 2018 by the developer in accordance with the provisions of the ground-lease. The development of the long-range installation real property master plan takes into consideration the installation's long-term development strategy. The redevelopment of the Birchwood site into a community area remains the long-term plan as a means to recapitalize existing facilities. The short-range component of the master plan integrates real property master planning into the Army's budgetary and operational planning processes. Given that the Birchwood site is encumbered, the earliest opportunity to begin construction is 2019. Project submissions for consideration into the fiscal years 2015 to 2019 Future Years Defense Plan will begin in 2013.

Senator BEGICH. Thank you very much.

Mr. MCHUGH. Yes, sir.

Senator BEGICH. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Begich.

Any other questions? [No response.]

If not, we thank you both. Thank you again, especially General Casey, for 4 decades-plus. Thank you for bringing your guests this morning. We honor them as well as we honor you.

Secretary McHugh, thank you for your great service, as well.

We'll stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR E. BENJAMIN NELSON

MEDIUM EXTENDED AIR DEFENSE SYSTEM

1. Senator NELSON. Secretary McHugh, the Department of Defense (DOD) has decided to modify the Medium Extended Air Defense System (MEADS) with Germany and Italy because of cost overruns and schedule delays. As I understand it, DOD plans to continue the development program to a proof-of-concept stage, within the time limit and funding limit provided in the tri-national program agreement; meaning there is about $800 million to go. The other two options considered, but rejected, were to terminate the program, or to increase the funding by more than $1 billion and increase the schedule by at least 30 months. If we terminate the program unilaterally, I understand we would be liable for all termination costs, which could be as much as $845 million. I want to understand the most cost-effective and beneficial way forward. If we proceed with the proof-of-concept program, as proposed, what do we get for the $800 million, and how does it benefit our security?

Secretary MCHUGH. Proceeding with the proof-of-concept program allows the United States to complete our current commitments under the international Memorandum of Understanding (MOU). This course of action enables the MEADS partners to harvest technology and design know-how from our investments to date, and

would place the Design and Development (D&D) program on stable footing should Germany and/or Italy wish to continue a MEADS development and production effort after the current MOU funding is expended. Terminating the program now, just after successful completion of the MEADS Critical Design Review, would force the nations to devote significant funding to contract termination costs instead of using this funding to bring MEADS development to a viable level of maturity. Terminating now would also increase risk of civil litigation costs. The remaining efforts that will bring the MOU to completion allow the United States to gain as much intellectual capital as possible to help inform future investments and development while assisting the partners to be more capable of addressing defense challenges in the future.

2. Senator NELSON. Secretary McHugh, I understand that if the three nations were to agree jointly to terminate MEADS—rather than proceeding with the proof-of-concept program—all three would share in the termination costs. Have the three nations discussed or considered the option of termination on a cost-shared basis?

Secretary MCHUGH. Department senior leadership has explored mutual termination with Italy and Germany, and they have clearly stated they have no interest in pursuing this course of action. Thus, there has been no detailed discussion by the three partner nations about executing a mutual termination.

3. Senator NELSON. Secretary McHugh, if that were to happen, what would be the cost to the United States?

Secretary MCHUGH. To date, the NATO program office has not requested a contract termination proposal to detail all costs, and there is no indication that such a termination will be requested by any of the three countries. Should there be a mutual termination, there are several points that must be considered to calculate the total liability. Termination costs would be driven by existing obligations like long lead item procurements and orders, targets, test and integration infrastructure, and other support costs (lease, support contractors, et cetera). Recent estimates of U.S. costs in a mutual termination scenario are on the order of $300 million.

4. Senator NELSON. Secretary McHugh, have the three nations made a decision yet on the way forward and, if so, what is that decision? If not, what is the path going forward for reaching a decision?

Secretary MCHUGH. Yes. The United States has decided that the best course of action is to continue the D&D phase by providing funding up to the agreed MOU cost ceiling of $4 billion (in 2004 dollars). We proposed to our MEADS partners that we focus remaining activities on implementing a proof-of-concept effort with the remaining MOU funds. This will provide a meaningful capability for Germany and Italy and a possible future option for the United States. Consistent with the current MOU cost ceiling, this refocused proof-of-concept D&D program will end by 2014.

This course of action enables the MEADS partners to harvest technology from our large investment to date, and would place the D&D program on stable footing should Germany and/or Italy wish to continue a MEADS development and production effort after the current MOU funding is expended. Terminating the program now, just after successful completion of the MEADS Critical Design Review, would force the nations to devote significant funding to contractor termination costs instead of using this funding to bring MEADS development to a viable level of maturity. At the most recent MEADS Board of Directors meeting, both Germany and Italy supported pursuing the proof-of-concept.

5. Senator NELSON. Secretary McHugh, is there any other option you are aware of that would give us the best security result for the least cost?

Secretary MCHUGH. The Army is developing plans to integrate Patriot components into the Integrated Air and Missile Defense network, mitigating MEADS shortfalls, and allowing the United States to employ more flexible and effective task force configurations. Additional upgrades will enhance Patriot against evolving threats, leveraging the additional range and lethality afforded by the missile segment enhancement missile. Enhancements and continued sustainment/modernization will keep Patriot relevant and ready beyond 2025.

QUESTIONS SUBMITTED BY SENATOR JEANNE SHAHEEN

LANGUAGE SKILLS AND CULTURAL AWARENESS

6. Senator SHAHEEN. General Casey, combatant commanders are increasingly identifying requirements for incoming units to be equipped with measurable language skills and cultural awareness before deploying to theater. Could you comment of the importance the Army attaches to these capabilities and any initiatives the Service is planning in its 2012 budget?

General CASEY. We recognize the tactical and strategic value of cultural training and culturally-based language training for full spectrum operations. The Army has mandated language and cultural familiarization for every deploying soldier plus more extensive language proficiency training requirements for select personnel at the platoon level. We continue to refine language and culture training requirements to meet future demands.

In November 2009, the Commander, International Security Assistance Force (ISAF) stated all soldiers deploying to the Afghan theater should be trained in the Dari language to enable rapport building with Afghan civilians and Afghan security forces.

In 2010, the Army instituted a training campaign to meet ISAF guidance with the Defense Language Institute Foreign Language Center (DLIFLC) as the main effort for training soldiers. The Army established General Purpose Force Language Training Detachments (LTD) at Forts Carson, Campbell, and Drum, and at Schofield Barracks. After 16 weeks of training, soldiers who achieve a certain level of proficiency are designated Language Enabled.

The Army approved $6 million in Overseas Contingency Operations funding for the initial establishment of LTDs in fiscal year 2010. The Office of the Secretary of Defense approved $29.38 million in LTD expansion funding for fiscal year 2011. In fiscal year 2012, LTD funding increases to $32.39 million.

In July 2010, the Army published standards requiring one soldier per deploying platoon to train to a minimum standard in the appropriate strategic language at an LTD or via an 80- to 100-hour distributed learning (DL) platform called Head Start 2. Pre-deployment guidance also established the Rapport Program as a broader training requirement for all deploying soldiers. Rapport is a web-based DL platform available in Dari, Pashtu, and Iraqi Arabic. Both Rapport and Head Start 2 are funded through DLIFLC's training development budget.

In addition to culturally-based language training initiatives, Army Training and Doctrine Command implemented a strategy to increase its cultural content in Professional Military Education. The effort will continue to mature in fiscal year 2012 as the Army develops greater understanding of specific knowledge requirements for each career series.

NIGHT VISION SYSTEMS

7. Senator SHAHEEN. Secretary McHugh, since the onset of the conflicts in Iraq and Afghanistan, the Army has procured large numbers of night vision goggle systems to meet evolving requirements associated with combat and counter-terror operations. A limited number of companies are capable of producing this technology and to meet these urgent needs, industrial base capacity had to be expanded accordingly. Do you anticipate that night vision systems will remain critical capabilities into the foreseeable future?

Secretary MCHUGH. Yes, we anticipate that night vision systems will remain critical to enabling the soldier to dominate the night in full spectrum warfare. They have been a significant combat multiplier for situational awareness, lethality, and force protection.

8. Senator SHAHEEN. Secretary McHugh, what concerns do you have regarding the Army's ability to maintain night vision goggle production capacity and core competencies as the Army leadership confronts future funding reductions and reduced procurements?

Secretary MCHUGH. In 2005, the Under Secretary of Defense (Acquisition, Technology, and Logistics) authorized investment of $80 million to rapidly expand Image Intensifier (I^2) tube production capacity to meet increased wartime demand for the Army and the Marine Corps. In 2009, the Army completed procuring its passive viewing systems and the Marine Corps is close to doing the same. Army production deliveries are on schedule to be completed by the end of fiscal year 2012. Current estimates indicate that fiscal years 2013 to 2017 I^2 quantities are <50 percent of peak production and other night vision technologies are also experiencing reduction

in demand. These changes in demand raise concerns about cost, workforce reductions, and capability. Industrial base capability is important, and we, in coordination with OSD and the other Services, will continue to look at options to meet future challenges.

9. Senator SHAHEEN. Secretary McHugh, how does the Army plan to address these concerns?

Secretary MCHUGH. To date, the Army's Program Management Office responsible for soldier-borne sensors and lasers is developing courses of action to mitigate sustainment rate concerns. They are also the lead of a multi-Service working group developing a recommended draw-down plan for DOD approval by the end of the calendar year.

10. Senator SHAHEEN. Secretary McHugh, what steps do you believe need to be taken in order to preserve an economical, competitive framework for night vision tube production?

Secretary MCHUGH. I think we all recognize that the current rates of production for night vision devices is at its peak due to our present day operations tempo. The Army will continue to maintain a transparent dialog with industry partners regarding production rates and also cooperatively develop ideas to minimize the impact of downsizing future requirements.

QUESTIONS SUBMITTED BY SENATOR KIRSTEN GILLIBRAND

JOINT TACTICAL RADIO SYSTEM

11. Senator GILLIBRAND. Secretary McHugh, I was informed that operational testing (OT) to support an initial production decision for several thousand radios is scheduled within approximately 2 months after the government developmental testing (DT) for the Joint Tactical Radio System (JTRS) Manpack system. Given past problematic developmental testing results for this system that required extensive modifications, is it realistic to believe that the time between DT and OT is sufficient for a major acquisition program?

Secretary MCHUGH. Yes, it is realistic to believe the time between DT and OT is sufficient for the JTRS program. The hardware design is stable and the remaining testing involves the software. The JTRS Handheld, Manpack, Small Form Fit (HMS) program conducted a Network Excursion (a DT event) in March 2011 demonstrating improved situational awareness and small unit effectiveness using the Army's network. The Network Excursion also assessed the JTRS radios and waveform's ability to support tactical data requirements. The excursion demonstrated integration between HMS Manpack, Warfighter Information Network-Tactical, and Force XXI Battle Command Brigade and Below. The Network Excursion also successfully demonstrated connecting the dismounted force to the Global Information Grid.

The HMS Manpack will participate in a series of DT and OT test events to build program decision data and confidence over the next 7 months. The decision data accumulated through these Test-Analyze-Fix series of DT events will ultimately support a decision whether to proceed with procurement under Low Rate Initial Production (LRIP) at a production decision brief yet to be scheduled.

The HMS Manpack is currently undergoing a formal DT event at Fort Huachuca, AZ. It will be further tested in the Army's Network Integration Exercise (NIE) (an additional DT event) scheduled June-July fiscal year 2011, the Network Integration Rehearsal (NIR) (an additional DT event) scheduled October fiscal year 2012, and the Rifleman Radio Initial Operational Test and Evaluation (IOTE) (an additional OT event) scheduled November fiscal year 2012.

These five test efforts will result in metrics and decision data accumulation, to support independent assessment of the capability provided by the HMS Manpack for the warfighter. In addition, the tests will also provide DOD the data necessary for any further acquisitions regarding the HMS Manpack.

12. Senator GILLIBRAND. Secretary McHugh, does it make sense to support the entire programmatic request for the development and production in fiscal year 2012?

Secretary MCHUGH. Yes, fiscal year 2012 funding allows DOD to finalize the design of the Ground Mobile Radio, Handheld Manpack Small Form Fit and the Multi User Objective System satellite communications waveform. Fiscal year 2012 funding also supports the addition of critical communications waveforms to the entire JTRS family of systems, development and integration of a JTRS capability for the Shadow

Unmanned Aircraft System, as well as completion of testing to support LRIP. Fiscal year 2012 funding procures sufficient quantities for LRIP with follow-on delivery to eight Infantry Brigade Combat Teams (BCT) in fiscal year 2013. A reduction in fiscal year 2012 funding would result in a corresponding reduction in funds available for procurement of any commercially developed network modernization alternatives.

MEDIUM EXTENDED AIR DEFENSE SYSTEM

13. Senator GILLIBRAND. Secretary McHugh, hearing a number of questions today about the MEADS program, I would like to understand what specific national security goals for the United States and our allies were to be served by the program, how a cancelation of the program will address those goals, and what will be the cost to DOD of the alternatives to fielding MEADS?

Secretary MCHUGH. Both Patriot and MEADS were designed to deter and defeat the growing Tactical Ballistic Missile and Cruise Missile threat to U.S. forces and to our allies. The Army will work to improve Patriot to mitigate the cancellation of MEADS. We expect funding requirements for that effort will be determined within the next year. Near-term improvements to Patriot will not only afford greater protection for our warfighters, but will enable 11 key allies to improve their defenses as well through Foreign Military Sales (FMS).

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

SERVICEMEMBERS CIVIL RELIEF ACT

14. Senator CHAMBLISS. Secretary McHugh and General Casey, the number of service men and women experiencing significant financial problems with their mortgage companies and banks is unfortunately well known. While the operational tempo (OPTEMPO) of our Armed Forces will hopefully decrease following the withdrawal of our combat forces from Iraq, the OPTEMPO will likely still remain high and we will continue to rely on our Reserve components to meet operational requirements for the foreseeable future. With this in mind and if private lenders continue to willfully violate or negligently ignore the provisions of the Servicemembers Civil Relief Act (SCRA), what adjustments do you believe may be necessary to that Act to protect the interests of our service men and women?

Secretary MCHUGH and General CASEY. While the SCRA provides many statutory protections designed to mitigate some of the hardships inherent in transitioning onto Active Duty, the unscrupulous and otherwise illegal acts of certain lenders still harm our servicemembers and their families despite the Congress' best efforts to protect servicemembers from such conduct. Fortunately, Congress recently took steps to strengthen SCRA enforcement through the passage of the Veterans' Benefits Act of 2010. This provided for civil enforcement by the Attorney General in certain circumstances and increased civil penalties in cases where the violator engaged in a pattern or practice of violating the SCRA or engaged in conduct which raised an issue of significant public importance. The Veterans' Benefit Act also provided servicemembers the ability to seek the award of reasonable attorneys' fees and litigation costs when they prevail in a private cause of action to enforce the SCRA's protections.

We recommend the SCRA be amended to provide both increased criminal penalties for its willful or negligent violation as well as the inclusion of significant civil penalties for all violations, not just those involving a pattern or practice of such violations. Absent increased penalties for its violation, SCRA noncompliance may be seen by some lenders to be a calculated business risk that they are willing to take, given the potential for increased profits with little perceived downside.

UNIFORMED SERVICES EMPLOYMENT AND REEMPLOYMENT RIGHTS ACT

15. Senator CHAMBLISS. Secretary McHugh and General Casey, the Uniformed Services Employment and Reemployment Rights Act (USERRA) protects millions of people, largely National Guard and Reserve members, as they transition between their Federal duties and civilian employment. The Act is intended to eliminate or minimize civilian employment disadvantages resulting from service in the Reserve components and protect the rights of those members when they deploy. Since September 11, 2001, over 500,000 citizen soldiers have been mobilized to fight the war on terrorism. Many American soldiers have served more than one tour of duty and may be required to serve more.

Additionally, the need for American troops in other parts of the world and at home continues, whether for conflict management or in response to natural disasters. While some would argue that it is statistically reasonable for the number of employment discrimination complaints filed by service men and women during this time period to have increased—based on the number of deployments—the data needed to make such a judgment remains incomplete.

Furthermore, data from a 2004 DOD survey showed that at least 72 percent of National Guard and Reserve members with USERRA problems never sought assistance for their problems, raising questions as to whether complaint numbers alone can fully explain USERRA compliance or employer support. Finally, the time it takes to process USERRA complaints, while somewhat improved, remains unacceptable when you are speaking in terms of whether or not a veteran and/or his family will lose their home due to a negligent or willfully mistaken foreclosure action.

In light of these factors, do you see the need for any changes to USERRA to address these issues or provide additional protection to our Guard and Reserve members?

Secretary MCHUGH and General CASEY. Since September 11, 2001, more than 800,000 members of the Reserve component (RC) have been called to Active Duty in support of our Nation. This includes more than 197,000 Army Reserve members. While there have been a handful of high profile USERRA related cases brought by RC servicemembers against employers during this time, statistics demonstrate that these situations are not representative of the experience of our reservists and national guardsmen.

In an effort to ensure that reservists are fully informed of both their rights and their responsibilities under the USERRA law, units are briefed on a regular basis. This includes briefings which occur immediately before and after mobilization. reservists are also provided with information regarding the resources and services available to them, including those available through DOD's Employer Support of the Guard and Reserve organization should the servicemember believe that their employer has violated USERRA.

The vast majority of the employers of our citizen-soldiers have been very supportive of their employees' military service. We urge caution with respect to placing increased legislative requirements upon our Nation's employers; it is important that employers are encouraged to hire Reserve soldiers.

QUESTIONS SUBMITTED BY SENATOR LINDSEY GRAHAM

CARBINE COMPETITION

16. Senator GRAHAM. Secretary McHugh, in today's budgetary climate our need to cut back and control spending while maintaining defense capabilities is increasingly important. Given this, before you decided to begin the new carbine competition, what type of analysis of alternatives (AOA) did you conduct to examine existing capabilities?

Secretary MCHUGH. The Army waived the AOA because the combat development leadership felt it was not required to support the Individual Carbine (IC) program. The program will execute a commercial off-the-shelf/nondevelopmental items system competition. At the end of the competition, the Army will conduct a Business Case Analysis (BCA) on fielding the winning carbine versus maintaining the current carbine. The BCA will use data collected during the test and evaluation of the IC candidates. Key Performance Parameters and Key Systems Attributes in the IC Capability Development Document were baselined on the current M4 carbine capability as directed by the Army Requirements Oversight Counsel. Therefore an AOA would not produce relevant information in support of the program.

17. Senator GRAHAM. Secretary McHugh, did the Army conduct an AOA? If not, please provide me with the documentation your office approved in granting a waiver for this critical step in the acquisition process.

Secretary MCHUGH. The Individual Carbine action office forwarded a request to waive the AOA to the Army Acquisition Executive (AAE) as part of the request for a Materiel Development Decision (MDD) Review. I have included both the request for the waiver and the AAE's approval of that request in his Acquisition Decision Memorandum from the MDD Review.

18. Senator GRAHAM. Secretary McHugh, in December 2010, Program Executive Office (PEO) Soldier through Picatinny Arsenal, received an unsolicited proposal to obtain the Combat Assault Rifle (CAR)—formerly the Special Operations Combat

Assault Rifle (SCAR)—Technical Data Package (TDP). This package would provide taxpayers a savings of $30+ million associated with the carbine competition, and minimized acquisition timelines since the CAR has already completed 6 years of research, development, test, and evaluation (RDT&E), and fired over 3 million rounds of ammunition. In fact, the SCAR is already deployed in combat where one Special Operations soldier stated, "the result of the SCAR–H rollout had a catastrophic effect on the enemy and their morale." By the Army owning the TDP, similar to how the Army owns the M4 TDP, the Army would be able to have a full and open competition on continued development and manufacturing of an already competed and tested solution. Ultimately, this would save taxpayers millions of dollars and provide our soldiers with a solution sooner rather than much later. Why did the Army fail to seriously consider this opportunity and instead chose to begin another carbine competition, essentially duplicating what has already been done for the past 7 years?

Secretary MCHUGH. Secretary of the Army Geren directed a full and open competition for a new carbine by memorandum, dated October 2, 2008. On October 14, 2008, the NDAA for Fiscal Year 2009 stated that: "If the small arms capabilities based assessments by the Army identifies gaps in small arms capabilities and the Secretary of the Army determines that a new individual weapon is required to address such gaps, the Secretary shall procure the new individual weapon using full and open competition. Full and open competition is described in Section 143 as competition among all responsible manufacturers that:

(A) is open to all developmental item solutions and non-developmental item solutions; and
(B) provides for the award of a contract based on selection criteria that reflect the key performance parameters and attributes identified in a service requirements document approved by the Army."

Procuring new weapons with the TDP for SCAR would not meet the requirements by law.

19. Senator GRAHAM. Secretary McHugh, what assurances can you give me that the results of the new carbine competition will consider true best value, that is a competitive procurement cost coupled with due consideration of the total life cycle cost of the new carbine, rather than simply awarding the contract to the lowest bidder?

Secretary MCHUGH. The IC procurement strategy is being conducted as a full and open competition to ensure that the soldier receives the best overall weapon at the best value to the taxpayer. Full and open competition permits the Army to pursue all commercially available advances in small arms capabilities. IC candidates will be evaluated against a number of factors, including accuracy, reliability/durability, fielding, manufacturing capability, and operational and supportability impacts, in addition to cost. At the latter stages of the competition, a Limited User Evaluation will be conducted in order to obtain user assessment of the system. At the end of the competition, a formal business case analysis will be conducted to consider the performance, life-cycle cost, and terms and conditions of the selected system compared to the current carbine. The activities described above are all intended to achieve the best value.

M240 PRODUCTION

20. Senator GRAHAM. General Casey, what is the status of the Army's M240 production, for both the M240B and M240L?

General CASEY. M240B: There are two producers of the M240B, Fabrique Nationale Manufacturing Inc. (FNMI) and Colt Defense. FNMI will complete Army deliveries in May 2011. Colt Defense is providing First Article Test (FAT) weapons in April; given a successful FAT, production deliveries will begin in July 2011 and will run through July 2012. This will complete the Army's buy of M240Bs.

M240L: FNMI is currently the only producer of the M240L and will complete delivery of the 4,500 LRIP weapons by October 2011. The Army is looking at options to pursue a sole source bridge contract with FNMI to maintain production of the M240L while a competitive contract can be competed and awarded.

21. Senator GRAHAM. General Casey, are you aware of the potential year-long break in production and associated costs that might occur beginning as soon as this year due to the Army's contracting process and the unique technical M240L manufacturing requirements?

General CASEY. The Army is aware of this potential break and is considering options to avoid a break in production, to include awarding a bridge contract to maintain deliveries until a competitive production contract is awarded.

22. Senator GRAHAM. General Casey, what is the Army doing to address this break in production and the possible increase in overall procurement cost of the system that has resulted from this acquisition decision?

General CASEY. The Army is considering options to avoid a break in production, to include the option of a bridge contract with FNMI that will mitigate the impact of a break by allowing FNMI to continue production of the M240L until a competitive award can be made. We anticipate cost savings as a result of a competitive production award.

23. Senator GRAHAM. General Casey, in order to lighten the soldier's load and provide him with the best machine gun possible, have you considered replacing M240B models with L models on a one-for-one basis as the Bs are withdrawn from service, sent back to depot for refurbishment, and then reserved for FMS? This would provide the Armed Forces with a follow-on medium machine gun that is as reliable, lighter, and more compact than the current M240B. Please comment on this.

General CASEY. Yes, in reviewing the basis of issue for the M240L, consideration was given to replacing all of the weapons versus select weapons within the formation. Priority was given to replacing all of the dismounted weapons within the formation. Availability of titanium, cost, and production time were all considered in determining the final basis of issue. The same short barrel and collapsible butt stock is being developed for both the M240L and M240B.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

ARMY ACQUISITION REFORM

24. Senator CORNYN. Secretary McHugh, according to the final report of the 2010 Army Acquisition Review, from 1990 to 2010, the Army terminated 22 Major Defense Acquisition Programs of record before completion. The report notes that, "Every year since 1996, the Army has spent more than $1 billion annually on programs that were ultimately cancelled." Since 2004, $3.3 billion to $3.8 billion per year (35 percent to 45 percent) of the Army's RDT&E funding has been lost to cancelled programs. In my view, this represents extremely poor stewardship of taxpayers' dollars. What are the primary factors in the Army acquisition process that have caused these program cancellations, and what is your department doing to end this decade-long trend of sunk costs on weapon systems that will never be deployed?

Secretary MCHUGH. The Army Acquisition Review Panel submitted its report in February 2011. It included 76 recommendations in 4 broad areas that extend across various Army organizations. Those broad areas address requirements generation, risk management, organizational alignment, and resources. I have directed the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT)) to assess those recommendations. The ASA(ALT) will provide specific recommendations for implementation of those portions of the report which are judged to improve the efficiency and effectiveness of the Army's acquisition process. That initial assessment is due to me in April. Following that, I will determine the path forward on implementation of the recommendations.

25. Senator CORNYN. Secretary McHugh, the Army's Rapid Equipping Force, Rapid Fielding Initiatives, and Rapid Acquisition Processes, which bypass the Army's current acquisition process, have been successful in developing, modifying, and fielding important and critically needed capabilities for our forces in Afghanistan and Iraq, who face ever-changing enemy threats. One recommendation by the Army Acquisition Review to make the Army's acquisition process timelier is to institutionalize rapid acquisition in the Army's policy guidelines and to amend AR 71–9 to support rapid acquisition in response to requests from combatant commands during quiescent periods. What are your plans to implement this recommendation?

Secretary MCHUGH. The Army Acquisition Review Panel submitted its report in February 2011. It included 76 recommendations in four broad areas that extend across various Army organizations. Those broad areas address requirements generation, risk management, organizational alignment, and resources. I have directed the ASA(ALT) to assess those recommendations. The ASA(ALT) will provide specific recommendations for implementation of those portions of the report which are judged to improve the efficiency and effectiveness of the Army's acquisition process. That

initial assessment is due to me in April. Following that will determine the path forward on implementation of the recommendations.

ELLINGTON FIELD

26. Senator CORNYN. Secretary McHugh, Ellington Field Joint Reserve Base is strategically located in Houston, TX, where it can address national security requirements for the Gulf Region and the Nation. In recent years, Ellington Field has evolved into a joint installation that hosts the Texas Air and Army National Guard; Army, Navy, and Marine Corps Reserve units; and the U.S. Coast Guard. Personnel levels at Ellington Field have grown exponentially—from 1,500 in 2008 to more than 6,000 in fiscal year 2011. Additionally, as host to Department of Homeland Security and National Aeronautics and Space Administration components, Ellington Field serves as a successful representative model of DOD joint forces basing and interagency installation planning. Given this confluence and emergence of multiple missions and growth, as well as Ellington Field's strategic capabilities, how does the Army plan to take full advantage of this installation and leverage its many strengths?

Secretary MCHUGH. Ellington Field is located in Houston, TX, near the Gulf coast. About 2,000 acres of the original Ellington Air Force Base were transferred to the City of Houston in the 1970s, and is currently managed by the Houston Airport System.

The Air Force retained a small portion of Ellington Field and permitted some of this land to the Army, which in turn licensed 20 acres to State of Texas. The Texas Army National Guard uses the 20 acres for training and currently maintains two Readiness Centers and an aviation unit headquarters.

The Army does not have any plans to expand current activities on Ellington Field at this time.

FORT HOOD

27. Senator CORNYN. Secretary McHugh, construction on a new medical center at Fort Hood is expected to be completed in September 2015 to replace the Carl R. Darnell Army Medical Center, which is 33 percent undersized. This hospital will support 140,000 enrolled beneficiaries, including 50,000 Active Duty soldiers. Fort Hood soldiers and their families currently make over 15,000 trips each year to medical centers over 150 miles away for specialty care in certain pathologies. What additional specialties and services does the Army plan to offer at Fort Hood's new medical center?

Secretary MCHUGH. The new 947,000 square foot Carl R. Darnall Army Medical Center will be 60 percent larger than the existing facility and will provide increased access to care by using space more efficiently, leveraging new healthcare delivery technologies, and centralizing healthcare services. The new facility will specifically address Fort Hood's most pressing health service needs in the areas of behavioral health, medical/surgical specialty clinics, and pediatric primary care. Expansion of existing services and the addition of new military funded specialties are not currently programmed for the new facility.

Fewer than 2 percent of all tertiary care referrals from the medical center leave the Central Texas medical community. Improvements in telemedicine technology in the new medical center will expand capability for local treatment with the assistance of distant military tertiary care centers. Additionally, the Fort Hood medical community will continue to increase local care capability in the areas of oncology and other hard to find medical subspecialties through academic and research partnerships.

28. Senator CORNYN. Secretary McHugh, construction of the new Fort Hood medical center was funded through unobligated stimulus funds. H.R. 1, the House-passed fiscal year 2011 Continuing Resolution, includes a provision that would require the rescission of all unobligated stimulus funds. It is my understanding that $106 million of these funds remains to be obligated for the new medical center, but that it cannot be done for another year. What impact would such a rescission have on the construction and scheduled completion of the Fort Hood medical center?

Secretary MCHUGH. Rescinding the American Recovery and Reinvestment Act (ARRA) funds would require reducing the project and put project completion at risk. As of the February 2011 financial reports, $97.6 million in unobligated ARRA funds remain for the Fort Hood hospital replacement project. DOD has obligated as much of the funds for the Fort Hood project that it can at this time while ensuring good

stewardship of available resources and complying with the law. The remaining unobligated balance is required to complete the project. A typical construction project includes estimates for design, contingency costs arising during construction, and procurement for particular categories of equipment. These funds are intended to remain available throughout the life of the construction project and are essential for successful completion, especially for large, complex hospital buildings.

29. Senator CORNYN. Secretary McHugh, Fort Hood has long been a source of pride for Texans and all Americans, having deployed more troops to Afghanistan and Iraq than any other installation. As you know, the tragic terrorist attack that occurred at Fort Hood on November 4, 2009, took place in a facility that is being used as a temporary soldier deployment processing center. It is my understanding that U.S. Army Installation Command has failed to include the replacement soldier deployment processing center in the Future Years Defense Program (FYDP) for Fort Hood. Continuing to utilize the makeshift facility where 13 soldiers were killed and many more wounded is not appropriate. Why was the replacement facility not included in the FYDP for Fort Hood?

Secretary MCHUGH. Following the November 2009 shootings and mass casualty incident, Fort Hood developed a Military Construction (MILCON) project estimated at $19 million to replace the Soldiers Readiness Processing Center (SRP). This project competed for funds in the supplemental process but did not make the final list for fiscal year 2010 funding. It remains as a Fort Hood priority and has been submitted to compete in fiscal years 2013 to 2017 MILCON Program.

30. Senator CORNYN. Secretary McHugh, what steps will the Army take to rectify this situation?

Secretary MCHUGH. This project remains a priority for Fort Hood and for the Army. While program requirements continue to exceed available funding, the Army will consider this project for inclusion in the fiscal years 2013 to 2017 MILCON Program.

31. Senator CORNYN. Secretary McHugh, as part of the DOD efficiencies initiatives, the Army has reduced funding for MILCON by $1.5 billion. It is my understanding that of those cuts, $360 million (45 percent) were projects in the fiscal years 2012 to 2016 FYDP at Fort Hood. Why was Fort Hood not consulted on the mission impacts of these cuts?

Secretary MCHUGH. In developing the MILCON program, the Army seeks universal participation from all stakeholders, including those at installation and garrison levels who have first-hand knowledge of local conditions. During the course of the fiscal years 2012 to 2016 program development, the Army responded to an accelerated DOD initiative to reduce overall spending, by reducing $1.4 billion across the 5-year MILCON program. These decisions were vetted on an accelerated schedule with Army commands and components. The decision to retain or to defer a project was based on how well it supported established Army MILCON priorities as well as the priorities of the sponsoring command or component.

32. Senator CORNYN. Secretary McHugh, please explain the rationale or the process that led to this shortsighted decision.

Secretary MCHUGH. The hypothetical $360 million Fort Hood reduction assumes that Army senior leadership and the Office of the Secretary of Defense would have approved these projects in the draft and pre-decisional version of the FYDP from which the $1.4 billion reduction was taken. The Army protected the following priorities from decrements:

(a) projects supporting key leader initiatives such as transformation and barracks buy out;
(b) known stationing actions;
(c) projects that would pose a high risk to readiness if not competed as scheduled.

The result of this review was that two Fort Hood projects in last year's fiscal year 2011 to 2015 FYDP totaling $138 million were deferred from the FYDP. Three new, previously unprogrammed projects, totaling almost $222 million at Fort Hood did not compete successfully in the fiscal years 2012 to 2016 FYDP. All projects deferred from previous programs or budget positions will be reconsidered during the development of the fiscal years 2013 to 2017 Program Objective Memorandum (POM) should sponsoring commands submit for consideration.

M–16/M–4 REPLACEMENT

33. Senator CORNYN. General Casey, the M–4 carbine, part of the M–16 family of weapons, is the Army's primary individual combat weapon for infantry units. The Army's plan to replace the M–16 family of weapons began in 1994, and as late as 2005, it was reported that the Army was about to approve the acquisition of a new assault rifle to replace the M–16 and M–4—a decision that was allegedly cancelled due to acquisition and bureaucratic conflicts. It is my understanding that the Army issued a draft request for proposal (RFP) on January 31, 2011, for a new individual carbine, with a formal solicitation for the competition scheduled for release in May. Why is this taking so long?

General CASEY. In order for the Army to develop and field a new weapon system, there must be a Joint Capabilities Integration and Development System approved requirement. The Individual Carbine Capability Development Document was approved in August 2010. Since approval of the requirement, the Soldier Weapons office has been actively managing the IC program and released a draft RFP for industry comment, held a Pre-Solicitation Conference to discuss the solicitation with industry, and is scheduled to release the final RFP in the third quarter of fiscal year 2011. The timeframe for these events has been set to afford industry enough time to comment on the draft RFP and help ensure that the final RFP accurately reflects the Army's requirements and evaluation factors. With 38 industry members participating in this process, the sheer volume of input has required extra time.

34. Senator CORNYN. General Casey, what is the Army's exact timeline for competition, selection, and fielding of a replacement for the M–16 and M–4?

General CASEY. The IC competition is currently underway. The exact timeline is dependent on many factors, the most important being the number of vendors that submit candidate weapon systems.

However, as presented at the Pre-Solicitation Conference held in Crystal City, Arlington, VA, on 30 March 2011, the expected timeline for the IC is as follows:

- Draft RFP: 31 Jan 2011 (released)
- Revised Draft RFP: 28 Mar 2011 (released)
- Pre-Solicitation Conference: 30 Mar 2011 at the Double Tree Hotel in Crystal City, VA
- Final RFP: Third Quarter 2011
- Phase I Evaluation: Fourth Quarter 2011—First Quarter 2012
- Phase II Evaluation: First Quarter 2012—Fourth Quarter 2012
- Contract Award(s): First Quarter 2013
- Down-select Evaluation: First Quarter 2013—Third Quarter 2013
- Milestone C/LRIP: Fourth Quarter 2013
- First Unit Equipped: Fourth Quarter 2014

35. Senator CORNYN. General Casey, in the interim, will the Army plan to continue its procurement of the M–16 and M–4, or will the Army consider newer and better weapons available right now on the commercial market?

General CASEY. The Army has met its acquisition objective for the M16 rifle and officially concluded the production phase of the program on May 12, 2004. Final Army delivery occurred in January 2005. The Army has not met its acquisition objective for the M4 carbine at this time and is planning a competitive M4 carbine contract award in fiscal year 2012. We are planning on procuring an additional 24,000 M4A1 carbines to fulfill Secretary Geren's direction provided in an October 2, 2008, memorandum. This will complete the Army Acquisition Objective and maintain the industrial base during the improved carbine competition. The Army continues to include M16 rifle and M4 carbine requirements in its contracts for other services and FMS.

Consideration of newer and better weapons available in the commercial market is being addressed by the IC program. Selection and qualification of small caliber weapons for the Army is a very extensive and thorough process as evidenced by the scope of the IC program.

COMBAT IDENTIFICATION

36. Senator CORNYN. Secretary McHugh, our military suffered a tragic 24 percent fratricide casualty rate in the 1991 Gulf War. In the 20 years since, Congress has provided substantial research and development funding to DOD in an effort to reduce fratricide casualties in present and future conflicts. Yet to date, no dedicated combat identification technology has been fielded. Please provide an update on the Army's combat identification program.

Secretary MCHUGH. The Army believes in a comprehensive approach to combat identification that focuses not only on materiel solutions, but embodies all of the elements of Doctrine, Organization, Training, Materiel, Leadership, Personnel and Facilities.

From a materiel perspective, the Army has invested over $5 billion in improved situational awareness systems including Blue Force Tracking, Second Generation Forward Looking Infrared Radar, Joint Combat Identification Marking System, Mounted Soldier System, Air Warrior, Nett-Warrior, and improved thermal sights. The Army's combat identification program will complete procurement and fielding of 7,224 Joint Combat Identification Marking Systems in 2013. Additionally, the Joint Cooperative Target Identification—Ground program is currently conducting an AOA with expected completion in third quarter 2011.

37. Senator CORNYN. Secretary McHugh, please detail and explain the POM funding allocated to complete development and begin the fielding of a dedicated combat identification technology solution.

Secretary MCHUGH. The Army is currently in the process of developing its POM for fiscal years 2013 to 2017 and is determining the appropriate level of funding required for the combat identification program.

ARMY END STRENGTH

38. Senator CORNYN. General Casey, over the past 10 years, the Army has increased its Active Duty end strength in order to meet current and future operational requirements. However, as part of his cost-saving initiatives, Secretary Gates has proposed reductions to the Army's Active Duty end strength of 22,000 soldiers by 2014, followed by an additional 27,000 soldiers beginning in 2015. Over the last 40 years, the Army has conducted two major post-conflict end-strength reductions, first after the Vietnam war and then again after Operation Desert Storm. Given that we live in what you, Secretary McHugh, and some other senior military leaders refer to as an era of persistent conflict, how risky is it to reduce our Army's end strength so soon?

General CASEY. We are in the process of conducting deliberate analysis to determine how and when to implement directed reductions. The Army's deliberate and responsible draw-down plans will take into consideration operational demands, unit readiness, and those actions necessary to sustain the All-Volunteer Force. The plan will need to proceed at a pace necessary to ensure mission success and retain flexibility to adjust the end strength, if necessary, in response to unforeseen demands. Current assumptions about future demand for Army forces are critical to assessing potential implications associated with both end strength and force structure adjustments. The Army assumes that the drawdown in Iraq will continue and that it will be completed by 31 December 2011. The Army also assumes that forces in Afghanistan will be drawn down in accordance with current administration policy. Finally, while we cannot predict with certainty when and where crises may occur, we do anticipate that in an era of persistent conflict Army forces will continue to be required for a variety of missions. However, the Army does not anticipate that near-term future demands will reach a level of commitment seen in recent years. As the boots-on-the-ground to dwell-time ratio (BOG:Dwell) is largely a function of demand, we expect BOG:Dwell ratios will continue to improve. The Army will continue to ensure accomplishment of its assigned missions, improve operational readiness to meet future demands, and care for the well-being of its soldiers and their families.

39. Senator CORNYN. General Casey, as you know, extended deployments and the high OPTEMPO have put a substantial strain on our All-Volunteer Army, resulting in high rates of post-traumatic stress disorder, suicide, alcohol and drug abuse, as well as other health issues within the force. The Army's increase in Active Duty end strength was designed, in part, to mitigate these effects and allow for soldiers to have longer periods of dwell-time between deployments. If conditions on the ground in Afghanistan do not allow for the administration's planned drawdown of U.S. troops by 2014, will the reduction of 22,000 soldiers to the Army's Active Duty end strength have a negative impact on the quality, resiliency, and overall well-being of our force?

General CASEY. The 22,000 temporary end-strength increase has been an integral part of the Army's ability to meet the manning requirements of deploying units. The planned reduction is based on the assumption that the demand for Army forces will decline by the end of 2013. If that assumption proves to be inaccurate, the Army

will reevaluate its ability to meet the new demand and engage with the Secretary of Defense to determine the appropriate mitigation strategy.

Concerning quality and resiliency of the force, the Army will continue its efforts to retain soldiers with the greatest potential to serve and align them with our leadership development strategy. The Army's deliberate and responsible drawdown plans will take into consideration operational demands, individual and unit readiness, and sustainment of the All-Volunteer Force.

PERMANENT CHANGE OF STATION POLICIES

40. Senator CORNYN. General Casey, current Army policy requires relatively frequent Permanent Change of Station (PCS) moves for most soldiers and their families. At a time when each of the Military Services is being pressured to find ways to stretch each and every dollar and improve its fiscal stewardship, a thoughtful and sensible revision of the Army's PCS policies could potentially save millions of dollars annually, which the Army could use to meet other requirements. Requiring PCS moves every 5 or 6 years—instead of every 2 or 3—would also reduce the strain on military families; certainly a worthy goal. In so doing, you would enable many military spouses to pursue their own careers without facing frequent relocations, and you would ease the stress that frequent moves and school relocations put on military children. Do you see any potential for the Army to rethink its current PCS policies to cut unnecessary expenses and improve the quality of life for military families? If so, how would these policies have to be reformed to accomplish this?

General CASEY. As a general rule, the Army does not require soldiers to move simply because they have remained at one location for a set number of years. Overseas moves are an exception, by OSD policy. They have established specific tour lengths based on environmental conditions in the overseas locations.

Two-thirds of all Army PCS moves result from accessions, separations, and professional development. The remaining third are used to distribute soldiers internal to the Army. They are used to maintain an acceptable match of skills and grades in units to meet operational requirements. Over the past 10 years the requirements for moves has accelerated by the need to meet the demands of filling deploying units. As demand for Army units decreases, we will work to increase the time on station for soldiers and families while maintaining the critical match of skills and grades across the Army.

ARMY COMBAT BRIGADES IN EUROPE

41. Senator CORNYN. General Casey, DOD reportedly intends to decide in the near future how many Army BCTs to keep in Europe, which could be as many as four or as few as two. Meanwhile, since 2002, two Germany-based BCTs have essentially been in limbo while DOD debates their fate. It now appears unlikely that these units, which had been scheduled to return to the United States by 2013, will meet that deadline. It should be considered that our soldiers in Europe may not be afforded the same high quality training opportunities they would otherwise receive stateside at a post such as Fort Bliss, TX, where training opportunities are unparalleled due to its vast ranges and whose conditions accurately simulate those faced by soldiers in Afghanistan and Iraq. In your view, is delaying the return of these Army units from Europe the right course of action, given that our European allies have their own highly capable militaries?

General CASEY. DOD is currently reviewing the disposition of forces in Europe and the Army has been a part of that process. The National Security Strategy and the Quadrennial Defense Review affirm the importance of investing in the capacity of strong and capable foreign friends and allies. These efforts further U.S. objectives of securing a peaceful and cooperative international order. The U.S. forces in Europe represent our enduring commitment to the defense of Europe specified in the North Atlantic Treaty Organization's (NATO) Article 5, ensuring a credible deterrent against all forms of aggression, and providing a robust capability to build allied and partner capacity for coalition operations such as in Afghanistan. It must also be noted that the majority of troop contributing nations supporting ISAF, NATO's largest and most complex out-of-area operation, come from NATO members. The relationships needed to support these types of operations can only be developed through long-term, sustained relationships. In addition to providing forces and directly supporting war efforts, U.S. Army Europe sustains key training capacity for the U.S. military, NATO and our allies at the world class Joint Maneuver Training Center at Grafenwoehr/Hohenfels, Germany.

42. Senator CORNYN. General Casey, why are these Army BCTs still permanently stationed in Europe, and when will the Army bring them home?

General CASEY. The Office of Secretary of Defense is currently reviewing the disposition of forces in Europe and the Army has been a part of that process. An Army review is underway to analyze and determine the appropriate force structure and posture to support our Nation's interests. As a result of pending decisions and ongoing analysis, the U.S. posture in Europe will be more capable, more effective, and better-aligned with current and future security challenges. The stated purpose of Army forces in Europe is to assure our allies and partners of our commitment to NATO, build their capacity to support out-of-area operations, and ensure regional stability.

[Whereupon, at 12:21 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, APRIL 5, 2011

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

U.S. NORTHERN COMMAND AND U.S. SOUTHERN COMMAND

The committee met, pursuant to notice, at 9:34 a.m. in room SD–G50, Dirksen Senate Office Building, Senator Carl Levin (chairman), presiding.

Committee members present: Senators Levin, Lieberman, Reed, McCaskill, Udall, Hagan, Blumenthal, McCain, Chambliss, Brown, Ayotte, and Cornyn.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Richard W. Fieldhouse, professional staff member; Jessica L. Kingston, research assistant; Michael J. Kuiken, professional staff member; Jason W. Maroney, counsel; and Michael J. Noblet, professional staff member.

Minority staff members present: David M. Morriss, minority staff director; Adam J. Barker, professional staff member; Daniel A. Lerner, professional staff member; and Michael J. Sistak, research assistant.

Staff assistants present: Jennifer R. Knowles, Kathleen A. Kulenkampff, and Christine G. Lang.

Committee members' assistants present: Christopher Griffin, assistant to Senator Lieberman; Carolyn Chuhta, assistant to Senator Reed; Gordon Peterson, assistant to Senator Webb; Casey Howard, assistant to Senator Udall; Roger Pena, assistant to Senator Hagan; Laurie Rubiner and Ethan Saxon, assistants to Senator Blumenthal; Lenwood Landrum, assistant to Senator Sessions; Brad Bowman, assistant to Senator Ayotte; and Dave Hanke, assistant to Senator Cornyn.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody.

We're pleased to have two distinguished military leaders with us today to talk about security in our hemisphere: General Doug Fraser, Commander of U.S. Southern Command (SOUTHCOM); and

Admiral Sandy Winnefeld, Commander of U.S. Northern Command (NORTHCOM) and Commander of North American Aerospace Defense Command (NORAD).

We welcome you both. We want to start by thanking you both for your distinguished service to our Nation, and ask you to also give our thanks to the men and women who serve with you for their tireless service and for the numerous contributions that they all make to our Nation's security. We also offer our gratitude to your families and the families of all of the personnel, since they share in the sacrifices of that service and because their support is so critically important to our success.

General Fraser, President Obama recently traveled to the SOUTHCOM area of responsibility (AOR), and this trip was the President's second trip to Latin America. His decision to travel to SOUTHCOM despite the beginning of international military efforts in Libya is a testament to the strategic importance of the nation states that are located in your AOR.

The three countries that the President visited—Brazil, Chile, and El Salvador—highlighted the spectrum of issues that your command confronts each day. In Brazil, President Obama found a rapidly emerging global partner with shared values both in terms of economics and security. Brazil is the world's seventh largest economy and a key trade partner in the hemisphere. In terms of security, their military has played an important role in supporting United Nations (U.N.) peacekeeping missions with 2,200 troops, military observers, and police officers on three continents. Its contributions to the U.N. effort in Haiti are particularly important as that nation struggles to rebuild.

In Chile, the President visited a country that has made the transition from a dictatorship to a democracy. Chile, as well as Colombia and Mexico, is sharing its expertise in security with nations in Central America where transnational criminal organizations (TCO) have produced havoc on the people of the region.

In El Salvador, the President visited a nation suffering from the scourge of drug cartels, predominantly from Mexico, but also from Colombia. The United States has been increasingly engaged in Mexico and Central America in terms of security and fighting criminal organizations trafficking in drugs, arms, money, and people. As additional resources and attention have been brought to bear in Mexico, some of the cartels have moved into Central America. As a result of this shift, both the administration and the Mexican government are focusing more on Central America, how to bolster these governments, and how to have a regional approach to security as, General Fraser, you note in your opening statement.

However, General, you are in a complicated position, as no one has to tell you. The solutions needed to address the issues associated with the drug cartels and broader illicit trafficking issues primarily require the action of civilian law enforcement agencies, not the military. However, in many cases it is the military that has the capabilities and resources required to confront the drug cartels.

So our committee looks forward to hearing you describe how SOUTHCOM is addressing this complex environment and how this committee can assist you in this important endeavor.

NORTHCOM is responsible for the defense of the Homeland and for providing defense support to civil authorities in response to domestic natural or manmade disasters. Admiral Winnefeld is also dual-hatted as the Commander of NORAD, which has the mission to provide aerospace warning, aerospace control, and maritime warning for North America.

The NORTHCOM AOR consists of all of North America, including Mexico. Given the high level of violence in Mexico, especially related to drug trafficking and the flow of money and guns from our country into Mexico, we'd like to hear you assess, Admiral, the current situation and the cooperation between our two militaries to help defeat the criminal organizations.

As part of the mission of providing defense support to civil authorities, NORTHCOM must work closely and cooperatively with other Federal agencies and with all the States on plans and coordination for emergency response to domestic disasters. Admiral Winnefeld has been working with the State Governors and the National Guard forces to improve their combined capabilities.

One of the initiatives underway is a concept called "Dual Status Command," which is intended to allow State and Federal military forces to work together to support a governor's needs for disaster assistance, and we'll be interested to hear more about that effort.

NORTHCOM is also the combatant command (COCOM) responsible for the operation of the Ground-based Midcourse Defense System, the GMD system, to defend the Homeland against the threat of a limited ballistic missile attack from nations such as North Korea and Iran. The GMD system has had two consecutive flight test failures, most recently in December, and we look forward to hearing Admiral Winnefeld's views on what we need to do to make the system work reliably and effectively, including adequate testing and system enhancement.

There has been discussion of the administration's hedge strategy for missile defense of the Homeland in case the future threat of North Korean or potential Iranian long-range missiles emerges more rapidly or in greater numbers than now expected or if the development of the Standard Missile 3 Block IIB interceptor has technical problems or delays. One component of that hedge strategy has been the continued testing and assessment of the two-stage ground-based interceptor. However, there are numerous other hedge options under way or under consideration, including extra silos planned at Fort Greely, AK. So we'd be interested to know, Admiral, what your views are on appropriate hedging strategies.

Again, we thank you both for appearing here this morning and we look forward to your testimony. I call on Senator McCain.

STATEMENT OF SENATOR JOHN MCCAIN

Senator MCCAIN. Thank you, Mr. Chairman. I'd like to join you in welcoming our witnesses today and extend my appreciation to Admiral Winnefeld and General Fraser for their many years of distinguished service to our Nation. I'd also like to recognize the service and sacrifice of the many selfless men and women serving under your commands.

While the recent events across the Middle East and North Africa have consumed the attention of Congress and the Nation, we

shouldn't ignore the complex set of security challenges and opportunities that reside just across our borders. TCOs continue to wreak havoc throughout Central and South America with ruthless tenacity. They exploit weaknesses in local and national security forces, bribe government officials, and move easily across porous borders. Flush with cash, these groups also have shown an ability to leverage technology and quickly adapt existing detection capabilities, as evidenced recently by the discovery of fully submersible mini-submarines in Ecuador and Colombia.

I have recently been to both Central and South America, as well as just a week ago toured the Arizona-Mexico border, and I can attest firsthand that we must remain ever vigilant to problems in our hemisphere.

In SOUTHCOM's AOR, we have seen a marked increase in foreign nations attempting to influence the region, including some that cause me great concern. According to your testimony, General Fraser, Iran has nearly doubled the number of embassies in the region in the last decade and the Chinese involvement in our hemisphere has continued to grow in dramatic fashion.

In NORTHCOM's AOR, Mexico, under the determined leadership of President Calderon, has shown remarkable courage in its fight against the cartels. But this fight has not come without significant costs. Since 2006 nearly 35,000 Mexicans have lost their lives as a result of drug-related violence. To put that in perspective, during that same period of time, 21,000 Afghan civilians have lost their lives.

Such tragic loss of innocent civilian lives underscores the necessity of continued U.S. support to our partners that leverages their courage with our technology, sustained commitment, and complementing efforts on our side of the border. These organized criminal gangs operating across international borders threaten not only our neighbors to the south, but also American citizens. Despite what some in the administration have claimed, violence along the southern border continues to rage unabated and, though we've made gains in securing our border, it's not yet secure.

The situation requires further investment within the United States, including personnel, technology, and information-sharing between Federal, State, and local authorities, as well as with our neighbors, which helped in apprehending those responsible for the killing of U.S. Border Patrol agent Brian Terry.

I'm interested in how forces under NORTHCOM are working with their law enforcement counterparts along the border and what can be done to improve and expand.

I'm pleased that both of you are testifying jointly before the committee today. Given that many of the topics we will address today span both of your AORs, a close partnership and robust coordination between your commands will obviously prove to be fundamental to your success.

I thank you both for being with us today and I look forward to your testimony.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain.

Admiral, I think we'll start with you.

STATEMENT OF ADM JAMES A. WINNEFELD, JR., USN, COMMANDER, U.S. NORTHERN COMMAND AND COMMANDER, NORTH AMERICAN AEROSPACE DEFENSE COMMAND

Admiral WINNEFELD. Chairman Levin, Senator McCain, and distinguished members of the Armed Services Committee: Thank you for the opportunity to appear before you this morning. If I may, I'd also like to thank you both for your kind remarks regarding the men and women who work for us. Many of them are probably listening right now and your remarks speak directly to them. So thank you for your comments.

Chairman LEVIN. Thank you.

Admiral WINNEFELD. I'm also delighted to be alongside my close friend and partner, General Doug Fraser. In the Western Hemisphere we work very closely together and it's delightful to be able to appear with him.

As Commander of NORTHCOM, responsible for defense of the United States and in the case of NORAD for the air defense of North America, it's my privilege to work with the talented team of men and women executing a uniquely diverse set of Homeland defense, civil support, and theater security cooperation missions. Our daily efforts include countering terrorism and TCOs, preparing to support our Federal and State partners in the wake of a natural or manmade disaster, air defense against both internal and external threats, maritime and ballistic missile defense, and of course, a growing focus on the Arctic.

I'd like to highlight two of these areas in advance of our discussion this morning. First, the tragic events in Japan over the last several weeks only highlight the importance of being prepared to respond to disasters, including those providing no notice, such as earthquakes, and those involving accidental or intentional release of harmful substances, such as, in Japan's case, radionuclides.

NORTHCOM plays a key role in our Nation's response to these disasters, principally in support of the Federal Emergency Management Agency's (FEMA) role as the lead Federal agency, but ultimately providing support to the affected States by bringing either additional capacity or specialized capabilities to bear that our partners may lack.

Time is our enemy in these disasters and we search every day for ways to become more agile in responding to the needs of our partners.

We also stress our supporting role, and I'm pleased to be able to report that, as Senator Levin mentioned, we've made considerable strides over the past year in achieving unity of command and control of State and Federal military forces during a disaster.

I can also report that NORTHCOM's relationship with the National Guard, which is such a capable partner and on whom I rely so much for my mission accomplishment in several key areas, is superb.

The second area I'd like to highlight is NORTHCOM's support for the ongoing struggle to disrupt and dismantle the TCOs that are having such corrosive effects inside our hemisphere. We're working hard to both support law enforcement agencies within the United States and, in conjunction with SOUTHCOM, to support the efforts of our partner nations.

Presidents Obama and Calderon have underscored our shared responsibilities as nations: on the U.S. side of the border, to reduce drug consumption and illicit flows of arms and money; and on the Mexican side of the border, to interdict drugs going north and to strengthen the rule of law so that criminals are put in jail and kept there.

The Mexican Government, as you pointed out, has displayed exemplary moral, physical, and political courage in undertaking this important struggle, because they know this is about the future of Mexico, and I take my hat off to them for that fact. The Mexican military has been asked by its civilian leadership to join with Mexican law enforcement agencies to support this struggle in the right way, respectful of Mexico's democratic ideals and the nation's commitment to the rule of law.

It's been a difficult struggle. As Senator McCain pointed out, since December 2006, 35,000 Mexicans have lost their lives in TCO-related violence. The criminality extends far beyond drugs to extortion, robbery, kidnapping, and trafficking of persons. I salute Mexico's police and security forces for their courage, skill, and determination, and for the progress they have made in building institutions like the Federal police and in taking down over two dozen of the most wanted criminals in their country, progress for which they do not always get the credit they deserve.

Today, the Mexican military is confronting concurrent challenges: how to counter a sophisticated, unconventional threat by integrating intelligence and operations; how to work jointly with each other and with their interagency partners; and how to fully inculcate respect for human rights into everything they do.

We know this is hard work because we've been down the same road and in some ways we're still on the same road. So I tell my Mexican partners that we don't know it all, we've made our own mistakes along the way, and we seek the kind of engagement that helps them benefit from our experiences. But while I always want to do more to help our friends in Mexico, I want to state publicly and very clearly that the first and most important principle we observe in this struggle is respect for Mexican sovereignty. We have much to offer, but Mexico is always in the lead in Mexico.

The Mexican Government has a strategy to combat organized crime. They have defined with us a substantive framework to guide our cooperation and have invited us to work with them to support their efforts. But again, they are always in the lead in their own country.

If together we can maintain our resolve, if we can be responsive to their requests, if we can work effectively together to support their operational progress, and if we can continue to make progress on our own side of the border, then together we stand a good chance of carrying the day against the TCOs. If not, the corrosive effects of the TCOs will continue to pose a danger within both of our countries.

I want to thank you, the members, and also your superb committee staff for your steadfast support for our men and women, both in uniform and in civilian clothes, who work hard on these and many other difficult problems each and every day.

Once again, thank you for the opportunity to appear today and I look forward to your questions.

[The prepared statement of Admiral Winnefeld follows:]

PREPARED STATEMENT BY ADM JAMES A. WINNEFELD, JR., USN

Chairman Levin, Senator McCain, distinguished members of the committee, thank you for the opportunity to share my thoughts on the missions and focus areas of U.S. Northern Command (NORTHCOM) and North American Aerospace Defense Command (NORAD). Let me begin by saying how impressed I am by the talented cadre of professionals—from the Active and Reserve components of all Services of the U.S. military, Department of Defense civilians, our Canadian partners, and representatives from 68 different civilian organizations—who work in and about my headquarters in Colorado Springs each and every day. It is truly humbling to work with such a great team.

I'm also very encouraged by the strong partnership we have with the National Guard; they are essential to operational success across the full spectrum of our missions. We have over 40 full-time National Guard positions in NORTHCOM, including my Deputy Commander, Lieutenant General Frank Grass, from the Missouri Army National Guard, and on any given day, the number of guardsmen in our headquarters is around 100. The Army National Guard provides the bulk of personnel for air defense capabilities protecting our Nation's capital. In addition, they provide all of the manning at our Ground-Based Interceptor sites in support of missile defense. They are also currently developing additional capabilities to take on a much larger role in support of consequence management in the aftermath of a chemical, biological, radiological or nuclear attack. Finally, the Air National Guard provides the majority of NORAD's operational force for Air Sovereignty Alert missions. Simply said, we could not do our missions without the National Guard, and I'm very pleased with the positive trajectory of our relationship.

We in North America face a changing world that presents us with many challenges. These include violent extremists, proliferation of weapons of mass destruction, rogue nations, traditional competitor states, transnational criminal organizations, insecurity within the global commons, economic distress, natural disasters, emerging infectious diseases, and the effects of climate change. Each of these challenges poses a potential threat to the United States, Canada, and our regional partners and is pertinent to the missions of NORTHCOM and NORAD. Fortunately, we also enjoy great strengths and are presented with opportunities born of our Nations' ideals, ideas, and resources and those of our partners. Today I will describe how we plan to capitalize on these opportunities to overcome the challenges we face.

The mission statements for NORTHCOM and NORAD reflect the language in the Unified Command Plan and the NORAD Agreement.

NORTHCOM Mission: U.S. Northern Command conducts homeland defense, civil support, and security cooperation to defend and secure the United States and its interests.

NORAD Mission: North American Aerospace Defense Command conducts aerospace warning, aerospace control, and maritime warning in the defense of North America.

Accomplishing these missions demands a diverse array of disciplines and activities within my headquarters. Accordingly, and in order to assist me in allocating my two commands' time and resources, I have grouped our activities into the following eight focus areas:

COUNTERTERRORISM AND FORCE PROTECTION

Because violent extremists present a threat that currently exhibits both the capability and the intent to attack our Nation, Counterterrorism and Force Protection continue to be a vital focus area for NORTHCOM and NORAD.

Within the confines of our borders, current laws, policies, and democratic traditions and practices properly restrict most counterterrorism activities to civil authorities. As a result, NORTHCOM's principal role is to synchronize joint force protection and ensure military infrastructure across our area of responsibility is properly postured to mitigate and prevent potential terrorist attacks. However, we are fully aligned within the Federal Government's counterterrorism network and play a supporting role—assisting with information sharing and remaining prepared to supply military-unique capabilities or to enhance civilian capacity when directed by the President or Secretary of Defense.

To help prevent acts of terrorism, we are working to improve information sharing to better position ourselves to preemptively detect and protect against these threats,

particularly in regard to our military bases and other infrastructure. We are fully implementing the relevant recommendations of the Department of Defense (DOD) Independent Review Related to Fort Hood, and have made progress over the last year in our ability to rapidly disseminate threat information to DOD installations when required. In the wake of a terrorist event, we are prepared to support civil authorities, as directed, to assist in mitigating the consequences.

COUNTERING TRANSNATIONAL CRIMINAL ORGANIZATIONS

The United States and Mexico—and many of our other Western Hemisphere partners—are confronting serious security and public health challenges driven by transnational criminal organizations (TCOs) responsible for illicit trafficking of drugs, human beings, money, and weapons.

The facts are daunting. Over 34,000 Mexicans have lost their lives in the last 4 years, including a dozen mayors in 2010. Murder, kidnapping, extortion, and other crimes have intimidated large segments of the Mexican populace, primarily, but not exclusively, along our shared border. In some areas, the TCOs have muzzled the media and chased away businesses.

Meanwhile, on the U.S. side of the border, the Drug Enforcement Administration estimates that Mexican TCOs operate in over 230 U.S. cities. Each year illicit drug-related deaths number in the thousands, and treatment center admissions and emergency treatment facility visits both exceed a million. The annual direct cost for treatment, prevention, interdiction, and local law enforcement of drug abuse exceeds $52 billion. These and other consequences of drug abuse, including lost productivity, the impact on the criminal justice system, and the environmental impact resulting from the production of illicit drugs are estimated to cost our Nation nearly $181 billion annually.

The TCOs are vicious, well-financed and heavily armed, due in no small part to cash and weapons smuggled across our southern border. They have diversified their businesses and are increasingly sophisticated in their methods. By fighting one another and the government for the impunity to pursue their illicit trade, the TCOs are confronting Mexico with a complex, but not unprecedented, blend of trafficking activities and challenging security problems. I am profoundly impressed by the determination and courage of the Mexican Government, the various Mexican security forces, and the Mexican people in taking on this challenge. They know this is about the long-term future of their country.

The complex challenges associated with defeating the TCOs and the abundant opportunities for progress all underscore the vital importance of our close relationship with Mexico. In my 10 months as the Commander of NORTHCOM, I have observed the Mexican security forces work with increasing effectiveness against the TCOs, gradually achieving success in unraveling these organized crime networks. The Mexican Army and Navy have been drawn into this struggle due to the severe threat it poses to Mexico's security and prosperity, and are working hard to overcome several important challenges. First, they must operate under the legal restrictions to which any democratic nation's military must adhere when operating within its own territory. Second, they are temporarily transforming from a traditional force to one that can be called upon to confront threats from domestic criminal enterprises. Third, they are working hard to build interagency teamwork, with budding indications of success. Finally, and despite a very information-savvy adversary, they are determined to respect human rights during their operations, and have been eager to gain insights from our own hard-earned lessons in this area. None of these challenges are foreign to our own military. The fact that many of the families of these security forces reside in the same areas where TCO violence is greatest only heightens the respect we have for our Mexican partners.

In keeping with U.S. Government policy and the law, we are working closely with the country team in Mexico City and other key stakeholders to assist the Mexican Government in defeating the TCOs. Building on the momentum established by our civilian leadership, the Mexican and U.S. militaries have forged a cooperative relationship based upon mutual respect, professionalism, and reciprocity. With all our partners, we have stressed the many dimensions of the solution—including building strong and resilient communities, forming more robust judicial institutions, establishing a 21st century border, and directly disrupting the TCOs themselves. Regarding the latter, we are working with our Mexican military partners to enhance their materiel capability and capacity, as well as sharing our own operational insights. In so doing, we carefully emphasize the sovereignty, dignity, and capability of a proud Mexican nation, which recently celebrated 200 years of independence.

Another important partner in this effort is the Western Hemisphere Institute for Security Cooperation (WHINSEC), which provides an effective mechanism to build

relationships with militaries throughout the hemisphere and to influence a positive trajectory on human rights. In June and December, I participated in the WHINSEC Board of Visitors meetings, and I have been impressed by the quality of WHINSEC's faculty and students and the foundation of respect for human rights upon which its various curricula rest. In fiscal year 2010, there were 108 Mexican students at WHINSEC and I would like to see that number grow. Moreover, it is an important message both to and from Mexico that WHINSEC's assistant commandant is a Mexican officer.

NORTHCOM also provides a considerable amount of support to our interagency partners operating on the U.S. side of the border. Such support includes construction of personnel barriers, roads, and bridges; air and ground transportation; intelligence support; and training in and fusion of intelligence and operations. We have begun to combine the intelligence assets at Joint Task Force-North in El Paso, Texas with the interagency El Paso Intelligence Center to enable greater unity of effort. We are working closely with Customs and Border Protection (CBP) to share some of our lessons learned from 10 years of countering a different irregular threat overseas, including a close partnership in CBP's Tucson Sector. Additionally, over the past year we employed multiple sensors, including radar, forward-looking infrared, as well as manned and unmanned aerial surveillance in support of the U.S. Border Patrol's counternarcotics operations on both the northern and southern borders.

In support of our northern border, last year Joint Task Force-North dedicated 22 percent of its available resources to supporting law enforcement agencies in securing the northern border. Our support in this region included eight operational missions that provided aerial reconnaissance, ground-based radar, and ground-based sensor support; eight mobile training teams that taught targeting and intelligence courses; and one intelligence analyst who provided intelligence expertise.

From a southern border perspective, recently the aerial reconnaissance support we provided under existing counterdrug authorities assisted in the apprehension of the suspected killers of U.S. Border Patrol Agent Brian Terry. From November 2010 to January 2011, this platform assisted in the interdiction of 17,000 pounds of marijuana.

DEFENSE SUPPORT OF CIVIL AUTHORITIES

The complexity of our Nation's response to natural and man-made disasters presents ample challenges and opportunities for improvement. We can respond relatively quickly to events with available DOD capability—when called upon by civil authorities. We are looking for ways to eliminate barriers to speed, enhance cooperation with our mission partners, and lean forward with Governors and the National Guard to advance understanding and teamwork.

With our National Guard partners, we are successfully exploring new ways to close an historical gap in philosophy regarding command and control of Federal forces operating in support of a state in the wake of a disaster. Over the past year, together we made significant progress on an initiative, supported by the Secretary of Defense and the Council of Governors, to prepare "dual status commanders" to achieve true unity of effort between state and Federal military forces in response to a natural or manmade Stafford Act incident or Economy Act event. This initiative is transforming the way we do business together. I look forward to the next National Level Exercise this spring, in which we will have the opportunity to thoroughly examine the progress we have made over the last year in unity of effort using a New Madrid Seismic Zone earthquake scenario.

As a signal of our deepening relationship, NORTHCOM for the first time hosted Adjutants General from 54 U.S. States and territories attending the National Guard Bureau Senior Leader Conference in October 2010. The conference focused on improving understanding, fostering relationships, and furthering collaboration between NORTHCOM and the National Guard.

In addition, I have had the honor of participating in two Council of Governors meetings. The bipartisan Council of Governors was directed by Congress in the National Defense Authorization Act for Fiscal Year 2008 and established by President Obama by Executive order on 11 January 2010 to advise the Secretary of Defense, Secretary of Homeland Security, and the White House Homeland Security Council on matters related to the National Guard and civil support missions. These meetings have proved to be a key forum for progress in ensuring unity of effort in responding quickly in the event of disasters or other emergencies that affect the American people.

As a combatant commander, I am a strong advocate for the Reserve component. I firmly believe our Nation needs a strong and well-equipped Guard and Reserve

Force. As such, I urge Congress to fully fund the fiscal year 2012 President's budget request for Reserve and National Guard capabilities for both Federal and non-Federal roles.

We continue to tighten our already-close relationship with the Department of Homeland Security and the Federal Emergency Management Agency (FEMA), with frequent senior leader exchanges and planning efforts. I also recently directed establishment within my staff of a cadre of Regional Desk Officers charged with working with the Defense Coordinating Officers associated with each FEMA Region, as well as a host of other partners, to bring better understanding and coordination of disaster planning between my headquarters and the various State and Federal agencies.

Finally, we are closely examining the role NORTHCOM would play in response to a cyber attack in order to synchronize our efforts with U.S. Strategic Command and U.S. Cyber Command. We view our role as assisting the lead Federal agency in mitigating the physical effects of such an event, while staying close to our partners working in the cyber domain.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, OR NUCLEAR CONSEQUENCE MANAGEMENT

Managing the aftermath of a Chemical, Biological, Radiological, or Nuclear (CBRN) event would be exceptionally challenging due to the potential scope of an event, the specialized skills required, and the general lack of knowledge among our population of the relative hazards associated with such an incident. NORTHCOM has a key leadership role in ensuring our Nation is prepared to succeed in this mission area. The Quadrennial Defense Review directed a transition to a CBRN Consequence Management Enterprise with more responsibility resident within the National Guard, more lifesaving capability, and faster response times. I am convinced this is the right path for this capability, which will be in high demand if such an event ever occurs. NORTHCOM and our ground component command, U.S. Army North, are working closely with the National Guard Bureau and the Joint Staff to assist in making the new enterprise operational. The first two State Homeland Response Forces and the Federal Defense CBRN Response Force will stand up this fiscal year. While we collectively have much work to do to bring this project to fruition, I am pleased to report that together with our partners we have leveraged excellent teamwork across the board in this effort, and are committed to ensuring a smooth transition from existing to planned capability in this area.

MARITIME WARNING AND CONTROL

We remain concerned with potential threats in the maritime environment—whether presented by nation-states, extremists, or a natural event. Moreover, opportunities abound for shared awareness and control and much remains to be done to both clarify and energize NORAD's mission area of Maritime Warning.

One of our key projects this year is to strengthen our day-to-day maritime componency relationships for NORTHCOM and NORAD to enable improved planning, maritime domain awareness, training, theater security cooperation, and execution of homeland defense and security operations—and to do so without requiring additional investment.

AEROSPACE WARNING AND CONTROL

This continually evolving mission is NORAD's central focus, and it maintains the same importance to the United States and Canada that it has for over 52 years. It's a real privilege to have 122 Canadians in my headquarters as part of a team that reflects the overall vitality of the relationship between our two nations.

We continue to challenge our assumptions in this arena to ensure we are accounting for potential changes in threats before they occur, while offering our two nations our best thinking on how to execute this mission as efficiently as possible.

We view this problem as a spectrum of potential threats with varying capabilities and intentions. Despite recent improvements in U.S.-Russian relations that reflect a dramatically reduced likelihood of conflict, we maintain our vigilance regarding the high-end threat to the United States and Canada because of enduring and continually improving Russian capability. However, our principal concern remains potential extremist intent to again use civil aircraft, ranging from commercial airliners to general aviation aircraft to ultra-lights, as a means for employing terrorist tactics. While we have made tremendous progress in our efforts to ensure a September 11-type of event can never occur again, the threat continues to search for ways to exploit potential vulnerabilities. Accordingly, we search every day for new ways to improve our tactics, techniques, procedures, and technical capability to enable us to execute the detect-assess-engage sequence as effectively as possible.

To do so, we need the right capability in the right place at the right time. We are analyzing our future Air Sovereignty Alert requirements and sharing this analysis with the leadership of the U.S. Air Force and the Air National Guard. We are focusing our analytical effort on exactly what our Air Sovereignty Alert force is intended to protect, against what types of threats, under what conditions, and at what cost. As part of this effort, we are identifying capability gaps to the Joint Staff and the Services that we believe are required to defend against an evolving threat and contributing to an examination of means by which some of these gaps, which remain classified, might be filled. In addition, we are preparing a Report to Congress on the Air Sovereignty Alert mission as directed by section 333 of the National Defense Authorization Act of Fiscal Year 2011.

We also need to ensure we have the right capacity to execute the Air Sovereignty Alert mission—not too much and not too little. Given the recently announced slip in the F–35 program, NORAD is working closely with and counting on the Air Force to ensure we have adequate resources to sustain our mission. This is critical because seven of our Air Sovereignty Alert sites fly older model F–16s, which are currently scheduled to reach the end of their service life between 2020 and 2023.

Another area we are watching closely is the pace of wind farm development. Increases in the number of wind farms raise the likelihood that radar signals vital to our ability to protect the national airspace will be obstructed. We believe enabling the construction of alternative energy sources and conducting our national air defense mission are not mutually exclusive as long as we exercise due diligence in assessing the impact of potential projects. To this end, we have developed a more mature process for evaluating the impact of wind farms on national security. Multidepartmental cooperation is required to develop the policy, technical solutions, and future surveillance infrastructure that will provide both national security and renewable energy at the same time.

We are also fostering a more collaborative relationship with the Russian Federation. In August 2010, NORAD and the Russian Federation completed an historic first—a cooperative 3-day, live-fly exercise designed to establish clear communication processes that would allow our two forces to work together during a real crisis. The exercise, Vigilant Eagle, was an international air terrorism scenario exercised over the Pacific Ocean consisting of forces from the United States and Russia responding to the simulated hijacking of a B–757 en route to and from the Far East. The exercise scenario created a situation that required both the Russian Air Force and NORAD to launch or divert fighter aircraft to investigate and follow a hijacked airliner, with a focus on shadowing and coordinated hand-off of monitored aircraft between fighters of our two nations. This exercise was an overwhelming success and has helped create an environment for further cooperative efforts.

MISSILE DEFENSE

Several nations are developing the capacity to target North America with ballistic missiles capable of carrying weapons of mass destruction in the belief those weapons will give them more freedom of action. Thus far, the United States is pacing the threat, but a lack of certainty of threat intentions and capabilities demands vigilance and agility. We focus on three imperatives in order to perform our missile defense mission:

- Execute the ballistic missile defense mission with precision using the existing Ground-Based Interceptor (GBI) fleet located at Vandenberg Air Force Base, CA and Fort Greely, AK
- Develop realistic training simulations and constantly train as we intend to fight
- Assist the Missile Defense Agency (MDA) and U.S. Strategic Command as they continue concurrent research and development activities to improve capability

I have gained increased confidence in the existing ballistic missile defense system's ability—including our sensors, weapons systems, and highly trained operators—to defend against current limited threats. Nonetheless, I would like to see a more robust and redundant architecture for sensor and command and control nodes. It is critical that we continue to ensure our sensor network provides adequate warning and targeting information, that we test the entire system to verify its reliability and validate ongoing improvements, and that we remain vigilant to ensure our capabilities remain ahead of the evolving threat. Accordingly, I fully support the Department's recent decision to keep the GBI production line open until at least 2016, as well as consideration to procure additional GBIs in light of recent flight test results.

As we continue to monitor other nations' advancements in their long-range missile programs, I am optimistic the administration's Phased Adaptive Approach to Ballistic Missile Defense will add another layer of defense for the homeland if future conceptual programs envisioned to support this approach materialize and mature. In the meantime, MDA has begun to demonstrate a two-stage GBI capability that I believe could contribute to U.S. homeland defense if a more mature threat appears more rapidly than we had originally projected.

I remain alert to our ability to defend the Nation against the potential future threat of cruise missiles and other less conventional forms of air attack from off our coasts. This is a complex problem space that is defined by: the spectrum of capabilities and intentions of potential threats; our ability to generate indications that these capabilities or intentions might be changing; and the costs, timelines, and capabilities of varying levels of potential defensive postures. Presently, we are aware of no threat possessing both capability and intent to conduct such an attack. However, we must remain vigilant and prepared to adjust our posture should a threat combination emerge that changes this equation. Clearly, a strong deterrence posture is one of our most important hedges against such a threat. NORTHCOM and NORAD are drafting a Report to Congress on this issue as directed by the House Report to Accompany the National Defense Authorization Act for Fiscal Year 2011 (House Report 111–491).

THE ARCTIC

The geopolitical importance of the Arctic has never been greater, because as far as we know, the natural environment in the Arctic in civilized times has never changed faster. Up to 25 percent of the world's remaining undiscovered oil and natural gas deposits may lie beneath the Arctic ice cap. While most experts believe it will be some time before commercial Arctic shipping routes through the Northwest Passage and the Northern Sea Route see a significant increase in volume, some countries and commercial interests are actively testing the waters and making plans to increase their activity. We have seen a marked increase in Arctic ecotourism, and its attendant safety concerns, including the grounding of a cruise ship in the Northwest Passage last summer.

Because these changes involve a complex mosaic of issues, challenges, and opportunities, and because a peaceful Arctic is central to the continued safety and security of the United States, I have elevated the Arctic to the status of a key focus area. We are crafting a Commander's Estimate on the Arctic for use within DOD, and my commands are examining how we can best support our interagency partners in this region with search and rescue assets, humanitarian assistance, disaster response capabilities, and support to law enforcement. We are also working hand-in-hand with Canada Command as a vital partner to produce a concept of operations regarding how we would partner in the Arctic to ensure our efforts are coordinated and that we pursue complementary rather than redundant capabilities in accordance with our respective national direction.

Regarding capabilities, we are maturing our understanding of our gaps in this unique environment. We face shortcomings in all-domain awareness, communications, infrastructure (to include a deepwater port), mobility (to include adequate national icebreaking capability), search and rescue enabling capabilities, Arctic Ocean charting, and the ability to observe and forecast Arctic environmental change.

The good news is that cooperation is on the rise in the Arctic, and we must continue that trajectory using the array of mechanisms available to us, such as the Arctic Council, the International Maritime Organization, and the United Nations Convention on the Law of the Sea. I would like to add my voice to those of the Secretary of Defense, Chairman of the Joint Chiefs of Staff, and Chief of Naval Operations in urging the Senate to ratify the latter. Becoming party to the Convention would protect and advance U.S. interests in the Arctic by bolstering our national security, securing U.S. rights over extensive marine areas, and giving the United States a seat at the table when our vital interests are at stake—without abdicating any sovereignty.

CONCLUSION

It is a privilege to be the military commander charged with the diverse array of missions to protect our vital interests in our homeland, whether deterring or defeating a direct attack, or supporting civil authorities in disrupting and defeating TCOs, or supporting other civil authorities in responding to disasters.

You have a great team in NORTHCOM and NORAD—Americans and Canadians serving side-by-side. We are proud to serve together and as we do, we remember the vital importance to both the United States and Canada of the NORAD partner-

ship, as well as the broad spectrum of missions demanded of NORTHCOM. We pledge to you—the U.S. Congress and the American and Canadian people—to give each one our best effort. Thank you.

Chairman LEVIN. Admiral, thank you so much.

General Fraser.

STATEMENT OF GEN. DOUGLAS M. FRASER, USAF, COMMANDER, U.S. SOUTHERN COMMAND

General FRASER. Chairman Levin, Senator McCain, distinguished members of the committee: I also want to thank you for the opportunity to appear before you today and to discuss SOUTHCOM's accomplishments and our efforts in Latin America and the Caribbean. I'm also very pleased to share this table with my good friend and counterpart from NORTHCOM, Admiral Sandy Winnefeld. As Senator McCain mentioned, we do have a very close cooperation that we work on a very routine basis, not only personally between the two of us, but our staffs, and that continues to grow very diligently. We work that very carefully, and that is to say that we work to make sure there is no disconnect and there is no seam in the conduct of U.S. forces within the Western Hemisphere across our borders.

Over the past year, SOUTHCOM worked in close collaboration with other U.S. Federal agencies and our international partners to respond to natural disasters, like the earthquakes in Haiti and Chile, and to address the ongoing threats to regional security. This year, with the continued support of Congress, we will promote our U.S. national and regional security interests through enduring partnerships.

SOUTHCOM engages with our military partners in the region to accomplish three broad goals: to defend the United States; to help maintain security and stability within the region; and to build enduring military-to-military partnerships. These partnerships, formed through routine education, training, and military exercises, are the focus of our daily engagement activities.

Using this foundation, SOUTHCOM then focuses on two immediate challenges. First: natural disasters, like those we witnessed last year; and second: evolving threats posed by TCOs and the illicit activities they pursue.

Hurricanes impact the northern part of our region every year. To help mitigate the impact of these storms, we help build emergency operations centers and warehouses for relief supplies that our partners can use to direct their respective domestic responses to natural diasters. We remain prepared to conduct disaster relief operations whenever needed and whenever requested.

In regards to TCOs, we are working closely with our interagency and international partners to address this challenge. TCOs engage in illicit trafficking of drugs, arms, money, and people across porous borders throughout the region, as we mentioned earlier into the United States, but also abroad, into Africa and into Europe. They do not respect national sovereignty, laws, governments, or human life, and the violence they use in conducting their illicit activities presents a significant security challenge in the region.

Nowhere is this more evident than in Central America, which is besieged by gangs and TCOs who conduct illicit trafficking with

near impunity and are causing unprecedented levels of violence. The northern triangle of Guatemala, El Salvador, and Honduras is the deadliest zone in the world outside of active war zones.

To address this problem, the newly formed Central American Citizen Security Partnership, announced recently by President Obama, supports the multilateral efforts of Central American nations and builds upon existing U.S. interagency efforts. In addition, it leverages the capabilities of partners such as Canada, Colombia, and Mexico in Central America. SOUTHCOM will support this effort.

In closing, Mr. Chairman, I'd like to thank this committee for your support in funding the construction of our new headquarters in Miami. This state-of-the-art building enhances our internal and external collaboration, improves our ability to conduct interagency operations, and raises the quality of life for our assigned personnel. On behalf of the men and women of SOUTHCOM, I want to thank you.

I'd also like to thank this committee and your very diligent staff for your continued support to our men and women in uniform.

I look forward to your questions.

[The prepared statement of General Fraser follows:]

PREPARED STATEMENT BY GEN. DOUGLAS M. FRASER, USAF

INTRODUCTION

Chairman Levin, Senator McCain, and distinguished members of the committee: thank you for the opportunity to appear before you today to discuss U.S. Southern Command's accomplishments and future efforts in Central and South America and the Caribbean. Over the past year, we worked in close collaboration with U.S. Government agencies and our partner nations to respond to the unprecedented natural disaster in Haiti and to the ongoing threats to regional security. This year, with the support of Congress, we will build on our accomplishments and continue to foster close cooperation and engagement throughout the region. We will also continue to evolve as a joint and interagency organization that promotes U.S. national and regional security interests through enduring partnerships.

These partnerships are not only enduring; they are essential. U.S. Southern Command envisions sustaining a shared partnership for the Americas; all nations working together to address problems of mutual concern. Under this vision, each exercise, program, and operation we conduct in the region augments the training of our joint forces, improves our ability to work with partner armed forces, and enhances the capabilities of our partners to confront regional security challenges. In addition, our programs directly integrate with and support other U.S. Government agencies' efforts to enhance citizen safety, democratic governance, and economic prosperity. We also continuously coordinate our programs with other U.S. Government departments and agencies. Our response to the January 12, 2010 earthquake in Haiti demonstrated the effectiveness of these efforts.

Before continuing, I would like to thank Congress for funding the construction of U.S. Southern Command's new headquarters in Miami. This state-of-the-art building ensures that we are fully prepared to accomplish our mission: we are ready to conduct joint and combined fullspectrum military operations and to support whole-of-government efforts to enhance regional security and cooperation. The new headquarters enhances internal and external collaboration, improves our ability to conduct operations, and raises quality of life for assigned personnel. Our integrated, interagency headquarters significantly enhances our collaborative approach in working to achieve our strategic objectives in the region.

REGIONAL CONTEXT

Positive Trends

Latin America and the Caribbean are comprised of a multitude of cultures, languages, heritages, and histories. The United States is connected to this region by more than physical proximity; increasing travel and trade ensure our countries re-

main connected culturally, socially, and economically.[i] We are also connected by many shared values and a commitment to democratic ideals. The majority of countries throughout the region seek to consolidate the democratic, security, and economic progress achieved in recent years. U.S. Southern Command endeavors to support our partner nations in these efforts through enduring engagement and continued collaboration.

The region's recent history is characterized by sustained economic growth that benefits Latin America, the Caribbean, and the United States. Over the past 12 years, U.S. trade with countries in the region grew at a faster rate than with China or the European Union. Although trade with Latin American and Caribbean economies still makes up a small percentage of overall U.S. trading activity (8.3 percent of all U.S. trading activity in 2009), this share grew by 15.3 percent over the past 14 years.[ii] Economic indicators throughout the region have been generally positive: growth rates averaged 3.4 percent per year over the past decade and regional GDP grew 6 percent in 2010,[iii] due in large part to strong economies in South America.

This significant economic growth has allowed some of our regional partners to invest in social and educational programs designed to alleviate poverty and reduce inequality. Both poverty and extreme poverty in the region fell by 3 percent from 2009 to 2010.[iv] Income inequality in Latin America and the Caribbean is exhibiting some signs of lowering, thanks in part to targeted social investments.[v] In 2003, the Brazilian Government launched "Bolsa Familia," which provides income support to poor families. In return, families commit to keeping their children in school and taking them for regular health checks.[vi] As of 2008, Bolsa Familia has reached 46 million people [vii] and has contributed to the improvement of income distribution in Brazil, resulting in the lowest levels of income inequality in the country's recent history.[1] [viii] Chile's strong economic performance in the past decade has permitted the government to invest heavily in hospitals, housing, education and pension reform.[ix] Between 1990 and 2000, poverty rates were reduced from 40 percent of the population to 20 percent; the 2009 poverty figure is currently 11.5 percent.[x,xi]

Sustained economic growth and positive social developments have been nurtured by a strong regional commitment to democracy. In the past decade, there have been numerous free and fair national elections resulting in peaceful transfers of power. Across the region, more than 60 percent of people surveyed prefer democratic governance to any other political system.[2, xii] Regional militaries have also made great

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[i] U.S. Department of Commerce, Office of Travel and Tourism Industries. 2009 Market Profile: Central America. 2009 Market Profile: South America. 2009 Market Profile: Caribbean, and 2009 U.S. Resident Travel Abroad. From 2002–2009, travel from the AOR to the United States increased by 32 percent and from the United States to the AOR by 41 percent.

[ii] Hornbeck, J.F. (2010). U.S. Latin America Trade: Recent Trends and Policy Issues. Congressional Research Services: June 25, 2010.

[iii] The Economic Commission for Latin America (2010). Preliminary Overview of the Economies of Latin America and the Caribbean 2010. Available online at: http://www.eclac.org/cgibin/getProd.asp?xml=/prensa/noticias/comunicados/9/41979/P41979.xml&xsl=/prensa/tpl-i/p6f.xsl&base=/tpl-i/top-bottom.xsl

[iv] The Economic Commission for Latin America (2010). Social Panorama of Latin America 2010. Santiago, Chile: November 2010.

[v] United Nations Development Programme. 2010 Human Development Report. Available online at: http://hdr.undp.org/en/media/HDR—2010—EN—Complete—reprint.pdf

[vi] International Labour Office (2009). Bolsa Familia in Brazil: Context, Concept and Impact. Geneva: 2009.

[vii] MDS (Ministerio do Desenvolvimento Social e Combate à Fome) (2009). Programas de Transferencia Condicionada de Renda: o caso do Bolsa Familia. Presentation made in the Employment and Social Policies Committee of the ILO Governing Body, March (Geneva). Cited in ILO Report (referenced above).

[1] Brazil's 2010 Gini coefficient=0.55

[viii] Instituto de Pesquisa Económica Aplicada. 2008. PNAD 2007: Primeiras Análises:Pobreza e mudança social. Comunicado da Presidencia. N0 9, Sept. (Brasilia, IPEA).

[ix] World Bank (2004). Shanghai Poverty Conference: Case Study Summary (Chile). Available online at: http://info.worldbank.org/etools/docs/reducingpoverty/case/24/summary/Chile%20Summary.pdf

[x] The Economic Commission for Latin America (2010). Social Panorama of Latin America 2010. Santiago, Chile: November 2010.

[xi] Ibid.

[2] According to the Latinobarometro 2010: regionally, 15 percent of respondents support an authoritarian system; 23 percent did not know or were indifferent. In comparison, the U.S. Agency for International Development (USAID)-sponsored AmericasBarometer survey by the Latin American Public Opinion Project indicates 70 percent support for democracy in countries surveyed in 2010 (www.lapopsurveys.org).

[xii] Latinobarómetro Corporation (2010). Latinobarometro Annual Report: 2010. Santiago,Chile. Available online at: www.latinobarometro.org

strides improving professionalism, subordinating to civilian rule and respecting human rights.

Challenges to Regional Security

Despite these positive economic, social, and political gains, several threats to security and stability in the region remain. Natural disasters wreak havoc and create humanitarian crises; social exclusion and poverty remain pervasive; and threats to democratic consolidation persist. The Americas, our common home, is vulnerable to many forms of natural disasters: hurricanes, earthquakes, volcanoes, and floods are regular occurrences. Although the region was largely spared from the ravages of hurricanes this past year, it was devastated by two major earthquakes and experienced significant flooding. Inevitably, the region will be impacted by additional natural disasters in the coming year.

While improving in some countries, poverty remains an ongoing challenge, particularly in Central America.[xiii] In many countries, poverty is difficult to reduce because of restraints on social mobility due to race and social class.[xiv] This social stagnation creates openings for criminal organizations to recruit new members who see crime as an opportunity for socioeconomic advancement. Positive change in social mobility is slowly occurring, but not at a rate that will significantly reduce the influence of criminal organizations in the short term.

While many countries in Latin America and the Caribbean continue consolidating their democracies, some governments have hollowed out democratic institutions and eroded constitutional checks and balances—the key ingredients essential for a functioning democratic system. These undemocratic measures go against the shared values of the Inter-American Democratic Charter. Though the Department of State and the U.S. Agency for International Development (USAID) are the lead agencies in supporting democracy and good governance initiatives to address such measures, U.S. Southern Command engages with the Armed Forces in the region to promote professionalization, respect for human rights, and subordination to democratically-elected governments.

While natural disasters, social inequalities, and undemocratic tendencies undermine regional stability, threats to citizen safety and border security represent broad concerns across the region. Weak institutions, inadequate support for the rule of law and lack of independent judiciaries limits accountability for corrupt government officials, business leaders, and criminals. In too many countries, less than 5 percent of all violent crimes are prosecuted.[xv] Widespread impunity undermines state institutions and provides safe haven for Transnational Criminal Organizations (TCOs) to operate in an environment of lawlessness. An estimated $100 billion per year in illicit goods—drugs, weapons, counterfeit products—and an estimated 100,000 humans are trafficked through porous borders throughout the region.[xvi, xvii]

Violence is an inherent aspect of illicit activity; it is no coincidence that the countries in Latin America with the highest rates of violence are besieged by TCOs and criminal gangs. TCOs and supporting criminal elements exploit weak institutions and corrupt officials to conduct their illicit operations with impunity. As a result, insecurity is a fact of life for many of the citizens in the region. In recent years, the Central American corridor has seen a dramatic increase in illicit trafficking and brutal violence and is now the most violent region in the world outside of active war zones.[xviii] This is due, in part, to success in stemming illicit trafficking elsewhere in the region, which has pushed their activities into Central America. According to the United Nations Office on Drugs and Crime, homicides in Latin America and the Caribbean increased from 19.9 per 100,000 people in 2003 to 32.6 per 100,000 peo-

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[xiii] Council on Foreign Relations (2008). Latin America and the United States: New Directions for a New Reality. Independent Task Force Report No. 60.

[xiv] Azevedo, V. (2009). Social mobility in Latin America: a review of existing evidence. Interamerican Development Bank: Washington, DC.

[xv] Reaching the untouchables. The Economist. March 11, 2010. http://www.economist.com/node/15663302?story—id=15663302

[xvi] The Globalization of Crime: A Transnational Crime Threat Assessment. U. N. Office of Drug Control. 2010.

[xvii] Congressional Research Service, Trafficking in Persons in Latin America and the Caribbean, October 16, 2009

[xviii] Casas-Zamora, Kevin (2010). Paying Attention to Central Americas Drug Trafficking Crisis. The Brookings Institute: October 27, 2010. Available online: http://www.brookings.edu/opinions/2010/1027—central—america—drugs—casaszamora.aspx

ple in 2008 (the U.S. murder rate is 5.0 per 100,000 people).[xix,3] Much of the violence related to TCOs is connected to the protection of trafficking routes and internal power struggles, but the criminality associated with the illegal drug trade and TCO activities increases the level of related crimes, including kidnapping, murder, money laundering, and firearms trafficking, the majority of which go unpunished.

Confronting the threat posed by TCOs to citizen safety requires coordinated diplomatic, law enforcement, and military cooperation among countries in the region. In countering this threat, Department of Defense efforts are aligned and coordinated with our interagency partners. We focus our efforts on the consequences of security challenges in the region, and support our interagency and international partners in confronting the causes of these challenges. U.S. Southern Command strongly supports increased congressional funding to our interagency partners—including USAID and the Departments of State, Justice, and Homeland Security—to strengthen regional civilian law enforcement agencies and judiciaries. We will continue to improve our collaboration with international and interagency colleagues to combine our efforts to disrupt and reduce transnational threats to the United States and regional security.

Extra-Regional Actors in the Region

As the Nations of Latin America and the Caribbean develop, they look beyond the hemisphere for trading partners, diplomatic support, and sources of aid, leading to increased activity in the hemisphere by various extra-regional state actors. U.S. Southern Command views this activity as both an opportunity and a challenge. We have a long history of regional security cooperation with the armed forces of countries such as the United Kingdom, the Netherlands, France, and Spain, and we also work with Canada on many issues related to hemispheric security. Additionally, we welcome activities by other countries when they are conducive to regional security and stability. However, as evident in the following observations, objectives for such activities are difficult to discern.

For example, China has engaged with Latin American militaries through high-level personnel exchanges[4] and arms sales. In summer 2010, China sold 18 K–8 light attack and training aircraft worth millions to Venezuela. Earlier significant arms transfer agreements include air surveillance radars to Venezuela and Ecuador, as well as K–8 aircraft to Bolivia. Additionally, China has become one of the largest providers of investment and trade in the region. With a large appetite for the natural resources needed to supply its manufacturing sector, China's imports of raw materials from the region reached $41 billion in 2009.[xx] The region is now also the second-largest destination for Chinese investments, which extend to local manufacturing as well as resource extraction.[xxi,xxii]

Although not a significant investor in the region, Russia has also found markets for arms sales in Latin America and the Caribbean. From 2002–2009, arms transfer agreements between Russia and Latin America increased several fold, peaking at $5 billion in sales in 2009.[xxiii] However, overall military spending remains low in Central and South America, and we expect some specific incidences of Russian arms and equipment sales to enhance the region's ability to counter TCOs[5]. In other cases, though, these sales have the potential to undermine regional stability. My principal concern with Russian arms in the region is the large number of manportable air defence systems and automatic weapons sold to Venezuela, and the potential they could reach the hands of organizations like the Revolutionary Armed Forces of Colombia (FARC). Beyond arms sales, Russia is also participating in infra-

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[xix,] United Nations Office on Drugs and Crime (2007). Crime and Development in Central America: Caught in the Crossfire. Geneva: May 2007; International Crisis Group (2008). Latin America Drugs I: Losing the Fight. Latin America Report No. 25, March 14, 2008.

[3] Comparing homicide rates puts the magnitude and deterioration of citizen insecurity in Latin America into perspective: in 2010, the homicide rate in Afghanistan was 8.6 per 100,000; 13.7 in Iraq; 71.0 in El Salvador; and 77.0 in Honduras. Sources (multiple): United Nations Mission to Afghanistan; Iraq Body Count; and National Civilian Police figures.

[4] At least 12 in 2010.

[xx] Arnson, C. and Davidow, J., eds. (2011). China, Latin America, and the United States: The New Triangle. Woodrow Wilson International Center for Scholars. Washington, DC.

[xxi] Pomfret, J. (2010). China invests heavily in Brazil, elsewhere in pursuit of political heft. Washington Post: July 26, 2010, section A01.

[xxii] Associated Foreign Press. China investment in Peru tops in Latin America: Official. April 22, 2010.

[5] For example, Peru's purchase of eight Russian-made helicopters in July 2010 to conduct counter illicit trafficking operations.

[xxiii] Bancroft-Hinchey, T. (2010). Russian Arms Sales Overtake United States in Latin America. Published September 9, 2010. Available online: http://english.pravda.ru/russia/economics/09–02–2010/112127-russian—arms—sales-0/#

structure development programs. For example, in 2010 Russia agreed to assist Argentina—as well as Venezuela—with nuclear energy programs. Russia is also widening its influence in the region by expanding diplomatic activities beyond its traditional allies of Cuba, Venezuela, and Nicaragua.

Finally, Iran continues expanding regional ties to support its own diplomatic goal of reducing the impact of international sanctions connected with its nuclear program. While much of Iran's engagement in the region has been with Venezuela and Bolivia, it has nearly doubled the number of embassies in the region in the past decade[6] and hosted three regional heads of state in 2010.[7] Currently, Iranian engagement with Venezuela appears to be based on shared interests: avoiding international isolation; access to military and petroleum technologies; and the reduction of U.S. influence. Together with our interagency partners, U.S. Southern Command will continue to monitor Iranian activity in the region consistent with law and policy to ensure that U.S. laws and international sanctions are respected, and that our existing partnerships remain strong and well-functioning.

In addition to extra-regional state actors, members of violent extremist organizations (VEOs) from the Middle East remain active in Latin America and the Caribbean and constitute a potential threat. Hezbollah supporters continue to raise funds within the region to finance their worldwide activities. Several entities affiliated with Islamic extremism are increasing efforts to recruit adherents in the region, and we continue to monitor this situation closely. Additionally, we deploy military information and civil affairs teams to undergoverned spaces to help our regional partners to hinder these recruitment efforts and counter VEO propaganda.

FOCUS AREAS

As we look to the future, U.S. Southern Command will continue supporting whole-of-government efforts that enhance the United States' role as an enduring partner of choice in the region. We will continue to do our part to sustain a region of secure, stable, and prosperous partner nations that work cooperatively to address shared challenges. In this regard, we will focus in three key areas: countering TCOs and illicit trafficking; providing humanitarian aid and disaster relief; and supporting peacekeeping operations.

Counter Illicit Trafficking

TCOs and the illicit trafficking they conduct continue to be the primary threat to regional security. These groups construct flexible, resilient networks which use multiple paths to support illicit activity. In countering this international threat, working with our partners, we must attack TCOs in a broad, coordinated manner, to include demand reduction; eradication and regulation of source materials; suppression of money laundering; interdiction of the illicit shipments as they transit to the United States and other end-user countries; and ultimately the disruption and dismantling of TCOs operating in the region. However, TCOs are increasingly sophisticated and have proven resilient and adaptive to attempts to disrupt their operations. They are innovative; to minimize and avoid detection and interdiction by U.S. and regional authorities, criminal organizations have begun using self-propelled fully submersibles to conduct illicit trafficking from South America to Central America and Mexico. These submersibles, built in the jungles of western Colombia and Ecuador, provide TCOs with a multi-ton, long-range cargo capacity. They are hard to detect and difficult to intercept. U.S. Southern Command is working with our interagency partners, the military Services, and our partner nations' armed forces to counter this evolving threat.

Joint Interagency Task Force-South (JIATF-South) in Key West, FL, is the center of U.S. maritime interdiction efforts in the Caribbean Basin and eastern Pacific. Using information from law enforcement, JIATF-South detects and monitors suspect aircraft and maritime vessels, and then provides this information to international and interagency partners who have the authority to interdict illicit shipments and arrest members of TCOs. This past year, JIATF-South and our international and interagency partners were directly responsible for interdicting 142 metric tons of cocaine, 3,419 pounds of marijuana, and 309 arrests, denying TCOs $2.8 billion in revenue.

JIATF-South's collaborative, interagency approach serves as the model for our partnerships with other combatant commands and U.S. Government agencies. U.S. Southern Command works directly with U.S. Northern Command to synchronize Department of Defense operations in the Western Hemisphere, prevent TCOs from

[6] Iran had 6 embassies in the AOR in 2005 and 10 in 2010.
[7] The Presidents of Bolivia, Guyana, and Venezuela.

exploiting seams in our AORs, and coordinate the employment of our combined resources. Specifically, U.S. Southern Command and U.S. Northern Command are coordinating counter-TCO actions with Guatemala, Belize, and Mexico to enhance our combined efforts to reduce trafficking along their borders. In addition, U.S. Southern Command coordinates counter-TCO activities with our other partners throughout Central and South America and the Caribbean.

Active engagement with our partner nations is a key component to effectively counter transnational criminal activities. U.S. Southern Command supports U.S. Government security initiatives in Colombia, Central America, and the Caribbean. Our ongoing strategic partnership with Colombia—undertaken within the framework of the Colombian Strategic Development Initiative (CSDI) originally developed by the U.S. Embassy in Bogota—serves as a model for integrated collaboration. CSDI aligns the U.S. Government support to Colombia with the Colombian government's National Consolidation Plan, a whole-of-government effort to expand State presence and services in targeted areas where poverty, violence, illicit crop cultivation, and drug trafficking have historically converged. Colombia has suffered from decades of violence and instability as narco-terrorist groups, financing their activities through drug trafficking, waged an insurgency against the government. While challenges remain, the security situation today in Colombia is drastically different, thanks in large part to the sustained efforts of the Government of Colombia, supported by Plan Colombia and its corresponding U.S. Government-sponsored initiatives. Since August 2002, more than 54,000 combatants from Colombia's illegal armed groups have demobilized. Of these, 58 percent demobilized collectively as a result of an agreement between the Government of Colombia and the paramilitary United Self-Defense Forces of Colombia (AUC). The FARC's strength has declined from over 18,000 in 2002 to around 8,000 today and its territorial control has decreased significantly. The successes of Plan Colombia and Colombia's own democratic security initiatives resulted in the acceleration of economic development; security and stability have helped Colombia achieve annual growth rates averaging 4 percent.[xxiv]

U.S. Southern Command's role in supporting the execution of Plan Colombia and its corresponding programs and initiatives involved equipping and training the Colombian armed forces; the sharing of technical expertise; and the facilitation of technology transfers. The armed forces of Colombia continue to yield positive results. In 2010, with the support of the U.S. Embassy country team and U.S. Southern Command, the Colombian armed forces planned and executed a string of operational successes, including eliminating Victor Julio Suarez Rojas, also known as "Mono Jojoy" (the FARC's long-time military leader and fourth in command) and 15 other high-ranking FARC members. I ask for continued congressional support for Colombia; your support has resulted in a valuable and reliable partner directly involved in countering illicit trafficking and promoting regional stability. As noted in the 2010 National Drug Control Strategy, while Colombia's gains have been impressive, they are reversible, and we value continued congressional support to CSDI and other initiatives.[xxv]

Our focus on countering transnational criminal organizations and their illicit trafficking activities extends beyond Colombia to include Central America and the Caribbean. In support of the U.S. Government's two sub-regional initiatives to improve citizen safety—the Central American Regional Security Initiative (CARSI) and the Caribbean Basin Security Initiative (CBSI)—U.S. Southern Command will continue to support interagency efforts to interdict illicit trafficking in international waters and airspace. Through Theater Security Cooperation activities, we will continue to enhance the capacity and capability of our partner militaries to operate within their respective territories and to support bilateral and multilateral counter illicit trafficking operations.

With its porous borders, lack of surveillance capabilities, and under-governed areas, Central America has become the TCOs' preferred transit zone to the United States. TCOs support and use a spectrum of destabilizing activities to conduct their operations, to include corruption, intimidation, extortion, kidnapping, targeted violence, and terror tactics. Confronting this spectrum requires a sophisticated, orchestrated strategy that both guides efforts to meet current challenges as well as sets a framework for disrupting future TCO adaptations.

Our current plan to counter the trafficking threat in Central America is to support U.S. interagency efforts and help build self-sustaining regional military capac-

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[xxiv] Country Data: Colombia. World Bank Database. Available online at http://data.worldbank.org.

[xxv] Office of National Drug Control Policy (2010). 2010 National Drug Control Strategy. Washington, DC: page 83.

ity to increase the cost and consequences to TCOs of using the Central American transit zone. Under initiatives like Enduring Friendship, we facilitated the procurement of maritime interdiction assets and command, control, and communications (C3) capabilities for Central American and Caribbean Basin countries.[8] To strengthen international borders, we are facilitating technology transfers that support Department of Homeland Security training that is improving our partners' ability to detect and interdict illicit shipments at international crossings. We are also providing training and equipment to partner nations' ground forces to strengthen their capacity to respond to TCO-related events requiring a military response.

However, the limited capabilities of Central American states have allowed Mexican TCOs to establish convenient points of entry for illegal drugs coming from South America. Nearly all cocaine destined for the United States crosses the Guatemala-Mexico border. The expansion of Mexican TCOs into Central America has created even more violence and crime, and a significant decline in citizen safety. Focusing specifically on this vulnerable Mexico-Guatemala-Belize border area, we are engaged in planning with our U.S. Northern Command, interagency, and partner nation colleagues, and are on solid footing towards developing a regional operations capability among these three countries.

With Caribbean Basin countries, we want to reduce the ability of TCOs to expand their operations. To achieve this goal, we will support CBSI and leverage existing regional initiatives in the Caribbean Basin like the Caribbean Community and the Regional Security System in the Eastern Caribbean to build capacity to conduct aerial and maritime surveillance and interdict illicit trafficking.

Humanitarian Assistance/Disaster Relief (HA/DR)

HA/DR consists of two separate but complementary missions. Humanitarian assistance provides support for basic human needs—food, water, shelter, and sanitation—to populations temporarily or chronically underserved. Disaster relief reduces the human suffering associated with natural disasters which cause the disruption of normal transportation and commerce and destroy infrastructure. Our annual humanitarian and civic assistance exercises provide valuable training for U.S. military medical, engineering, and combat support personnel, while complementing the Department of State and USAID's goal of advancing community development and hemispheric prosperity. Disaster relief activities go beyond deploying our own forces when disaster strikes. We also seek to improve our partner nations' capacity to conduct disaster relief operations within their own borders, and when possible, outside their borders. We envision a region in which mutual assistance is the norm.

Our annual training exercises in the Caribbean Basin and Central America help improve our ability to conduct disaster relief and humanitarian assistance at both the tactical and operational levels. In 2010, we conducted 76 medical readiness training exercises (MEDRETEs), resulting in the treatment of 276,827 patients throughout the region. During our annual engineering exercises—New Horizons and Beyond The Horizons—our forces built or renovated 10 schools, 6 health centers, 6 sanitation facilities, 2 police stations, and 7 water wells in communities in Nicaragua, Panama, Guatemala, the Dominican Republic, and Haiti. These exercises also helped increase response capabilities of the participating partner nations; during the course of the training, our forces provided valuable training to first responders and disaster managers in the host countries.

Joint Task Force-Bravo (JTF–B) at Soto Cano Air Base in Honduras provides regional support for responding to natural disasters and supporting counter drug operations with our partners in Central America and the Caribbean. In 2010, JTF–B medical personnel conducted four Medical Capability Projects in El Salvador, Guatemala, Honduras, and Nicaragua, treating 6,981 patients and also supported relief efforts in Haiti and in Guatemala after the eruption of the Pacava volcano and the landfall of Tropical Storm Agatha. I thank Congress for its continued support of JTF–B, especially for the appropriation of funds to support construction of new barracks at Soto Cano.

Unquestionably, the most significant 2010 HA/DR operation for U.S. Southern Command was Operation Unified Response in Haiti. The situation after the January 12 earthquake was grim: over 230,000 people killed, 300,000 wounded, and 1 million people displaced in our hemisphere's poorest country. Critical infrastructure, includ-

[8] Enduring Friendship countries include: Dominican Republic, Bahamas (funding provided in fiscal year 2006 when they were in the U.S. Southern Command AOR), Jamaica, Panama, Honduras, Nicaragua, El Salvador, Costa Rica, and Belize. Enduring Friendship was expanded into the Eastern Caribbean under the "Secure Seas" rubric providing funding to the Regional Security System HQ, Barbados, Grenada, Antigua & Barbuda, St Kitts & Nevis, Dominica, St Vincent& the Grenadines, St Lucia, Trinidad & Tobago, Suriname, and Guyana.

ing the Port-au-Prince airport and seaport, was destroyed or unserviceable. Thirteen of fifteen government ministries were destroyed, crippling the Haitian government's ability to respond.

We established Joint Task Force-Haiti in support of USAID, the lead Federal agency for the disaster response effort. Our response was immediate: within hours the airport was reopened; within days maritime transportation was reestablished, allowing the influx of food, water, and medical supplies. U.S. soldiers, sailors, airmen, and marines provided critical rescue, medical, and relief supply distribution support for the Haitian people. During Operation Unified Response, U.S. forces delivered 2.3 million meals, 17 million pounds of bulk food, 2.6 million bottles of water, and almost 150,000 pounds of medical supplies. In addition, Department of Defense medical personnel—operating on the ground as well as onboard USNS *Comfort*—treated almost 10,000 patients, and conducted 1,025 surgeries and 343 medical evacuations. In partnership with nongovernmental organizations and the private sector, U.S. Southern Command coordinated both the delivery of additional relief supplies worth $36.2 million and the integration of 200 civilian medical specialists and translators into our relief efforts.

JTF-Haiti completed its mission on May 15, but the end of our operation did not signify the end of our support to Haiti. Instead, we transitioned to a smaller mission consisting of targeted humanitarian and civic assistance exercises. As part of New Horizons Haiti 2010, approximately 500 personnel—mainly from the Louisiana National Guard—deployed to Haiti from June to September 2010. Engineers completed 13 projects, building schools, improving wells, and constructing sanitation facilities. Medical forces conducted 10 MEDRETES and established clinics that each served 4,000 to 5,000 patients. Equally noteworthy, the exercise involved forces from another country in the region. Belize—partnering with the Louisiana National Guard under the State Partnership Program—deployed an engineer company to assist with reconstruction efforts. This example of regional collaboration represents the type of capability we actively seek to build and sustain throughout Latin America and the Caribbean. Our commitment to Haiti is ongoing. As Haiti rebuilds, U.S. Southern Command will continue to conduct annual humanitarian and civil assistance exercises and respond to lingering effects of the devastating earthquake, as well as other humanitarian challenges.

U.S. Southern Command also supported U.S. Government disaster relief efforts in Chile following a devastating 8.8 magnitude earthquake on February 27, 2010. In support of USAID, approximately 150 U.S. military personnel deployed to Chile and worked with local and international responders to deliver 300,000 pounds of relief supplies. Working with Chilean counterparts, a U.S. Air Force Expeditionary Medical Support team treated more than 300 patients. U.S. Southern Command also partnered with the private sector, which donated $1.2 million in transportation assistance to ship 40,000 meals-ready-to-eat to Chile. It is important to note that Chile possessed the internal capacity to effectively respond to the disaster, requiring limited assistance from the U.S and other nations. This epitomizes the type of capability we seek to promote with our other regional partners.

Finally, during hurricane season in the Caribbean Basin, U.S. Southern Command remains prepared to assist any partner nation in the region affected by a tropical cyclone. We design our annual maritime deployment, Continuing Promise, to conduct humanitarian assistance in the Caribbean Basin while maintaining readiness to respond to disaster relief efforts, if requested. This past year, USS *Iwo Jima*—with a Special Purpose Marine Air Ground Task Force of approximately 500 marines, 128 NGO personnel, and 44 partner nation personnel embarked—deployed to the Caribbean Basin between July and November. During eight port visits, U.S. medical personnel treated 45,517 patients and performed 329 surgeries; dental personnel treated 15,472 patients; and veterinarians treated 26,969 animals. Engineers completed 23 projects over the course of the deployment. In late October, when Hurricane Tomas was forecast to strike Haiti with Category 3 strength, U.S. Southern Command diverted USS *Iwo Jima* from a scheduled port visit in Suriname to a safe location near Hispaniola as part of U.S. Government response preparations. Following landfall of the storm, USS *Iwo Jima* moved into the area quickly and U.S. Marine helicopters conducted several damage assessment flights. Fortunately, Hurricane Tomas only struck a glancing blow to southwestern Haiti, and relief organizations already on the ground were able to respond to the minimal damage caused by the hurricane.

Peacekeeping Operations (PKO)

Our partner nations exhibit a tremendous capacity to conduct peacekeeping operations in the region and around the globe. During Operation Unified Response, U.S. Southern Command drew on the strengths of our South American regional partners

who comprised the United Nations Stabilization Mission in Haiti (MINUSTAH). Led by a Brazilian general officer, peacekeepers from Argentina, Brazil, Chile, Bolivia, and Uruguay were on the ground when the earthquake occurred and were instrumental in maintaining security and leading the initial response. MINUSTAH continues to play an invaluable role in Haiti through the on-going efforts of our hemispheric partners. U.S. Southern Command also supports peacekeeping efforts through our partnership in the Department of State's Global Peace Operations Initiative (GPOI). Joining with nine countries in the region, we develop or enhance national training capabilities and equip potential peacekeeping units for deployment of U.N. Peace Support Operations.[9] We conduct the annual PKO Americas exercise, which is designed to improve partner nation capacity to plan and conduct peacekeeping operations. In the coming year, we will continue to support GPOI and our regional partners who take the lead in peacekeeping operations.

ENDURING ENGAGEMENT

Military-to-Military

Building partner nation capacity and enhancing interoperability is at the core of everything we do in our AOR. In implementing this strategy, we facilitate exchanges, seminars, and training exercises throughout the region with our partner militaries. A cornerstone of our engagement strategy is the International Military Education and Training program, which provides professional development for foreign military officers and senior enlisted personnel from Latin America and the Caribbean. Each year, U.S. Southern Command helps send approximately 5,000 students from the AOR to attend U.S. military training programs across the Department of Defense, to include the Western Hemisphere Institute for Security Cooperation, the Center for Hemispheric Defense Studies, the Inter-American Defense College, and the Inter-American Air Forces Academy. Our goal is to encourage our partner nation militaries to promote institutional professionalism within the context of democratic governance. These programs are vital to building and sustaining relations with our partners throughout the region.

Our training and education programs also promote respect for human rights with our military partners. These programs remain important across the region, but hold particular relevance in the few countries whose militaries are being asked by their governments to assist local police forces in supporting and enhancing internal security. U.S. Southern Command's programs support our military partners in preparing to assume these roles and help them provide clear instructions to their soldiers to support and respect human rights. Our human rights programs and initiatives remain an important aspect of our engagement throughout the region.

Our engagement strategy is reinforced through our Foreign Military Interaction (FMI) exercise program. Every year U.S. Southern Command sponsors seven military exercises specifically designed to facilitate interoperability, build capabilities, and provide venues to share best practices among the military and security forces in the region. Our largest multinational exercise, Panamax 2010, brought together 18 nations from the Western Hemisphere to train for the defense of the Panama Canal.[10] Other key FMI exercises in the region include Tradewinds, Fuerzas Comando, and Unitas. These exercises provide a venue for participating militaries to train together and maintain security and stability within the region.

Interagency

Very few threats in the region require a conventional military response; as a result, the predominant security challenges we face are best addressed through the coordinated efforts of many U.S. Government agencies. U.S. Southern Command headquarters is organized to support this coordination and collaboration; 27 representatives from 12 different agencies are embedded throughout our structure. This integration is both efficient and effective, allowing us to combine resources, perspectives, and expertise to collectively address issues in the region. Our interagency partners contribute to the development of strategic plans and participate in our joint exercises and operations, a cooperation that is critical to our success in the region. We continue to seek innovative ways to orchestrate our efforts across the U.S. Government to maximize our results.

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[9] GPOI countries: Belize, Nicaragua, Honduras, Guatemala, El Salvador, Peru, Paraguay, Uruguay, and Dominican Republic. Chile, Colombia, and Ecuador are pending diplomatic agreements.

[10] Panamax participants: Argentina, Belize, Brazil, Canada, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay.

REQUIREMENTS

In order to successfully achieve our strategic objectives in the region, U.S. Southern Command has identified requirements in two key areas: Intelligence, Surveillance, and Reconnaissance and Foreign Military Sales.

Intelligence, Surveillance, and Reconnaissance (ISR) are critical enablers of U.S. Southern Command's operations. Effective countering of illicit trafficking operations is contingent upon our ability to detect and monitor illegal activities. As demonstrated during Operation Unified Response, ISR is also valuable for supporting HA/DR operations. ISR components—such as improved imagery intelligence, wide area coverage, sensor integration, signals intelligence, moving target indicators, layered ISR architecture and management tools, and biometrics—will improve our ability to synthesize a common operating picture to better support our operations in the region.

An additional source of valuable regional insight is information available and disseminated on the Internet. Social media and social networks provide opportunities for increased regional awareness and improved collaboration with our partners. U.S. Southern Command is improving our ability to analyze social media sources such as Twitter and blogs so we can identify regional trends early and accurately. When appropriate, we are also seeking to improve and expand the use of the All Partners Access Network, an online community that promotes collaboration among governmental and nongovernmental organizations during exercises and operations.

We continue to work with the defense industry and the Defense Advanced Research Projects Agency to identify promising technologies that match our requirements. Specific needs include: flexible, persistent manned and unmanned aerial vehicles; light detection and ranging technologies for foliage penetration; fast and flexible unmanned surface craft to support maritime domain awareness; acoustic and electronic sensor technologies to detect semi- and fully-submersible craft; commercial satellite radars with the ability to detect high-speed watercraft; next generation Over-the-Horizon radars; non-electro-optical imagery which enables change detection; and the associated Tasking, Collection, Processing, and Dissemination architecture. Individually and collectively, all of these technologies enable our operations and represent opportunities to develop regional capabilities.

Foreign Military Sales (FMS) and Foreign Military Financing (FMF) are key components in the security assistance the U.S. Government provides our partner nations. The goal of these programs is to increase partner nation capability and capacity to help us address threats to security and stability. Ideally, FMS would be an efficient process to rapidly support and enhance partner nation capabilities and deliver products that are tailored and appropriate for a nation's requirement. Unfortunately, the current program is inflexible and does not allow for efficient coordination within the interagency community. An improved FMS program would increase interoperability, strengthen military and economic ties, and maximize the efficient use of resources. The Defense Security Cooperation Agency has begun reforms that represent a promising start to addressing the inadequacies of the current FMS system. We also support efforts to pool State and Defense resources for the purpose of funding more robust and comprehensive security sector assistance programs to respond to emergent challenges and opportunities. These and other improvements are necessary to effectively develop a comprehensive, integrated security assistance program.

CONCLUSION

U.S. Southern Command is committed to being a trusted, reliable partner of choice in the region. Our success will depend on our ability to engage effectively and transparently with regional militaries, partner nation governments, and our interagency partners. We actively work with the countries in our AOR to build enduring, mutually beneficial partnerships that address our shared security concerns: violence and instability caused by TCOs and illicit trafficking, and the repercussions of natural disasters. Each training exercise and operation in the region is designed to increase partner nation capabilities to help us confront these challenges; we envision a region that is capable and willing to share the responsibility of hemispheric security and stability. Although we have experienced successes, we remain vigilant for evolving threats; watchful for new opportunities; and willing to engage with our partners to enhance our international, interagency, and public-private relationships.

None of the progress we made this year would be possible without the dedication and hard work of our military and civilian personnel, the support of their families, and the cooperation by the men and women from our partner agencies who serve alongside us. I thank Congress again for your continued support to all the dedicated

professionals at U.S. Southern Command as we serve together to accomplish our mission.

Chairman LEVIN. Thank you very much, General.

Let's try a 7-minute first round.

Admiral, let me start with you. According to a recent press article, leaders of the National Guard and the Army Reserve, including General McKinley, who's chief of the National Guard Bureau, told a House committee last week that they believe that current law should be changed to allow the Reserves to be activated to respond to a natural disaster.

Can you tell us whether you agree with their view that it would be beneficial to modify the law to allow the Reserves to be called up to help States respond to natural disasters? Are you working with the Council of Governors to address the concerns that they have expressed about that proposal?

Admiral WINNEFELD. Thank you, Senator. Yes, I do agree that it would be helpful for the law to be changed so that Reserves could be involuntarily activated in the wake of a disaster. I appreciate the comments that were made by General McKinley and his colleagues last week. I would point out that we are working closely with the Council of Governors. We want to make sure that they are comfortable with this. I believe that this initiative should come from the governors and I believe that eventually it will. I think we've formed such a very good partnership in the wake of the establishment of the Council of Governors that I think we're on a very good trajectory there.

So again, I think that we would never want to have to come to this committee and explain why we were not able to bring all elements of national power to bear to help American citizens that are in danger, but I think taking a deliberate approach so that the governors are comfortable is the right way to go.

Chairman LEVIN. I would hope you would pursue that course, because it just doesn't seem sensible to me not to have that capability. We tried it once before here and the governors reacted negatively, I guess because they weren't involved in the takeoff. But it is important that we work that out so that, whether the initiative comes from the governors or whether—wherever it comes from, that the governors are comfortable with it and understand that it can make a real difference in response to a disaster.

Now, I think that there's an initiative, talking about initiatives, which you've undertaken for dual-status commanders for Federal-State military cooperation in responding to domestic disasters. Can you describe how that concept would work in practice and where is it? Has this been implemented in any of the States yet?

Admiral WINNEFELD. Yes, sir. This is another outgrowth of the efforts of the Council of Governors. As you are aware, there has been some historical friction between the State governments and the Federal Government regarding command and control of military forces inside a State in the wake of a disaster. Understandably, the State governors would like to have control because they are sovereign States; and also understandably, the Federal Government believes it has a vested interest in Federal forces being used legally, ethically, safely, and cost-effectively.

What we've done is, historically for deliberately planned events, such as support for political conventions or inaugurations or Superbowls or what have you, is a deliberate 6-month planning process for a dual-status commander, in which a National Guardsman would be dual qualified to command Federal troops in a chain of command leading to the President and State troops in a chain of command leading to the supported State governor.

We asked the question last year why this would not work in the wake of a disaster, as long as we properly trained the National Guardsman who would be potentially in command and provided the proper support for that National Guardsman's staff, to include a Title 10 deputy commander and some supporting staff elements that can bring some Federal expertise to bear.

We put this in motion under some very good cooperation between the National Guard Bureau, NORTHCOM, the Office of the Secretary of Defense (OSD), and a number of other key players. We prototyped it in the States of Florida, Texas, and California over the course of late summer. It worked very well. In particular, we have a very intense training program for these particular National Guardsmen who would be chosen to do this kind of response. Then we took it to the Council of Governors and it's been approved by the Council.

Since then, we have trained 31 National Guardsmen from 31 different States to be State Joint Task Force (JTF) commanders who could be dual status qualified, and we will have the remainder of the 54, because of the States and the territories and Washington, DC, trained by the end of the summer. The only thing we're really waiting for is the fact that there has to be a memorandum of agreement between the affected State and the Federal Government. We're trying to get those memoranda done in advance of a disaster so that we can turn on a dime when the disaster occurs, the President and the governor can agree that a dual-status commander is appropriate, and we believe it normally will be appropriate, and then off we go.

It's a tremendous initiative. I'm really grateful to my State partners and my National Guard partners for making this work, and it's really transformed our relationship and the way we do business.

Chairman LEVIN. We thank you for that. As I understand it, there's a deputy commander who's a Title 10 commander underneath that dual-status commander; is that correct?

Admiral WINNEFELD. Yes, sir, that is correct.

Chairman LEVIN. Do you need any legislative authority, legal authority, or do you have all you need to make this happen?

Admiral WINNEFELD. We have the legal authority that we need to make all this happen, sir. But I think tied to this is your previous question of activating the Reserves involuntarily in the wake of a disaster. We're exploring carefully right now with the council how we might make a legislative proposal that would codify the contingency dual-status commander in legislation, and I think that would give a lot more confidence to the governors in their willingness to accept having the Reserves involuntarily activated.

So we're exploring that right now. It's in its early stages and I'm sure we'll be able to report back to you.

Chairman LEVIN. I would think that the agreement should be signed before the problem. You said you're hoping that it would be signed before the problem. The time to get it signed is not after the disaster. So would you keep this committee informed on progress that you're making in that regard? Would you also send us a copy of what I assume would be a form agreement that would apply to all 54 units? Would that be separate, a different kind of contract with each, or would it be a form?

Admiral WINNEFELD. We have sent to the National Governors Association a straw man, if you will, of what a memorandum would look like. Because the individual States are sovereign States, they will want to conclude a separate agreement with the Federal Government. But we believe and certainly hope that they will be relatively similar, with only minor modifications based on the particular laws of the State.

But I would be happy to supply you with that draft memorandum.

Chairman LEVIN. Would you do that?

Admiral WINNEFELD. Yes, sir.

Chairman LEVIN. Thank you.

[The information referred to follows:]

Enclosed is a draft Memorandum of Agreement (MOA) jointly developed by the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs, the Joint Staff, U.S. Northern Command, U.S. Pacific Command, the National Guard Bureau, and the Office of the DOD General Counsel. This MOA can significantly expedite establishment of a Dual-Status Commander, consistent with the direction of the Joint Action Plan for Developing Unity of Effort.

MEMORANDUM OF AGREEMENT
BETWEEN
THE [STATE/COMMONWEALTH/ETC.]
AND
THE DEPARTMENT OF DEFENSE
FOR THE USE AND ESTABLISHMENT OF A DUAL-STATUS COMMANDER
PURSUANT TO TITLE 32, U.S. CODE

I. **PURPOSE.** This Memorandum of Agreement (MOA) provides the terms, responsibilities, and procedures governing the use of a Dual-Status Commander, when established pursuant to 32 U.S.C. §325 or 32 U.S.C. §315. This MOA also outlines the process for establishment of a Dual-Status Commander, when the Governor of [State] and the President/Secretary of Defense or their designees mutually agree that such establishment is necessary and proper. Finally, this MOA provides the memorandums for execution by the Governor of [State] and President/Secretary of Defense, or their designees, necessary to the establishment of a Dual-Status Commander to perform specified functions in defined jurisdictions for a designated duration.

II. **APPLICABILITY.** This MOA applies in those circumstances when an Army National Guard or Air National Guard officer is established as a Dual-Status Commander pursuant to 32 U.S.C. §325 or when a commissioned officer of the Regular Army or Regular Air Force is established as a Dual-Status Commander pursuant to 32 U.S.C. §315.

III. **DUAL-STATUS COMMANDER TERMS, RESPONSIBILITIES, AND PROCEDURES**

A. Mutually Exclusive Chains of Command. The Dual-Status Commander will receive orders from a Federal chain of command and a State chain of command. As such, the Dual-Status Commander is an intermediate link in two distinct, separate chains of command flowing from different sovereigns. Although the Dual-Status Commander may receive orders from two chains of command, those chains of command must recognize and respect the Dual-Status Commander's duty to exercise all authority in a completely mutually exclusive manner, *i.e.*, either in a Federal or State capacity, relaying orders from the Federal chain of command to Federal military forces and from the State chain of command to State military forces, but never relaying Federal orders to State military forces or State orders to Federal military forces. This MOA contains special procedures to maintain the required separation of State and Federal chains of command.

1. State Command and Control

a) The Governor of [State/Territory], through [his/her] Adjutant General, will provide command and control over [State] National Guard units and personnel operating in a State status (i.e., State Active Duty status or in duty status pursuant to Title 32, U.S. Code). The Dual-Status

Commander, in [his/her] status as a member of the State chain of command, is subject to the orders of the Governor, through the Adjutant General of [State].

b) The Dual-Status Commander, acting pursuant to State authority, may issue orders to assigned National Guard units and personnel serving in a State status (i.e., State Active Duty status or in duty status pursuant to Title 32, U.S. Code) in [State].

c) Command and control of National Guard units and personnel provided to [State] from other states to serve in a State status (i.e., State Active Duty status or in duty status pursuant to Title 32, U.S. Code) will be determined by prior coordination between those states and [State].

d) Subject to the authority of the Governor, through the Adjutant General, the Dual-Status Commander will ensure that [his/her] orders issued to [State] National Guard units and personnel, as well as those provided by other states, serving in a State status (i.e., State Active Duty status or in duty status pursuant to Title 32, U.S. Code) are consistent with the law of [State].

e) All military justice issues concerning [State] National Guard personnel will be determined in accordance with the [State] Code. Military justice issues concerning supporting National Guard personnel from a State other than [State] will be determined in accordance with that supporting state's code.

2. Federal Command and Control

a) The President, through the Secretary of Defense and the supported Combatant Commander, will provide command and control over Federal military units and personnel, including National Guard units and personnel serving in Title 10, U.S. Code, status. In [his/her] status as a member of the Federal chain of command, the Dual-Status Commander is subject to the orders of the President, through the Secretary of Defense and the supported Combatant Commander.

b) The Dual-Status Commander, acting pursuant to Federal authority, may issue orders to assigned or allocated Federal military units and personnel (e.g., military units and personnel on active duty pursuant to Title 10, U.S. Code, including units and personnel of the Army National Guard of the United States, Air National Guard of the United States, the Army Reserve, the Navy Reserve, the U.S. Marine Corps Reserve, and the Air Force Reserve).

c) Subject to the authority of the President, through the Secretary of Defense and the supported Combatant Commander, the Dual-Status Commander will ensure that [his/her] orders issued to Federal military units and personnel are consistent with the law of the United States. In accordance with 18 U.S.C. §1385 (the Posse Comitatus Act) and Department of Defense policy, the Dual-Status Commander may not order Federal military units and personnel to perform direct civilian law enforcement-type activities unless the Commander of the supported Combatant Command determines that a recognized exception to 18 U.S.C. §1385 is applicable.

d) All military justice issues concerning Federal military personnel will be determined in accordance with the Uniform Code of Military Justice as implemented by applicable Military Department regulatory guidance.

B. Missions

1. *State Military Mission*: Plan, coordinate, and provide requested, authorized, and approved support to lead State agencies performing activities pursuant to the execution memorandum issued by the Governor of [State/Territory]. This execution memorandum will be drafted at the time of Dual-Status Commander appointment.

2. *Federal Military Mission*: Plan, coordinate, and provide requested, authorized, and approved support to lead Federal agencies performing activities pursuant to the execution memorandum issued by the President/Secretary of Defense. This execution memorandum will be drafted at the time of Dual-Status Commander appointment.

C. Compliance with Federal and State Laws. The Dual-Status Commander must comply with all State and Federal laws appropriate to the assigned mission while executing [his/her] duties. If the Dual-Status Commander perceives that orders provided by the State or Federal chains of command may violate Federal or State law or create a potential conflict of interest, [he/she] must refrain from executing such orders until [he/she] has consulted with a judge advocate from both the State and Federal chains of command. If after such consultation, the Dual-Status Commander perceives that the problem has not been resolved, [he/she] will notify both chains of command and request appropriate guidance.

D. Mission Conflicts.

1. The Dual-Status Commander should attempt to ensure there are no conflicts between Federal and State mission tasking. If the Dual-Status Commander believes a conflict exists, [he/she] should notify both chains of command at the

earliest possible opportunity. Both chains of command and the Dual-Status Commander must be involved in the resolution of such conflicts.

2. In the event that a mission tasking conflict cannot be resolved, the Dual-Status Commander should consult with a judge advocate from both the Federal chain of command and the State chain of command. While the conflict is being resolved, the Dual-Status Commander will continue to execute [his/her] Federal missions, and will continue to execute those State missions in areas not subject to the conflict.

3. If such conflicts cannot be resolved, the State and Federal chains of command may terminate the issued Dual-Status Commander execution memoranda and the Dual-Status Command status.

E. Sharing of Documentation. To avoid miscommunication, the State and Federal chains of command should authorize the Dual-Status Commander to share all documents/guidance concerning their respective missions when [he/she] determines it is necessary and proper.

F. Anti-Terrorism/Force Protection Standards. [State] National Guard units and personnel, and those provided by other states, under the command of the Dual-Status Commander will comply with anti-terrorism/force protection (AT/FP) standards and guidance provided by their Governor, through their Adjutant General. Federal military units and personnel under the command of the Dual-Status Commander will comply with the AT/FP standards and guidance provided by the supported Combatant Commander.

G. Status. During the course of executing [his/her] assigned duties, the Dual-Status Commander shall describe the status of all assigned forces in writing. The purpose of this requirement is to mitigate possible confusion in appropriate State/Federal mission taskings by the Dual-Status Commander. If it becomes necessary to make a change to the status of assigned forces, the Dual-Status Commander will ensure both the State and Federal chains of command are notified of the necessity for such changes and seek approval to make them from the Governor for National Guard forces or the Secretary of Defense for Federal military forces.

H. Delegation from Sovereigns. It is agreed and understood that the State and Federal sovereigns may delegate their command authority to intermediate officials or officers who will, on their behalf, issue orders to the Dual-Status Commander. This delegation will typically occur via written orders but may take another form in exigent circumstances.

I. Incapacity of the Dual-Status Commander. In the event the Dual-Status Commander becomes incapacitated, the Governor of [State] and the President/Secretary of Defense, or their designees, agree to take those actions necessary to establish a successor Dual-Status Commander promptly. When a qualified and certified State National Guard Deputy and/or a Federal Deputy are available, the execution memorandums should designate a

successor Dual-Status Commander. If a qualified and certified successor Dual-Status Commander is not available, the Adjutant General will designate an appropriate commander for [State] National Guard units and personnel, and those provided by other states, operating in a State status (i.e., State Active Duty status or in duty status pursuant to Title 32, U.S. Code) and the supported Combatant Commander will designate an appropriate commander for Federal military units and personnel (e.g., military units and personnel on active duty pursuant to Title 10, U.S. Code.

IV. PROCESS FOR ESTABLISHMENT OF A DUAL-STATUS COMMANDER

A. When the Governor of [State] and the President/Secretary of Defense agree that is necessary and proper to establish an Army National Guard or Air National Guard officer as the Dual-Status Commander in accordance with 32 U.S.C. §325:

1. The Governor of [State] will issue an execution memorandum (see TAB A) specifying:

   a) The name and grade of the Dual-Status Commander;
   b) That this officer is qualified and certified to perform the duties of a Dual-Status Commander;
   c) Consent for the Dual-Status Commander to serve in both State and Federal duty statuses;
   d) The operation for which the Dual-Status Commander is being established;
   e) The jurisdiction in which the Dual-Status Commander is permitted to perform [his/her] duties in a State status (i.e., State Active Duty status or in duty status pursuant to Title 32, U.S. Code); and
   f) The duration for which the Dual-Status Commander is established.

2. The President/Secretary of Defense will issue an execution memorandum (see TAB B) specifying:

   a) The name and grade of the Dual-Status Commander;
   b) Authorization for the Dual-Status Commander to serve in both State and Federal duty statuses;
   c) The operation for which the Dual-Status Commander is being established;
   d) The jurisdiction in which the Dual-Status Commander is permitted to perform [his/her] duties in a Federal status (i.e., Title 10, U.S. Code); and
   e) The duration for which the Dual-Status Commander is established.

B. When the Governor of [State] and the President/Secretary of Defense agree that is necessary and proper to establish a commissioned officer in the Regular Army or Regular Air Force as the Dual-Status Commander in accordance with 32 U.S.C. §315:

1. The Governor of [State] will issue an execution memorandum (see TAB C) specifying:

    a) The name and grade of the Dual-Status Commander;
    b) Acceptance of the detail of the subject officer to the Army National Guard of [State] or the Air National Guard of [State], as the case may be;
    c) Agreement to tender to the detailed officer a commission in the Army National Guard of [State] or the Air National Guard of [State], as the case may be;
    d) Understanding that this commission is terminable in the President's or Governor's discretion;
    e) The operation for which the Dual-Status Commander is being established;
    f) The jurisdiction in which the Dual-Status Commander is permitted to perform [his/her] duties in a State status (i.e., State Active Duty status or in duty status pursuant to Title 32, U.S. Code); and
    g) The duration for which the Dual-Status Commander is established.

2. The President/Secretary of Defense will issue an execution memorandum (see TAB D) specifying:

    a) The name and grade of the Dual-Status Commander;
    b) That this officer is qualified and certified to perform the duties of a Dual-Status Commander;
    c) That the subject officer is detailed to the Army National Guard of [State] or the Air National Guard of [State], as the case may be;
    d) Permission for the detailed officer to accept a commission in the Army National Guard of [State] or the Air National Guard of [State], as the case may be, without prejudicing [his/her] rank and without vacating [his/her] regular appointment;
    e) The operation for which the Dual-Status Commander is being established;
    f) The jurisdiction in which the Dual-Status Commander is permitted to perform [his/her] duties in a Federal status (i.e., Title 10, U.S. Code); and
    g) The duration for which the Dual-Status Commander is established.

V. **EFFECTIVE DATE.** This MOA will become effective upon signature by the Governor of [State] and the President/Secretary of Defense and remain in effect unless terminated in accordance with paragraph VII.

VI. **MODIFICATIONS.** This MOA may be amended or revised by the mutual agreement of the Governor of [State] and the President/Secretary of Defense. Modifications and revisions made by the mutual oral agreement of the Governor of [State] and the President/Secretary of

Defense under exigent circumstances will be memorialized in writing as soon as circumstances permit.

VII. **TERMINATION.** This MOA may be terminated in writing by the Governor of [State] or the President/Secretary of Defense. A written termination will be provided to the other party as soon as possible but not later than 30 days prior to the intended date of termination. Similarly, the Governor of [State] or the President/Secretary of Defense may terminate at any time the execution memoranda for Dual-Status Commander. Termination of the execution memoranda results in the release from Title 10 U.S. Code active duty for a Dual-Status Commander occupying dual status in accordance with 32 U.S.C. §325, and the release from State National Guard duty of a Dual-Status Commander occupying dual status in accordance with 32 U.S.C. §315.

_____ _____
Robert Gates Date
Secretary of Defense

_____ _____
Date
Governor, State of [State]

TAB A

The Honorable [Name]
Secretary
U.S. Department of Defense
The Pentagon
Washington, D.C. 20318

Pursuant to the Memorandum of Agreement Between [State/Commonwealth/Territory] and the Department of Defense for the Use and Establishment of a Dual-Status Commander Pursuant to Title 32, U.S. Code (hereinafter "the Memorandum of Agreement"), signed on [Date], and Section 325 of Title 32, U.S. Code, I grant consent for [Grade, Name, Military Service] to be activated and to serve in both State and Federal duty statuses as Dual-Status Commander for the purpose of [Operation]. In his/her State National Guard status, the jurisdiction in which [Grade, Name] may perform his/her duties as Dual- Status Commander is [Jurisdiction]. [Grade, Name]'s activation is not expected to exceed [Number of Days], beginning on or about [Date] and ending on or about [Date].

[Grade, Name, Military Service] is qualified and certified to perform the duties of a Dual-Status Commander.

This consent is provided contingent on [Grade, Name] performing his/her duties as Dual-Status Commander consistent with the [Date of Signature] Memorandum of Agreement. This consent is also provided with the understanding that it may be withdrawn consistent with the terms set forth in the [Date of Signature] Memorandum of Agreement.

_____
Governor

TAB B

SECRETARY OF DEFENSE
1000 DEFENSE PENTAGON
WASHINGTON, DC 20301-1000

Governor
Office of Governor
Address

Dear Governor:

Pursuant to the Memorandum of Agreement Between [State/Commonwealth/Territory] and the Department of Defense for the Use and Establishment of a Dual-Status Commander Pursuant to Title 32, U.S. Code (hereinafter "the Memorandum of Agreement"), signed on [Date], and Section 325 of Title 32, U.S. Code, [Name, Grade, Military Service] is authorized to be activated and to serve in both State and Federal duty statuses as Dual-Status Commander for the purpose of [Operation]. In his/her Federal (i.e., Title 10, U.S Code) status, the joint operational area in which [Grade, Name] may perform his/her duties as Dual-Status Commander is [Joint Operational Area]. [Grade, Name]'s activation is not expected to exceed [Number of Days], beginning on or about [Date] and ending on or about [Date].

This authorization is provided with the understanding that [Grade, Name] is qualified and certified to perform the duties of a Dual-Status Commander and contingent on his/her performing these duties consistent with the [Date of Signature] Memorandum of Agreement. This authorization is also provided with the understanding that it may be withdrawn consistent with the terms set forth in the [Date of Signature] Memorandum of Agreement.

_____
Secretary of Defense

TAB C

The Honorable [Name]
Secretary
U.S. Department of Defense
The Pentagon
Washington, D.C. 20318

Pursuant to the Memorandum of Agreement Between [State/Commonwealth/Territory] and the Department of Defense for the Use and Establishment of a Dual-Status Commander Pursuant to Title 32, U.S. Code (hereinafter "the Memorandum of Agreement"), signed on [Date], and Section 315 of Title 32, U.S. Code, I accept the detail of [Grade, Name, Military Service] to the Army National Guard/Air National Guard of [State] and will tender a commission to him/her to serve in both State and Federal duty statuses as Dual-Status Commander for the purpose of [Operation]. In his/her State National Guard status, the jurisdiction in which [Grade, Name] may perform his/her duties as Dual-Status Commander is [Jurisdiction]. [Grade, Name]'s detail and commission is not expected to exceed [Number of Days], beginning on or about [Date] and ending on or about [Date].

This detail is accepted and this commission is tendered with the understanding that [Grade, Name] is qualified and certified to perform the duties of a Dual-Status Commander and contingent on his/her performing these duties consistent with the [Date of Signature] Memorandum of Agreement. I understand that you may revoke his/her detail and withdraw your authorization for him/her to serve as is/her status as Dual-Status Commander consistent with the terms set forth in the [Date of Signature] Memorandum of Agreement.

_____
Governor

TAB D

SECRETARY OF DEFENSE
1000 DEFENSE PENTAGON
WASHINGTON, DC 20301-1000

Governor
Office of Governor
Address

Dear Governor:

Pursuant to the Memorandum of Agreement Between [State/Commonwealth/Territory] and the Department of Defense for the Use and Establishment of a Dual-Status Commander Pursuant to Title 32, U.S. Code (hereinafter "the Memorandum of Agreement"), signed on [Date], and Section 315 of Title 32, U.S. Code, [Name, Grade, Military Service], is detailed to the Army National Guard/Air National Guard of [State] and is permitted to accept a commission in the Army National Guard/Air National Guard of [State] without prejudicing his/her duties in a Federal status (i.e., Title 10 U.S. Code) to serve in both State and Federal duty statuses as Dual-Status Commander for the purpose of [Operation]. [Grade, Name]'s detail and commission in the Army National Guard/Air National Guard of [State] is not expected to exceed [Number of Days], beginning on or about [Date] and ending on or about [Date].

[Name, Grade, Military Service] is qualified and certified to perform the duties of a Dual Status Commander.

I understand that the commission of [Grade, Name] in the Army National Guard/Air National Guard of [State] is tendered contingent on his/her performing the duties of a Dual-Status Commander consistent with the [Date of Signature] Memorandum of Agreement. I also understand that you may revoke his/her commission and withdraw your consent for him/her to serve as is/her status as Dual-Status Commander consistent with the terms set forth in the [Date of Signature] Memorandum of Agreement.

_____
Secretary of Defense

Chairman LEVIN. My time is up. Senator McCain.

Senator MCCAIN. Admiral Winnefeld, both of us mentioned in our opening remarks that 35,000 Mexican citizens have been killed in the drug cartel situation in Mexico. You've been in your job for about a year. Would you agree that the drug cartels pose an existential threat to the Government of Mexico?

Admiral WINNEFELD. Sir, I don't believe they pose an existential threat to the government. They don't have political ambition to take down the Government of Mexico and I don't think that's——

Senator MCCAIN. No, but they have ambitions to control certain areas of Mexico.

Admiral WINNEFELD. They have ambitions to preserve their market share and to have the freedom to maneuver, certainly to ply their evil trade, if you will, in Mexico and in the United States, yes, sir.

Senator MCCAIN. Have you seen an increase or a decrease in violence in the last year since you've been in command?

Admiral WINNEFELD. I think that the violence has actually increased. I think part of that has to do with increasing competition among the cartels, I also think that part of that has to do with the

Calderon government's courageous decision to continue this fight and not back off of the cartels.

Senator MCCAIN. Have you been briefed that in Arizona there are somewhere around 100 or more guides that are sitting on mountains in Arizona guiding the drug traffickers across the border and up to Phoenix, AZ?

Admiral WINNEFELD. Sir, I was not aware that there are guides on the mountains guiding them. It wouldn't surprise me if they have some sort of an arrangement set up to get their people where they want them to go.

Senator MCCAIN. You're aware that about 40 percent or 50 percent of the marijuana smuggled into the United States from Mexico comes through the Tucson sector of our border?

Admiral WINNEFELD. Yes, sir, I'm aware of that.

Senator MCCAIN. So what is your prediction as to what will happen here with the Mexican efforts to bring these cartels under control?

Admiral WINNEFELD. It's very hard, as we found in other places where we've been involved in some sort of a struggle, to predict anything definitively. However, I would say, as I mentioned in my opening remarks, that the Mexican military and overall security forces are undergoing a very important transition right now, that I think is going to lead to more success on their part.

They're learning more about how to do the sort of irregular work. They are working much more closely together. They are seeking our help in the right way. I believe that the opportunity exists, if we can support them properly, if they can continue the progress that they're making, that they can turn the corner on this. But it still remains to be seen.

Senator MCCAIN. Would you assess our border, the U.S.-Mexico border, as being secure?

Admiral WINNEFELD. Sir, I would say that security is not a binary answer, yes or no. It is secure to a degree. I don't think it's secure to the degree that any of us would want it to be, but I think there has been progress over the last couple of years, at least. We're determined to support our law enforcement partners as well as we can to enhance their efforts to make it even more secure.

But it would be false to say that it's perfectly secure, absolutely.

Senator MCCAIN. Some of us believe that the increase in the level of violence in Mexico has exceeded our efforts to secure the border. On the Mexican southern border they have a lot of work to do to secure their border; is that correct?

Admiral WINNEFELD. Absolutely, yes, sir.

Senator MCCAIN. General Fraser, what effect has the failure to ratify the U.S.-Colombia Free Trade Agreement had on our relations with Colombia?

General FRASER. Senator, from a military-to-military relationship we still have very close relationships and continue to do that. I would see an agreement on a free trade agreement as a very positive, beneficial aspect for our cooperation with them, because I see a growing capacity to support the capabilities of the Armed Forces and law enforcement capabilities to then address the issues that they have within their countries.

Senator MCCAIN. Recent press reports state that Hugo Chavez is purchasing $15 billion in weapons, tanks, submarines, and helicopters primarily from Russia, China, and Spain. What's that all about?

General FRASER. Senator, I can't tell you exactly why President Chavez has chosen to purchase that level of weapons, and I can't confirm the $15 billion number. It's still a large number, between $8 and $12 billion, that he's made agreements with various countries for.

Senator MCCAIN. Is that destabilizing?

General FRASER. Senator, I don't see the fact of purchasing those weapons as a destabilizing factor within the region. My bigger concern on the purchase of weapons is the number of automatic weapons that he has purchased as a part of those agreements and the potential that those could make it into the hands of illicit or illegal armed groups. That is my bigger concern.

Senator MCCAIN. The Chinese have increased their presence dramatically in the Southern Hemisphere, would you agree, General?

General FRASER. Yes, sir, I would.

Senator MCCAIN. Their reasons are purely for natural resource access reasons in your view?

General FRASER. I see it as a very complex relationship, Senator. I see both diplomatic efforts as well as commercial. There is a growing effort also in the defense area, with exchanges with military members within the region, as well as also selling arms like K–8 aircraft to Venezuela as well as defense radars. So there is a growing effort both commercial and diplomatic with Latin American countries, but I would argue they're doing the same thing looking for markups within China as well.

Senator MCCAIN. We hear continued reports about these gangs of human smugglers and drugs, these criminal gangs, that now seem to be transnational in nature, rotating from places like Salvador and Honduras and others, up to Mexico and into the United States. Do you see that as being on the increase? How serious a problem do you view that to be?

General FRASER. Senator, it is a serious problem. The transnational nature of it, we don't see it within the gangs at the same level we see it within the drug trafficking organizations and other illicit activities. We still see it very much localized, but there are large numbers of gangs and they are starting to make some transnational connections, but those are really more through those other organizations, not the gangs themselves.

The gangs, though, in trying to get their credibility within the streets, are increasing the levels of violence to show and demonstrate that credibility, and that's the growing problem I see with gangs, within Central America, especially.

Senator MCCAIN. Just one question I forgot to ask, Admiral Winnefeld. Do you know whether the cost of an ounce of cocaine on the street in Des Moines is up or down?

Admiral WINNEFELD. Sir, I don't know whether it's up or down. Over which period of time?

Senator MCCAIN. In the last year.

Admiral WINNEFELD. I don't know, but I can find that.

[The information referred to follows:]

The price of an ounce of cocaine in the Des Moines, IA, area has remained fairly stable in the 2009 to 2010 timeframe, at approximately $1,000 to $1,200 per ounce, based on the Drug Enforcement Administration's reporting. Over a longer period of time, the price of cocaine is a complex function of supply and demand, and due to the opaque nature of this market, it can be difficult to decipher what causes a change in price.

Senator MCCAIN. Isn't that the best measurement of whether we are succeeding or failing in stopping the flow of drugs into this country?

Admiral WINNEFELD. Sir, I think it's a very complex metric, and I'm very suspicious, frankly, of numerical metrics we apply to any of this, because it's a supply and demand problem. The biggest engine of this whole challenge that we face is U.S. drug demand and if drug demand goes up, of course, the price is going to go up. If supply goes down, the price is going to go up as well.

So I don't have my arms around exactly whether it's a demand problem or a supply problem that would be driving that principally in recent months.

Senator MCCAIN. But the number has not changed in your view?

Admiral WINNEFELD. As far as I'm aware, it hasn't changed. But I'm not sure, sir.

Senator MCCAIN. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain.

Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Admiral and General, thank you for your testimony. Thanks for your leadership. You're both at the command of important commands that really affect the security of the American people. These tend not to be in the news today except with regard to the violence in Mexico and drugs coming into the United States, but on a daily basis, the testimony that both of you have filed, which really is very interesting, important reading, shows that you're doing critically important work.

I'd say, wearing my other hat as chair of the Senate Committee on Homeland Security and Governmental Affairs, Admiral, I think you've done a really exceptional job at negotiating agreements with the governors, between the governors and the Department of Defense (DOD) and really, effectively, each other and the adjutant general, that have created the opportunity for a level of preparedness and response to disasters, both natural disasters and unnatural, which is to say terrorist attacks, that is really quite impressive. I thank you very much for it.

Frankly, I think if more people both in Congress and throughout the country knew where we are on all that, they'd feel more secure. Of course, these are all applications of lessons learned from the two national traumas that we had different kinds of traumas: September 11, and then Hurricane Katrina and the failure of our government to protect our people.

Let me focus in first on part of that. DOD has transitioned now from an initial plan to have three so-called chemical, biological, radiological, and nuclear (CBRNE) consequence management response forces to now having 10 Homeland response forces and 1 DOD CBRNE response force. I thought it would be helpful if you described that system and where you think we are in our level of

preparedness to respond based on it, because it brings to bear the capacities of DOD to protect the American people in the event of a disaster.

Admiral WINNEFELD. Yes, sir, thank you. If I could very briefly first thank you for the accolade on the work we've done in partnership with the governors and the States. I would be remiss if I did not point out that it's a two-way street and they've been wonderful partners to work with.

Senator LIEBERMAN. Good. I agree.

Admiral WINNEFELD. Second, on the CBRNE response enterprise, the enterprise is going through a transition right now. Currently it is more federally-focused than it is State-focused, but there's capability on both sides of that. It begins with very small teams, 57 of them. Obviously, each State has at least one 22-person Civil Support Team (CST) that can respond to an event like this and really diagnose it and figure out what's really happened and what kind of response.

Senator LIEBERMAN. So every State has one of those?

Admiral WINNEFELD. Every State, and there are 57. California has two.

Senator LIEBERMAN. Right.

Admiral WINNEFELD. Then within the National Guard there are CBRNE Enhanced Response Force Packages, we call them. It's a couple hundred people who can respond a little more robustly than a CST can. Then on the Federal side we have two Consequence Management Response Forces for CBRNE (known as CCMRF), that are able to deploy in response to one of these disasters.

[The information referred to follows:]

CERFP stands for Chemical, Biological, Radiological, and Nuclear Enhanced Response Force Package. CERFPs are composed of existing National Guard units on State Active Duty, title 32 or title 10 status, and are specially trained to respond to a weapons of mass destruction incident. They must be ready to deploy within 6 hours of notification. CERFPs locate and extract victims from a contaminated environment, perform mass patient/casualty decontamination, and provide treatment as necessary to stabilize patients for evacuation.

Each CERFP is composed of 186 personnel. CERFPs are primarily equipped to deploy via ground transport to CBRNE incident cites, but can be moved by air, if necessary.

There are 17 CERFP States: New York, Massachusetts, Pennsylvania, West Virginia, Colorado, California, Texas, Illinois, Missouri, Florida, Hawaii, Washington, Virginia, Ohio, Georgia, Minnesota, and Nebraska.

Admiral WINNEFELD. The choice was made in the Quadrennial Defense Review (QDR), and I fully agree with it, to transition this enterprise, first to make it a little bit more State-centric and less Federal-centric, to give it more lifesaving capability, and to make it a more rapidly responsive force. That's the transition that we're going through right now. By the end of this year, we will have a single large Federal response force that's larger than one of the CCMRFs right now.

Senator LIEBERMAN. The number is about what, number of personnel?

Admiral WINNEFELD. The number under the CCMRF—I have the exact numbers. I can get it to you. But the Defense CBRNE Response Force (DCRF) will have 5,200 people and the CCMRF is right now around 4,500 people.

Senator LIEBERMAN. What are their capacities? They will have lifesaving capacities?

Admiral WINNEFELD. Right. They will be able to do search and extraction under very challenging circumstances, radiological, chemical, biological, that sort of thing. They will have a lot of medical capability; much more transportation capability, helicopters, ambulances, vehicles, than we currently have; more engineering capability; and they're designed to respond in half the time.

The current CCMRFs are designed to respond between 48 and 96 hours. The future DCRF will respond in half that time.

Senator LIEBERMAN. Very important. As we know, the speed of the response is critical.

Admiral WINNEFELD. Speed is life, absolutely. Then a key element of this is that there will be one Homeland Response Force within each FEMA region.

Senator LIEBERMAN. Yes. So in other words, as part of the FEMA Reform Act we created—we beefed up 10 regional offices for FEMA.

Admiral WINNEFELD. Yes.

Senator LIEBERMAN. Now we're going to complement—each of those will have a Homeland Response Force through your operations.

Admiral WINNEFELD. Yes, sir. That will be around 500 people who will be able to respond very quickly within that FEMA region, or even respond to an adjacent FEMA region. They have a very rapid timeline, 6 to 12 hours to get out the door.

We're working very closely with the National Guard Bureau in pulling all of this together. It's a good news story. My U.S. Army North (ARNORTH) commander has a very good relationship with his National Guard Bureau counterparts in how we're going to train, standardize, and that sort of thing.

I think it's a good news story, frankly.

Senator LIEBERMAN. I think it's a very good news story and should give us all, in an uncertain world, an added measure of confidence.

The joint action plan relies on officers being trained in advance to serve in a dual-hat role and components of the training are provided by the Department of Homeland Security (DHS) and FEMA, I know. I wanted to ask you whether you think the DHS component of the training to date has been what you want it to be?

Admiral WINNEFELD. Yes, sir, it has. We take these National Guardsmen who would be a dual-status commander, we put them through a week-long JTF commanders course that we host in Colorado Springs, which other people can attend as well, but this is a prerequisite for these officers. Then we take them on a special 1-week training course where I spend a lot of personal time with them. Then they travel around the country to visit ARNORTH, Air Forces Northern, and that sort of thing.

They end up here in Washington, DC, where they get to visit with FEMA, they see the command centers, they visit with DHS and OSD and a number of the key players. I think at the end of the day we end up with a National Guardsman who is trained better than 99.9 percent of the Federal people who would be trained who could end up responding in a disaster here.

So I end up with a guardsman who understands his or her State, who understands how the Guard works, but also who understands how the Federal side works as well as anybody.

Senator LIEBERMAN. Thank you.

My time is running out. I just want to make one point, General Fraser. I'm sorry I don't have the chance to ask you to respond. I was really struck by a point you made in your prepared statement, which was that nearly all the cocaine destined for the United States crosses the Mexican-Guatemalan border. So I think there may be in the minds of a lot of people a kind of feeling that all this is coming from Mexico to the United States, but it's obviously coming from south, and that's something that demands the cooperation of both of your commands.

Thanks, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Chambliss.

Senator CHAMBLISS. Thanks, Mr. Chairman.

Let me echo my appreciation to both of you for your service. General Fraser, you and I have had the opportunity to work on any number of issues from time to time. I'm very proud of your service and where you are now. Admiral Winnefeld, you continue to make Georgia Tech proud.

Admiral, an incident occurred on the border in the last day or 2 where two young Americans were apparently shot to death. I don't know whether it was random or whether you can shed some light on that. But a two-part question: first, was this a random act; and second, going to the numbers that you alluded to as well as Senator McCain, is this becoming more and more common, where we're seeing 35,000 Mexicans killed over a short period of time here? It's highlighted when we have Americans killed, but can you comment on what's happening with respect to the random killings like this?

Admiral WINNEFELD. I only learned about the two deaths at the Tijuana border this morning as well. So I'm sure law enforcement will work with our Mexican counterparts. They have a very cooperative relationship in situations like this to get to the bottom of what actually happened there. So I don't have any new information for you on what happened in the two killings in Tijuana.

I do believe it goes without saying that violence is a problem inside Mexico. They acknowledge that. They have a plan to address it. I think again everything we can do to help them in a right way that acknowledges Mexican sovereignty and is a reciprocal way will only help them get their arms around that challenge that they face, that you and Senator McCain have both pointed out.

So I think we have a ways to go before this is solved. But again, I applaud the courage and the commitment of the Calderon government and my Mexican military counterparts in taking on that problem. It's a tough one.

Senator CHAMBLISS. The issue of border security continues to be a very hot-button item with policymakers as well as our constituents all across the country. Let me first ask you whether or not in your support role to law enforcement on the border there is any asset that you don't have that you need or any increase in numbers of assets that you have that would provide you greater opportunity to be of assistance?

Admiral WINNEFELD. Sir, we have a JTF-North, who works underneath me in El Paso, that is charged with supporting our law enforcement agencies along the border as best we can within the legal limits of how a military can support law enforcement inside a democratic nation like ours.

So we provide construction support along the border, whether it be new roads or repairing roads or fences. We provide some surveillance assets, including contract surveillance assets that were useful in apprehending the suspects in the Agent Terry case late last year. We also provide intelligence support, and we have to be very cautious with that to strictly adhere to the legal and policy limitations that we have.

But I've moved, for example, 14 of my intelligence specialists from JTF-North into the El Paso Intelligence Center (EPIC) to help them benefit from some of the lessons that we've learned overseas on how you fuse different types of intelligence and go at this problem.

We're doing what we can with the resources we have to support our law enforcement partners as best we can.

Senator CHAMBLISS. To again echo what Senator McCain said, it's the last year that's our measuring stick. So when you come back next year and appear before this committee, very honestly, Admiral, we expect you to be able to tell us—while it's not your primary responsibility to secure that border, I think it's reasonable to expect us to get a favorable report from you with regard to an increase in security on that border from the standpoint of the support that you're giving.

Let me address a question to both of you regarding the valuable role of Western Hemisphere Institute for Security Cooperation (WHINSEC) in particularly the Mexican situation, but otherwise, too. I know that the training that we are providing at WHINSEC today—and Senator Levin and I have the privilege of serving on that board—with regard to the Mexicans being able to confront the TCOs has been very forceful and very positive at WHINSEC.

I'd like for you to comment on that, and also for both of you to comment on this issue of whether or not the names of non-U.S. personnel who are attending WHINSEC should be released, in light of the fact particularly with what's going on in Mexico, what kind of harm's way does it put these individuals in should their names be released to the public?

Admiral WINNEFELD. I'll go ahead and start if it's okay, sir. I managed to visit WHINSEC this year. I have attended the Board of Governors meeting and that has been a useful experience for me to understand what that terrific institution is able to do. We're very delighted to have a Mexican deputy commandant this year, which I think is a tremendous step from the Mexicans' part, to provide that, and will benefit both of us.

Regarding your last point, I think it's very important that we not release names. I would categorically state that WHINSEC has undergone a tremendous transformation in the last decade. It's a very good education for the Latin Americans and Mexicans who visit there. They emphasize human rights at every turn. I think it would be tragic if we were to release the names of those personnel and expose them to risk inside their own countries potentially, as we

have seen in many cases. In fact, in Mexico they've lost as many security personnel in the last 4 years as we have in Iraq and Afghanistan. So there is real risk for these folks and I think we should not release their names.

General FRASER. I'll echo Admiral Winnefeld's comments. Roughly 1,000 people are at WHINSEC each year. We're seeing growing demand. We're seeing growing support for the school. It follows the curriculum that Admiral Winnefeld discussed.

I, like him, do not think we should release the names, for exactly the same reason. I've even had—not regarding the release of names, but I've had some of my counterparts ask us to extend and increase the types of training that we have in WHINSEC, they find it that valuable.

Senator CHAMBLISS. I believe you told me also that you even had a request for more numbers of individuals from countries to be able to attend WHINSEC. That's what our partners think of the school.

General FRASER. Yes, sir, that's in fact true. I've had one of my counterparts ask that he be able to train all of his cadets and lengthen the amount of time that they have at the school. He had a chance to attend the school when he was a young officer and he found it very valuable, and he wants to extend that to all his young officers.

Senator CHAMBLISS. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Chambliss, and thank you for the work that you do relative to WHINSEC. As a matter of fact, even some of the skeptics and the critics, I think, have gradually understood the value of that institution in terms of training, in terms of support, and in terms of human rights.

I want to particularly thank you and join with you in saying how much we opposed the release of those names and were able to get that removed in conference last year, that effort that was made on the part of the House.

Senator Udall.

Senator UDALL. Thank you, Mr. Chairman.

Good morning, gentlemen. It's great to have you here. It's also inspirational to know the kind of partnership the two of you have crafted, given the interwoven nature of the challenges we face, both NORTHCOM and SOUTHCOM.

Admiral Winnefeld, I want to thank you as well for outlining in some great detail the relationship we have with the Mexican Government, the Mexican authorities. The TCO dynamic is a dangerous one, it's a complex one. But I think it's important to underline the fact that these are criminal organizations that are bent on driving their own mission forward with no consideration for human lives and societal stability. So thank you for the good work you're doing there, and also the partnership you've crafted with the Mexican authorities. I know it's been a focus of your time.

Let me turn to the concept you've used, Admiral, the 21st century border. Could you describe that concept in a little more detail? Is it a physical structure, the 21st century border, or is it a combination of physical construction, sound policy initiatives, and other actions that might not be obvious at first glance?

Admiral WINNEFELD. I would first point out that the 21st century border concept is one of the four Beyond Merida pillars, so it's

not my creation. It's an intergovernmental creation between the Government of Mexico and the Government of the United States, led by the Department of State (DOS), which involves not only defeating and disrupting the TCOs, but building strong and resilient communities, also establishing strong institutions and the rule of law, and finally the 21st century border.

In the case of the 21st century border, I would also want to defer to my DHS colleagues, who really are the dominant feature of that particular initiative.

I would say that the 21st century border concept is not a line in the sand. It's not a fence. It's a concept that talks about depth in terms of looking at the border beyond just the border, both into Mexico and into the United States. It's a concept that tries to preserve the freedom of licit commerce as well as the ability to intercept and interdict illicit commerce.

I really would want to turn to my DHS colleagues to have them outline it in greater detail.

Senator UDALL. You noted, Admiral, that the air sovereignty alert mission requires careful coordination between Active Duty and National Guard units, and there are a whole host of partners involved, including the Canadians, the Federal Aviation Administration, and other agencies. I want to make sure you have the tools that you need for continued success. Do you have any concerns, given that the F–16 fleet is aging and there are then delays in the F–35 program? As a follow-on, would you speak to any other resources or improvements in your existing infrastructure that are necessary to make sure the air sovereignty alert (ASA) mission is fully manned and supported?

Admiral WINNEFELD. I'd say first we're delighted to have one of our ASA sites right in Denver at Buckley. They do a wonderful job up there. We have 16 ASAs inside the continental United States, all of which are manned by the Air Guard, and they do a terrific job for us. We interact with them on a day-to-day basis through both our continental NORAD and our eastern and western air defense sectors.

It's my sense from working closely with the Air Force that General Schwartz is determined to make sure that our ASA needs are met. He's made that commitment, and of course it's the Services' job to work through the details of how they would achieve that. SLEPing F–16s or what have you may be the correct answer, but I'm counting on the Afghans and they have given me good reassurance that we will have the assets that we require to conduct that mission properly. I know there's a very good, healthy discussion going on inside the Air Force and the Air Guard to make sure that happens.

Regarding the other resources, I'm pretty pleased that we're on track regarding budgetary pieces that would help me do my mission better. There are a number of capability enhancements that we've sought and have received, things like better satellite communications for our interceptors, so that you can have one down low in case there's a low flyer and one up high and still be able to communicate properly with those aircraft, and a host of other things. But we're in pretty good shape resource-wise for this mission.

Senator UDALL. If I might, let me turn to the QDR from July 2010. I think you've spoken to this, but I wanted to consider it even a little bit further. In the QDR, to quote what was stated there, the force structure recommended by the QDR "will not provide sufficient capacity to respond to a domestic catastrophe that might occur during a period of ongoing contingency operations abroad. The role of Reserve components needs to be reviewed with an eye to ensuring that a portion of the National Guard be dedicated to homeland defense."

Do you agree, and what changes will NORTHCOM need to pursue to address this concern?

Admiral WINNEFELD. I think the QDR was probably addressing the fact that we are transitioning some of our CBRNE response capability into the National Guard, much more State emphasis with the Homeland response forces being produced over the next year and a half. All 10 of those will be in place by the end of fiscal year 2012. So that's principally what we're talking about.

I would say that the National Guard is serving extremely well as an Operational Reserve. I would not want to box them in too much into one mission because the very same guardsmen who can respond inside a State or can respond at the request of another State under the Emergency Management Assistance Compact in the event of a disaster, are the same guardsmen who have been deployed overseas, many of them several times, to Afghanistan or Iraq. It just demonstrates the terrific versatility of that force. I wouldn't want to box them in too much into a Homeland security or defense role. They're just a wonderful, diverse partner to have in anything that we do.

Senator UDALL. I think outside of the overall Guard commander, you have the best view of the capacity of the Guard. I think you put it very well that the expansion of their knowledge, their skill sets, their experience, is phenomenal. You are well aware of that because, although you don't, as you've told me and told the committee, own that many assets, when the emergency hits the Guard will need to be deployed under your command.

Admiral WINNEFELD. I also rely on the Guard for a number of other things, not only ASA and to be a good partner in the event of a disaster, where we would be a supporting partner; they are my missile defense trigger-pullers. The Alaska National Guard and the Colorado National Guard perform the missile defense mission for me each and every day.

So I have a tremendous reliance on them. They're a wonderful partner and I have a vested interest in them being well taken care of.

Senator UDALL. Thank you both for your service.

Chairman LEVIN. Thank you, Senator Udall.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman.

Admiral and General, thank you, obviously, for being here. It's good to see you both again.

Admiral, we've come pretty far since the days of September 11 in how we respond to natural disasters and defend our Homeland. As you also know, I'm a Guardsman and so I have a unique appreciation for the role of the Guard as an Operational Reserve, wheth-

er it's responding to floods, earthquakes, responding with no notice to defend our air space with F–15s or F–16s.

So I just want to thank you for recognizing, obviously, the importance of the Guard on NORTHCOM's mission. It's important. I know that General Carter is here, the adjutant general in Massachusetts, advocating on behalf of Massachusetts guardsmen, and I know a lot of other Senators feel very strongly about the role that they play, and also the strains and stresses not only on them but their families.

So I think it's important for you to know that you have an ally and that if there's a problem we need to know about it. As the chairman referenced, is there any type of legislation or any other benefits that we need to try to help you with? Please include me in that circle if you could.

I was wondering, how many actual National Guard officers sit in your command, Admiral?

Admiral WINNEFELD. I have on any given day around 45 or 50 permanently assigned to my headquarters. But on top of that, a number of them are passing through.

Senator BROWN. TDY?

Admiral WINNEFELD. TDY, that sort of thing. So around 100 on any given day in my headquarters.

Senator BROWN. In terms of the communications with General McKinley, is it on a daily basis, weekly? How does that work?

Admiral WINNEFELD. I probably speak with General McKinley at least once a week, if not more often. We spend an awful lot of time together. Once I was nominated for this position, the first phone call I made was to General McKinley to express my desire to have a great partnership. We already knew each other from previous work, and that has been an excellent partnership. I think the world of the National Guard and its leadership.

Senator BROWN. I have noted that you've obviously referenced it. It's refreshing to see the role of the Guard and how it's being perceived, obviously, with the administration and obviously you in your position.

How does the Guard actually fit into NORTHCOM's training plan, if you can do it now, or we can speak off-line, whatever's easier?

Admiral WINNEFELD. I can provide you information for the record on that, but I can tell you that they are intimately integrated.

[The information referred to follows:]

U.S. Northern Command (NORTHCOM), in coordination with the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs, the National Guard Bureau (NGB), and the Department of Homeland Security/Federal Emergency Management Agency (FEMA), develops, plans, and conducts a number of training courses and exercises every year.

The Vigilant Guard exercise program is jointly operated and staffed by NORTHCOM, NGB, and the States to conduct four regional exercises annually involving between 12 and 30 States total in each year. States often link their own response exercise efforts to their participation in a Vigilant Guard or NORTHCOM exercise, mutually benefiting the State, the National Guard, and NORTHCOM. Exercise Ardent Sentry, our annual national Defense Support of Civil Authorities (DSCA) exercise, is routinely linked to at least one Vigilant Guard exercise and, when appropriate, the National Level Exercise.

For 2011, we have two Vigilant Guard exercises linked and the eight States of the four affected FEMA regions participating with NORTHCOM, NGB, and FEMA. As a matter of sound training practice, we incorporate some appropriate level of

Chemical, Biological, Radiological, Nuclear (CBRNE) and cyberspace incidents into every exercise.

We partner with the NGB to conduct training and exercises for all State Joint Force Headquarters Joint Task Force Commanders and their staffs. In addition, we sponsor a DSCA Executive Seminar. Hosted in our Headquarters, this 2-day seminar provides a great opportunity for me to meet with the Adjutants General (ranging from one to five at a time) or other senior Guard officers, for them to receive capabilities briefs from various staff directorates regarding DSCA operations, and to orient themselves to NORTHCOM's missions.

Finally, NORTHCOM, in coordination with the NGB, has developed the Contingency Dual Status Commander Training and Qualification Program in order to ensure that the most highly qualified officers are selected and trained for this important duty. The Contingency Dual Status Commander Initiative is an element of the Council of Governors' Unity of Effort with the Department of Defense. Previously, dual status command (one military chain of command over title 10, and title 32 forces) was utilized only for pre-planned events such as the 2008 Democratic and Republican National Conventions, and more recently, for the 2010 National Boy Scout Jamboree. The historical success of the Dual Status Command concept has been expanded in order to enable State Governors to select and implement a Contingency Dual Status Commander during a no-notice event, such as an earthquake, hurricane, or wildfire

Bottom line: The National Guard is an integral component of all our exercises, including all phases of planning, execution, data collection, and lessons learned.

Admiral WINNEFELD. We work hand-in-glove with the Guard supporting them. We always try to leave them at the helm, if you will, and be a good supporting partner. We're not trying to run their training for them.

We have good partnerships in exercise. We have a very important national-level exercise that's coming up in the next month or so called Ardent Sentry for us, that will examine the effects of a New Madrid earthquake fault. FEMA is involved. It's a very national-level exercise. We'll be partnering very closely with the Guard in the process of that. So that's just one example of the many things that we do together with them.

Senator BROWN. I found it exciting and interesting about the contingency dual status commander initiative you mentioned. Are officers from all Active and Reserve components eligible to become dual-status commanders?

Admiral WINNEFELD. Anybody theoretically can be a dual-status commander, including a Title 10 officer. Our training program is focused on the Guard because the Guard is in the States.

Senator BROWN. Where do you do it?

Admiral WINNEFELD. We do the JTF commanders course right in Colorado Springs, and then I spend a day with them in Colorado Springs personally, talking with them and hearing from them, frankly, as much as we talk to them. Then they move to San Antonio, where my U.S. Army North headquarters is, and they get a good solid day of understanding how that team works. Then they spend time in Washington, DC, all around town visiting with some of the key players that would be involved in the response to a disaster.

Senator BROWN. DOD has modified the CBRN consequence management enterprise. When will the transition to the new enterprise be completed, and how will the new structure provide greater lifesaving capabilities?

Admiral WINNEFELD. The transition should be complete at the end of next fiscal year, so on October 1, 2012, we should be complete with the transition. The first two Homeland response forces,

one in Ohio and one in Washington State, will stand up this year, and the remaining eight will stand up over the course of fiscal year 2012.

We will be complete with the transition on the Federal side to the DCRF, if you will, at the end of this year and we will stand up one other unit, called a Command and Control CBRN Response Element, which is about 1,000 people, who also have some response capability, but whose intent in life is to bring in general purpose forces in the event of a large disaster that goes beyond the scope of what the current enterprise can handle.

So the transition is on track.

Senator BROWN. General Fraser, I don't want you to feel left out. I apologize. I just wanted to zero in on a couple of areas.

I want to thank you, first of all, for SOUTHCOM's really tremendous success with Haiti and Chile. It really makes me proud to be an American and see what our men and women are doing. I know the President has traveled to Brazil, Chile, and El Salvador to try to forge new alliances, and I certainly encourage him in that. In fact, that's why I'm hopeful a lot of these free trade agreements will be approved sooner rather than later.

However, I'm troubled. When I was in Israel, I noticed Iran's kind of tentacles out there. I know Iran is also establishing relationships within Latin America, and I know they're looking for new allies in that region. I was wondering, can you comment on the anti-U.S. alliance in Venezuela under President Chavez and the personal relationship between Ahmedinejad and Chavez, and has this relationship enhanced Iran's influence in Bolivia, Nicaragua, and Ecuador?

General FRASER. Thanks, Senator. There is a close relationship between President Chavez and President Ahmedinejad. President Chavez has visited nine times in the 12 years that he's been President. I still see it primarily on a diplomatic and a commercial level, those relationships. Although there are growing opportunities for military-to-military connections, we haven't seen it growing to the same extent. Iran has almost doubled the number of embassies they have within the region, so they're not just focused in Venezuela and Bolivia, those other countries.

They've also built cultural centers in 17 different countries throughout the region. So they are continuing to try and gain an understanding within Latin America, of Latin Americans, of Iran and form those connections.

My concern as I look at it is the fact that there are flights between Iran and Venezuela on a weekly basis. Visas are not required for entrance into Venezuela or Bolivia or Nicaragua. So we don't have a lot of visibility in who's visiting and who isn't, and that's really where I see the concerns.

I don't have connections with those organizations that Iran has supported in other parts of the world, Hezbollah, but we're still skeptical and watching that on a routine basis.

Senator BROWN. My time is up. I want to just wrap it up. Can I have one more small question, Mr. Chairman?

Chairman LEVIN. Yes.

Senator BROWN. Thank you.

Currently, does SOUTHCOM have the necessary amount and appropriate mixture of ISR resources required to successfully combat illicit trafficking operations, in your opinion?

General FRASER. Senator, let me be honest. Every combatant commander would like more.

Senator BROWN. Right.

General FRASER. Within the current capabilities and capacities and priorities we have, I'm comfortable with the assets we have. But we're also exploring ways that we can gain information through a lot of other information sources that are throughout the region, meaning social networking, a lot of different areas that we're trying to see what the value and what the capabilities are, because ISR is only one piece of where we can gain information and get awareness. We have a lot of effort in that area.

Senator BROWN. Thank you both.

Mr. Chairman, thank you.

Chairman LEVIN. Thank you, Senator Brown.

Senator Reed.

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

Gentlemen, thank you for your service and the service of your families and service men and women. Thank you very much.

Admiral, you've talked a lot about Mexico today. It's a significant and violent situation. These TCOs are operating openly. One of the disturbing facts is not just the fatalities, but also the increasing sophistication of their weapons, and not just firearms, but communications, night vision devices, and others.

Where are most of these weapons coming from?

Admiral WINNEFELD. They come from a variety of places. To be sure, there are a number of weapons that are flowing south across our border, and it's a grave concern to the Mexicans and of course it is for us as well. By the same token, there are also weapons coming into Mexico from other parts of Latin America. If you see an AK–47, it could come from either place. But there are certain types of weapons that might come from south of Mexico.

So there are a number of other sophisticated weapons. The night vision goggles, I'm not really sure where they come from. But you're absolutely correct, they are getting more and more sophisticated. They're using heavily armored vehicles that are more and more resistant to the types of weapons that the Mexicans are using. They are using fully submersible submarines to move cocaine from South America and to Central America. So it is an increasing challenge to be sure.

Senator REED. We are taking efforts on our side of the border to try to disrupt this trade? General Fraser can respond to the efforts that are being taken in other countries, neighboring countries.

Admiral WINNEFELD. Yes, sir. I can't speak for the Department of Justice (DOJ) and Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) and a number of other organizations that are trying to do the best we can to interdict the flow of weapons going south, but there is a concerted effort. It's a big challenge, though.

Senator REED. When you say you can't speak for them, is there some type of statutory bar for collaboration?

Admiral WINNEFELD. No, sir. It's just that most of the support that we give to the law enforcement agencies is fairly basic in

terms of construction, intelligence, surveillance, reconnaissance (ISR), that sort of thing. In terms of the sort of deep investigatory type of work that a law enforcement agent would do in order to interdict weapons, it's really not in our area of expertise.

Senator REED. General Fraser, your comments on the flow of weapons from other neighboring countries into Mexico?

General FRASER. Yes, Senator. The information I have is that over 50 percent of the military-type weapons that are flowing throughout the region have a large source within Central American stockpiles, if you will, left over from wars and conflicts in the past. DOJ, ATF, have a lot of focused efforts they're working to work stockpile controls as well as military efforts to work the same issues. But there is a lot of funding available with these TCOs, so corruptions, slack processes, are still a problem, and we're fighting those on every level.

Senator REED. Let me ask a question of both of you in the context of the strategic implications. By 2014 there will be a Panama Canal that is able to accommodate much larger ships. We're told by the Navy that by 2020 at least 1 month a year the Northwest Passage will be open to commercial traffic, which is your responsibility, NORTHCOM.

Are you beginning to think in terms of this significant change in maritime routes in terms of your strategy and our policy, General Fraser?

General FRASER. We are looking at that. We conduct annual exercises in support of the Government of Panama. We call it "Panamax." It also involves 18 other countries; it varies, 18 to 20. We conduct that on an annual basis, as well as the government itself takes advantage of the opportunity and conducts its own internal exercise focused on the defense of the Panama Canal. So they have a very significant effort working along those lines.

So in conjunction with NORTHCOM, it is an area that we are looking at. But a lot of our focus right now continues to be on the counter-transnational criminal operations.

Senator REED. Admiral, in terms of the Arctic opening up, which was something that 10, 20 years ago was beyond—I mean, no one could credibly see this coming—what are you doing to prepare for this?

Admiral WINNEFELD. Of my eight different focus areas that I have in the command, the Arctic is one that we are working on very hard. I'm calling this the year of the Arctic around the headquarters. We're working very closely with a lot of our partners, to include our Canadian partners, to put together what we call a Commander's Estimate for the Arctic that will lay out where we see the challenges, what's the environment is like, and how would we organize our thinking to take on the potential for the Arctic opening up.

I'm blessed to have Canadians in my headquarters because they not only bring considerable expertise on the Arctic to bear on the intellectual work we're doing, but it also demonstrates transparency to Canada that I have Canadians helping me with this problem, which forges a very good partnership between us.

So we are looking very closely. We believe we're going to organize ourselves around defense, security, and safety. But I think that

most of our attention will probably be applied in reverse order. As the Arctic opens up more and more, there's going to be more human activity up there, more possibilities for search and rescue requirements or an environmental disaster where we may be the only people around, along with our Canadian partners and the Coast Guard, who can assist in something like that.

So we're examining this very closely and trying to stay ahead of it.

Senator REED. This is also an opportunity for cooperation or confrontation with other powers in the region, which I presume would be the Russians. Who else are you beginning to reach out to or who will have some type of geographic interest in the area?

Admiral WINNEFELD. There are eight recognized Arctic nations, Russia being one of them. We are cautiously optimistic that the eight nations together will manage to prevent the militarization of the Arctic, but we're very vigilant for that. We obviously don't want to unintentionally cause it by getting up there with too much too fast.

I think the key in the Arctic is open partnerships among the Arctic nations. There are other non-Arctic nations who are expressing an interest up there, namely China, that we are watching very closely as well.

Senator REED. Thank you very much. My time has expired. Thank you, gentlemen.

Chairman LEVIN. Thank you, Senator Reed.

Senator Ayotte.

Senator AYOTTE. Thank you, Mr. Chairman.

Admiral, General, thank you so much for your service to our country, and please give my gratitude to all of those who serve beneath you for the sacrifices that they're making to keep us safe.

I wanted to ask you, General Fraser, you said in your written testimony that members of violent extremist organizations from the Middle East remain active in Latin American and the Caribbean and constitute a potential threat. Could you provide more detail regarding the fundraising activities of Islamist extremist groups in Central and South America, and an estimate, if you were able to give one, of how much money they're raising, how's it being raised, and where are they then funneling those funds to?

General FRASER. Thank you very much, Senator. There are those organizations resident, not as much in Central America. They're more in South America. Most of their funding is raised through illicit activity, and these are organizations and members who have been around for a number of years, decades, if you will, in those areas.

The amount of how much they raise I don't have a good estimate of, because it transfers back and forth to parent organizations in the Middle East in a variety of methods. So I can't get a very clear estimate. Even then, as it goes back to locations within the Middle East, I can't tell you exactly where it is going. But we have again assessments that it is going into parent organizations. That's my concern right now. We haven't seen a change in that over the last 2 to 5 years, of where their activity is focused.

Senator AYOTTE. Do you have any thoughts for us on how we could better assist what you're trying to do, obviously not just your

command, but multiple other agencies, in addressing the fundraising activities that go to terrorist groups? Are there any other tools that you need in your toolbox that we could help you with?

General FRASER. Senator, I think it is, as we look across the region, this is a whole-of-government effort. It is support to those DOS programs that really focus on law enforcement activities, on the judicial areas, and supporting those opportunities, money-laundering. There has been a significant effort focused on money-laundering through the DOS.

The interagency efforts is the best focus that I have within that to really addressing these issues.

Senator AYOTTE. How much are these Islamic terrorist groups having success recruiting in the area of Latin America? Is this a fertile recruiting ground for members of those organizations to commit terrorist acts?

General FRASER. There are individuals who are attempting to recruit in various locations. We have seen fairly low numbers of results of any ability to radicalize elements. So it's an area that we continue to watch and monitor, but we haven't seen any big change in their ability to really improve and recruit activists within their organizations within Latin America.

Senator AYOTTE. That's actually very encouraging. Thank you.

Admiral, the Government Accountability Office recently published a report on the northern border. The report highlights that in fiscal year 2010 only 32 of the nearly 4,000 northern border miles had reached an acceptable level of security. I realize that we've been talking about in this committee very importantly some of the incredibly serious problems along our southern border that require immediate attention and resources. I certainly fully support those efforts to secure our southern border.

But as we look at our northern border, I'm concerned al Qaeda, terrorist organizations, they're going to look at wherever they can come into our country, and wanted to know from you how does NORTHCOM's support for DHS in securing our northern border—can you update us on efforts to better coordinate with civilian agencies and our Canadian partners at that border?

Admiral WINNEFELD. First, of course, DHS will be in the lead, as you pointed out, on this. A 4,000-mile border is a tremendous challenge, as you well understand. It's a longer border than we have on the southern border.

We have provided support in the past to our DHS partners. Since 2008 it averages roughly a couple of events per year that are major events, a month-long surveillance support mission or what have you. We have two more of those scheduled this year. So we'll execute those.

We also have a number of other initiatives that we work with our partners in terms of some training initiatives that we work with the law enforcement folks. But it is an economy of force effort, to be sure.

I would candidly point out that in the years since 2008 that we've been doing this, DOD efforts have assisted in interdicting 181 pounds of marijuana. That's what a single ultralight coming across the southern border in one night will drop and depart and head back into Mexico. So we are using about 20 percent, I believe,

of our JTF-North resources along the northern border to support our partners, and we think we have that about right. But it is, as you point out, a very difficult challenge to secure 4,000 miles of border.

Working with Canada, I think the peripheral security initiative that we have ongoing within the Governments of Canada and the United States is a positive move ahead and if it's able to improve transparency between the two nations in terms of intelligence regarding potential terrorist threats, I think that will be one of the most important things that we can do in this effort.

Senator AYOTTE. Thank you both very much for your testimony. I appreciate it.

Chairman LEVIN. Thank you, Senator Ayotte.

Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman.

Thank you, both of you, for being here today and obviously your service to our country. It's very appreciated.

As chair of the Subcommittee on Emerging Threats and Capabilities of this committee, I believe it's critically important to counter the TCOs and their illicit trafficking activities. Central to that is building the effective partnership capacity with key regional governments and the security establishments to prevent them from operating in permissive environments.

General Fraser, in your prepared statement you indicated that Central America has become the preferred transit zone for this criminal organization in pursuit of their illicit activities and the limited capabilities of Central American states have allowed the Mexican transnational criminal organization to establish points of entry for illegal drugs coming in from South America, and then the Mexico-Guatemala-Belize border area is particularly vulnerable.

I understand that SOUTHCOM is working with NORTHCOM and the interagency to develop a regional operation capability among the nations. I understand that an estimated $100 billion per year in illicit goods—drugs, weapons, counterfeit products—and then an estimated 100,000 humans are trafficked through the porous borders throughout the region; and also that nearly all the cocaine destined for the United States crosses the Guatemala-Mexico border.

With that background, what types of resources will this regional operations capability require and what will the objectives be?

General FRASER. Thank you, Senator. It is a complex issue, as you mentioned. Central America has become a preferred pathway for illicit activity, if you will, coming in and out of the United States. From a cocaine standpoint, still 90 percent of the cocaine is grown in the northern part of South America and it transits up through various stops into Central America, and then there is bulk cash and weapons and other activity that flows south.

We are working very closely in an interagency process within the Federal Government to support the governments within Central America. If you look in the northern part of Central America, the presidents of Guatemala, El Salvador, and Honduras are meeting on a regular basis. Their ministers of defense and ministers of security are doing the same thing, to build their own capacity across their borders.

As you mentioned, along with Admiral Winnefeld we are working with our counterparts in Mexico, Guatemala, and Belize to work the issue along their common border. A lot of the focus of the effort is going to be in other parts of our government. It is law enforcement focused, it is judiciary, it is working with disadvantaged youth to help them. It is the U.S. Agency for International Development (USAID).

We have a role to play in that. A lot of our area is focused in the maritime and air environment to try and help support efforts all throughout Central America to give them the capacity and support their capacity to intercept those vessels that transit drugs and illicit activity as well as the airborne capacity. But that's in very close coordination with DOS and all interagency efforts. That is a growing capability. As I mentioned in my opening remarks, with the President's initiative, with the Central American regional security initiative, and if I go into the Caribbean, the Caribbean Basin security initiative, in conjunction with what we're doing in Mexico with the Beyond Merida and what Colombia is doing, it is a regional effort and it needs to remain that way. But we have a lot of work to do.

Senator HAGAN. Admiral Winnefeld?

Admiral WINNEFELD. Again, I would reiterate that General Fraser and I work closely together. We see signs, good signs, I think, of cooperation among Belize, Guatemala, and Mexico, and of course we encourage that. We would like to help them in any way we can, while respecting their sovereignty.

In the case of Mexico, they have a very clear understanding of their southern border region. It's a very complex place, much more complex than I ever anticipated before I came into the job. Their current focus right now is in the northeast because that's where the most violence is occurring, it's where the Zetas and the Sinaloa and the Gulf cartels and the like are fighting over turf, and that's where most of the violence is occurring. The last thing they want to do is open up another front in the south before they're able to get their arms around the challenges in the northeast.

We're in lockstep with them on that philosophy. We're ready to help in any way that we can within the resources and authorities that we have.

Senator HAGAN. General Fraser, I'd love to hear your comments about the submersibles. Where is it coming from? Where is that starting and where is it ending up in the United States?

General FRASER. We have seen an evolution of maritime transit over the last decade. There's still a large portion of it, 40 to 50 percent, that transits through go-fast vessels along the coast of Central America, and that's where it enters Central America.

In the last decade, we saw an increase in what we call semi-submersibles, 100-foot long vessels that could carry 10 tons of cocaine, that travel 1,000 to 1,500 miles. We saw an increase and it peaked in 2007, and we've seen a decline of those vessels, and now an increase in, as Senator McCain mentioned, fully submersible vessels, vessels that can submerge on a shallow level, very difficult to detect, about the same level.

They transit primarily from the west coast of Ecuador, Colombia, up through the Pacific, in some cases around the Galapagos, back.

Two days ago we just captured or we stopped a semi-submersible about 300 miles to the east of the Galapagos as it was transitting. Then they go north to along the southern border of Guatemala or Mexico.

So it's an increasing problem, made in the jungles of western Colombia and Ecuador. As an idea of why they're using them, it costs in our estimate $3 to $4 million to produce, but one transit will equate to about $70 to $80 million of return on that one transit.

Senator HAGAN. My time has expired. Thank you.

Chairman LEVIN. Thank you very much.

Senator Cornyn is next.

Senator CORNYN. Thank you, Mr. Chairman.

Admiral, General, thank you for being here and for your service. I think it's appropriate that you be here together because, as we've seen, there's a continuum of concern from our northern borders all the way into South America. I want to talk to you a little bit about that.

Admiral, thanks for meeting with me recently to go over some specific concerns I had, and shared by others, about what's happening in Mexico and our efforts to help President Calderon and the government there. As you said, respecting their sovereignty, but being there to help as an ally and friend and trading partner, a must as they confront this great challenge.

General, as much attention as I pay as a Texan to things happening south, I was frankly very surprised to hear part of your testimony that the northern triangle formed by Guatemala, El Salvador, and Honduras is possibly the most violent place on Earth. That came as a little bit of a surprise to me, but I guess again reiterating how everything's connected to everything else. We know that things that can flow north, which is where the money is and where these TCOs are committed to doing everything they can to maximizing their profits by selling anything that has a market value, that all of this is worthy of our attention and certainly your best efforts to try to help us combat.

General, since you are in charge of the Joint Interagency Task Force-South (JIATF-South), I have actually had some conversations with the Admiral about using that model in combatting the cartels and the drug trafficking in Mexico or along the border. Of course, Admiral, you pointed out that it's important to have civilian lead in any JIATF-type model that was created in El Paso or thereabouts.

But I wonder, General, would you talk just briefly about what you see the benefits of the JIATF model are? Then I'd like, Admiral, for you to follow up with that and talk about what we can learn from that model in SOUTHCOM that might be appropriate to help add additional resources and capabilities in fighting the cartels and the drugs coming into the United States.

General FRASER. Thank you, Senator. Our focus within JIATF-South is very focused. It's a portion of the traffic route and the disruption of that as they transit to the north. It's very focused in detecting and monitoring that traffic as it goes through the maritime and air environments of the Caribbean and the eastern Pacific, so a very defined mission in support of our interagency goals.

It's become a very effective organization because it includes 17 different Federal agencies: law enforcement, service organizations, as well as national intelligence organizations, all working, all bringing their capacities and authorities together, and then they coordinate to conduct their mission. They get intelligence information on what vessels or aircraft to look at from law enforcement and local countries. Then they detect and monitor it with both military and law enforcement capability, and then hand that vessel off to either a domestic capability within a Central American country or to an international vessel, who then detains those operators and then moves them to prosecution within the United States or domestically.

It's become a very effective organization and a great model. In fact, it has representatives from countries and law enforcement throughout Latin America, but also Europe, because we see a connection across the Atlantic as well.

Senator CORNYN. Admiral, what could we learn from what's happening in SOUTHCOM to enhance capabilities for law enforcement and our Federal agencies?

Admiral WINNEFELD. First of all, I would say JIATF-South is a very good model. It may not be a perfect model for what you would do inside the Homeland, because there are different legal requirements inside our own country, as opposed to outside.

Senator CORNYN. Hence the point you made about the importance of a civilian lead?

Admiral WINNEFELD. Exactly, and of course, we would be very happy to have a civilian lead of an organization like that. The last person who should lead something inside the Homeland that has to do with law enforcement is DOD.

I believe that we're migrating slowly in that direction. The EPIC is an organization that continues to evolve positively, in a positive direction. There's the newly created Border Intelligence Fusion Section (BIFS), down with the EPIC, that is starting to do some good work.

As I mentioned earlier, we have put 14 of our own international people from JTF-North inside of the BIFS. I think they're doing some good work down there. So we are migrating in that direction. I would characterize it as adults will act their way into a new way of thinking before they'll think their way into a new way of acting. I think that's exactly what's happening down there.

The thing I would want to express is that the individual agencies, law enforcement agencies associated with it, each have their own genuine concerns about what would happen if they were drawn together in one of these entities, that I think they can work their way through over time.

So I support it. I think it's a potential concept that can do good. We're migrating in that direction.

Senator CORNYN. Thank you very much, both of you. I am very concerned that, notwithstanding the efforts that we've tried in the United States to help our Mexican allies with the Merida Initiative, that more needs to be done. We need to find other creative ways to adapt to the threat and to provide the resources.

I think you said, Admiral, the military has the resources, civil law enforcement should take the lead, but we ought to avail our-

selves of the resources, the operational capacity that the military has to try to maximize our impact.

Let me ask you one other question about money. We know that when the drugs come north and are sold there's a challenge of getting the money back to the seller, the original seller, and that raises questions about money-laundering, bulk cash transfers, and the like. What other resources can the U.S. Government apply to help you and our Federal agencies interdict cash that's heading south? It strikes me that that has to be one of the legs of the stool that's perhaps the most vulnerable.

General FRASER. Senator, we are watching the illicit traffic as it comes south, and that's why we're focused on illicit trafficking, not just drug trafficking. It doesn't matter whether it's going north or south; if it's illicit activity, we're going to work with our law enforcement partners to stop that.

We're seeing an increase in bulk cash coming south. There has been a lot of interagency effort. I'm not qualified to do that, to address the money-laundering issues. We're also working with our DOJ, Department of Commerce counterparts, Department of Treasury (DOT), to focus on the financial tracks and use that as opportunities to help us conduct our efforts as well. We're using all means throughout the interagency on a regional basis to address the issue you were talking about.

Admiral WINNEFELD. I would say a couple of things, sir. First, the EPIC is actually doing some pretty good, increasingly improved work in interdicting cash coming south. I was just down there a few weeks ago and they briefed me on one of the operations that they had that managed to interdict some cash coming south in a pickup truck that had been carefully sewn into the seats. It's almost like smuggling drugs. They have to be as careful with cash as they do with the drugs.

I also would say that OSD has provided us with financial resources to allow us to stand up a six-person cell inside my headquarters that's oriented to countering illicit financing, the traffic of cash. The natural bureaucratic and human tendency is to let that operate in a stovepipe and we're going to resist that. We've really pushed these people out—we don't have all six of them yet, but we have, I think, three or four of them. We're pushing them out to work with our interagency partners, DOT, ATF, and the like, to try to make the sum greater than the parts. I think that's a nascent effort that will see some progress as time goes on.

But it's a very difficult problem. We're not moving money electronically here. We're moving it physically, and that's a very hard thing to interdict.

Senator CORNYN. Mr. Chairman, if I may. We've put a lot of assets on things heading north, as we should, and I think we need to continue to expand our efforts to secure our border. But obviously, this is a vulnerability heading south and there's not a similar effort being made there. You don't have the resources. But we need to try to come up with the right answers and resources you need in order to deal with that critical element in drug trafficking, which is to cut off the cash.

Thank you very much.

Chairman LEVIN. Thank you, Senator Cornyn.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

I want to focus on an area first with you, General, if I may, and I want to join in thanking both of you and the men and women under your command for your service and sacrifice to our Nation. Focus on an area that I think is very important, both to SOUTHCOM and to others, particularly the Middle East, where military leadership has proved to be so important, military leadership in other countries, and particularly the leadership of the military of those countries in respecting human rights and values that you have made such a central part of your concern. I want to thank and commend you for recognizing the importance of those values.

I understand that SOUTHCOM has a unique human rights unit dedicated to addressing these issues in military training and cooperation with our allies in Latin America. I'd like to learn more about how this office was established and what you believe can be done to replicate its activities and success in other commands, if you would address that issue, General?

General FRASER. Thank you, Senator. The office has been around for a number of years. It was started in the 1990s as a recognition of the issues and the importance of human rights and the need to address the concern. It has grown and focused over that time frame. It established a human rights initiative. There are 10 member nations who now support that effort.

We conduct training with our partners throughout the region. It is a focus of all our visitors. All our people have to be trained in human rights awareness before they travel into the region, so that they support it.

But our military's partners within the region also understand it. There has been, I think, a real transformation over the last 20 years, at least from my standpoint. They understand their role in a democratic and a civilian-led government. They understand their authorities. They understand the importance of human rights. I hear it discussed routinely throughout.

As we look into other commands, all the COCOMs are focused in this same area. I don't know that the others have a specific office. Ours is a resource for them with what we're doing to support human rights initiatives, and it will continue to be an ongoing focus for us.

Senator BLUMENTHAL. I wonder if you could describe maybe in more specifics how the relationships with other commands, that is commands in other countries in Latin America, fosters the value for human rights? Is it the personal interaction? Is it an institutional interchange?

I know there's a very conscious policy on your part, which again is, I think, extraordinarily important for this Nation, as well as those nations.

General FRASER. It's on multiple levels I would say, Senator. It is at the senior level, where it's discussed. It's at the individual level. It's in the conduct of our men and women as they go down, and that's why the importance of briefing them before they go down on their focus and their conduct, as they also represent the United States throughout the region.

It's in conferences that we hold. But we've had a very deliberate effort in focus with Colombia, in their fight over the last 10 years. They are an important counterpart with us in espousing the role and the importance of human rights in all the forums in which I talk about it, and I have connections—I hear them talking about it more than a lot of other people.

Now, we also work with human rights nongovernmental organizations and have discussions with them here in Washington, here in the United States, but also throughout the region. We look for opportunities to bring those partners together. So it's little efforts on a continuous basis that I think are making the difference.

Admiral WINNEFELD. I was going to ask, within your time, sir, if I could answer also?

Senator BLUMENTHAL. Absolutely.

Admiral WINNEFELD. The Mexican partners that I have are up against a very sophisticated information adversary, who's very skilled at taking almost any incident and turning it into an alleged human rights violation. So they're very cautious about that. I would tell you that they really want to get this right, and they have an insatiable appetite for the types of subject matter expert exchanges that we have with them, where we have to remember that we don't have a perfect record, either. We're eager to share with them our experiences and they're very eager to hear them. They really want to get this right and they're on a good track in Mexico.

Senator BLUMENTHAL. That is a very encouraging part of this story and, unfortunately, perhaps less told or untold. I want to thank you for bringing it to our attention and for pursuing it so aggressively and vigorously, because I think it's very important to the future of our Nation as well as their nations that we support those democratic values and human rights.

I want to also thank you for supporting our National Guard and our Reserves, which in Connecticut are very important to much of what we do. Many of our citizens depend on them and they have a very distinguished record of service to our Nation in Iraq and other parts of the globe, as well as in Connecticut. So I think your emphasis, Admiral, on that Reserve and National Guard component and on clarifying the lines of command, I think, is very important.

I'd like to ask you, because you refer to it in your testimony, about the consequences of failing to fund the fiscal year 2012 budget that the President's proposed, what impact you would see that potential failure as having on their capability and on the relationships to the active service?

Admiral WINNEFELD. I would want to defer to the National Guard Bureau probably to give you a more robust answer to the impact of budgetary issues on their capability. I think there's a good news story in there over the last few years, as I think Secretary Gates has pointed out, that the Guard's equipment status has steadily increased, I think very well. Some of that has to do with the fact that they've done overseas contingency operations. I think it was very much the right thing to do.

In terms of specifics in the 2012 budget regarding the Guard, I want to get back to you for the record on that, sir.

[The information referred to follows:]

North American Aerospace Defense Command and U.S. Northern Command rely on the capabilities of the National Guard to execute our missions, including air sovereignty and ballistic missile defense, among other missions. As a combatant commander, I strongly urge Congress to fully support the fiscal year 2012 President's budget request for the Reserve components. The National Guard Bureau and the Services are best-suited to provide capability impacts resulting from potential adjustments to the fiscal year 2012 budget request.

Senator BLUMENTHAL. One more quick question, if I might, Mr. Chairman.

I have been told, General Fraser, about the relationship between Argentina and Iran concerning the state-sponsored terrorist attack on their Jewish community center that I believe occurred back in 1994, as to some quid pro quo. You may be more familiar with the facts than I, involving Argentina's agreement not to pursue an investigation in return for Iran's economic benefits to Argentina. I wonder if you could comment on those reports?

General FRASER. Senator, I don't have a whole lot more information on that than you do. I know that there are discussions that are ongoing between the Government of Iran and the Government of Argentina. Where and why those are taking place, I don't have any other insight specifically on that. But it is a development that we're watching.

Senator BLUMENTHAL. If you have any additional information, I would appreciate having it.

General FRASER. We'll provide that.

Senator BLUMENTHAL. Thank you very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Blumenthal.

Why don't we just push that one step further and ask you if you would take the initiative to look into that and provide the committee any additional information that Senator Blumenthal has pointed to.

General FRASER. I will do that, Mr. Chairman.

Chairman LEVIN. It's an important subject.

[The information referred to follows:]

The original article first appeared in a March 26, 2011, edition of a prominent Argentine opposition newspaper, regarding an alleged agreement between Iran and Argentina in which Argentina agreed not to pursue an investigation into Iran's involvement in the bombing of the Jewish Cultural Center in Buenos Aires in 1994 in exchange for increased trade. On April 5, 2011, Argentina's Foreign Minister traveled to Israel, where he publicly denied the allegation. I have no information that confirms the existence of such an agreement.

Chairman LEVIN. Senator McCaskill.

Senator MCCASKILL. Thank you, Mr. Chairman.

Let me start, Admiral Winnefeld, by telling you I know that you're in great hands because your deputy commander for the NORTHCOM is a Missourian, Lieutenant General Frank Grass of the Missouri National Guard. So I want to point that out.

I assume that you are participating in the national-level exercise concerning the New Madrid fault that will be occurring later in May. Obviously, with earthquakes on the minds of everyone in the world after what happened in Japan, clearly that's something that's very important where I come from, is national-level exercises to deal with a potential earthquake which, frankly, was the most

serious earthquake we've ever had in the United States, was the New Madrid fault. So I thank you for that.

Let me start quickly with both of you. The Secretary of Defense has asked the branches of the military to look at $100 billion in cuts through the efficiencies program. Can both of you briefly give me what your top-line cuts are that you've been able to identify for the Secretary of Defense in your commands?

General FRASER. Thanks, Senator. Ours were, because we're a level of effort command, pretty straightforward. We looked at some conference costs and how many conferences and what we were doing. We looked at some TDY expenses, what we were doing there. Then we took some small efforts, if you will, into some other areas.

So it was really on a fairly small basis, about $20 million is what we worked through that effort. But we also got, as we looked through the entire focus, some support and improved some capacity as we looked at continuing to support our over-the-horizon radar, as we looked at support for ISR capacity we have. So it was a give-and-take throughout that.

Senator MCCASKILL. Did you take more than you gave?

General FRASER. Ma'am, overall I think we did.

Senator MCCASKILL. Okay. If you could get those numbers for us specifically, that would be helpful.

General FRASER. Yes, ma'am. We'll provide them.

[The information referred to follows:]

General FRASER. U.S. Southern Command's (SOUTHCOM) top-line cuts for Secretary of Defense Efficiencies totaled $9 million for fiscal year 2012 and were:

(a) ($3.9 million) Reduction of foreign military interaction exercises by conducting command post (virtual) exercises every other year vice conducting some annual exercises.
(b) ($2.5 million) Reduction of Operation Southern Voice by eliminating some analyses and assessment activities without degrading mission accomplishment.
(c) ($2.4 million) Reduction in travel and conference costs by reducing travel for headquarters personnel by 30 percent, reducing the number of SOUTHCOM-sponsored conferences by 50 percent, and minimizing the number of personnel who travel to conferences.
(d) ($.2 million) Reduction of personnel recovery and force protection by eliminating support of one country which has reduced theater cooperation activities.

Admiral WINNEFELD. The North American Aerospace Defense Command and U.S. Northern Command topline reduction between the fiscal year 2011 and fiscal year 2012 President's budget related to the Secretary of Defense Efficiency program is $25.4 million. These funds were intended to pay for costs related to existing military and civilian positions eliminated as part of the efficiency review, existing support contractors, and an expected growth of civilian positions.

Senator MCCASKILL. Admiral?

Admiral WINNEFELD. I'd also like to provide the numbers for the record. But I can say that as I stepped in as the new commander 10 months ago, I felt as any new commander would a responsibility to look across the organization to see if there were ways we could become more efficient. This coincided with the initiative that came out later, late last summer, to do this among the COCOMs.

Of course, the Services are taking the lion's share of the effort in finding the savings. But we were tasked to do it as well. We have come up with I think it's numbering in the 60s of people that we have determined we can probably live without and transition

those billets into other types of organizations. So I think 40 of those are military personnel who will be absorbed back into the Services. They won't lose their jobs, but I just will not have them in the headquarters any more. The same thing on the civilian side.

So we're working very hard to become more efficient. We know we have to be good stewards of taxpayers' dollars. Even though our numbers are small compared to the Services, we need to do our part.

Senator MCCASKILL. I think that this exercise has been helpful. I'm not convinced that all of the $100 billion that's been identified all needs to go back in, but I know that the $78 billion that the Secretary of Defense identified at DOD is something that we can, I think, work towards cutting.

I do think that there is—I am a big believer in some of the things that the Secretary of Defense said about brass creep, about making a flatter organization, about taking a different attitude about how many people we have where and are they all essential, have we puffed up, so to speak, some of our tasks.

Let me go to fighting drugs. We had a hearing in my Ad Hoc Subcommittee on Contracting Oversight of the Committee on Homeland Security and Governmental Affairs in 2009 and it was revealed that over a 4-year period, DOS and DOD spent over $1.1 billion on contracts to U.S. businesses conducting counternarcotics activities in Colombia alone. We are trying to get additional information on this contract spending. It didn't appear at that hearing that there was a good handle on performance measures, what was actually going on. Frankly, a lot of the same companies are resurfacing with very big contracts in Afghanistan.

If you look at overall the amount of money that we've spent on counternarcotics funding, it's ranged in the last couple of years and for the budget next year between $3 billion and $2.6 billion. That's combining DOS and DOD. Now, I don't even have in those numbers what we're doing at DOJ and the Drug Enforcement Administration (DEA) and so forth.

Could I get comments from you? Are you comfortable that if we did a really aggressive hearing and scrub at what we're spending with private contractors that the American taxpayers would be pleased?

General FRASER. Senator McCaskill, from my standpoint, yes, ma'am. As you have looked into this, we have looked into it very deliberately also, for all the right reasons. We continue to focus on that. A lot of the support that we provide to Colombia and we provide with other parts of our counternarcotics effort are contracted focused, and we have a contracting Center of Excellence that really focuses on this effort and makes sure that we have accountability for those efforts and activities and that we're getting value for our dollar. So we are very focused on this, and I'm happy to have a discussion at a more detailed level with you.

Senator MCCASKILL. It's confusing to me. Do you feel it's clear in your mind the different functions between DOS, USAID, DOD, and DEA? Do you think that everybody knows exactly what the other guy's job is in regards to this effort?

General FRASER. Senator, within Colombia specifically there is daily coordination between all those organizations within the em-

bassy country team. There's very clear understanding of what each is doing and why they're doing it and how it supports one another's efforts. So I'm very comfortable in their focus and I'm very comfortable in their coordination to do this.

I see that throughout the rest of government as we focus this. We do have a very clear understanding within our country teams and within our organization as well. We have representatives from USAID within our staff. We have representatives from Federal law enforcement within our staff. We coordinate those on a very routine basis.

Senator MCCASKILL. I wish I were as confident as you are that everyone knows what everyone's job is and there's no—part of the problem is, of course, is we've gone back and forth between is this a DOS function, is this a DOD function. We've seen that with training of police. We've seen that with trying to use contracts, different places to augment the things that we needed in contingencies versus what's going on in South America.

I'm going to continue to drill down in this area and will look forward to both of your cooperation, because my sense is that there's money to be saved there and there's efficiencies that can still be gained in terms of how we are mounting this effort, the overlap, and the lack of consistency as to who's in charge and why.

I appreciate both of you and all the people under your command and thank everyone for their service to our Nation.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCaskill.

I have a few more questions so we will start a second round.

General, a number of questions have been asked about these semi- and fully-submersible vessels that are being tracked, operating out of, I guess, Central and South America. When they are detected and monitored and when it looks as though they're going to land or deliver their cargo to some other ship, is that information then turned over to the Coast Guard? Is that the way it works?

General FRASER. Yes, sir. It is an interagency group that does that. That is JIATF-South. So the Coast Guard is a part of that, as well as the service organizations, as well as law enforcement. That information, if it's a host nation or a domestic capability from one of our partner nations who can intercept, that information is provided directly to their command centers and then they work to intercept and detain the vessel.

So it depends on whether it's in international waters or territorial waters on who's contacted and how the information is passed. But it is law enforcement that's responsible for detaining and then prosecuting those individuals.

Chairman LEVIN. Are there many cases where that information is turned over to the Coast Guard?

General FRASER. On a routine basis.

Chairman LEVIN. It happens all the time?

General FRASER. Yes, sir, that happens on a daily basis.

Chairman LEVIN. What percentage of the cases would you say results in an arrest? Most, a few?

General FRASER. Senator, I don't have a specific number. I will give you that for the record.

[The information referred to follows:]

Since the first self-propelled semi-submersible (SPSS) was detected in 2006, there have been 174 SPSS and 2 self-propelled fully-submersible events documented. A total of 30 events have been disrupted with 9 resulting in rescue, and 21 resulting in detention of the crew. An additional six SPSSs were reportedly lost at sea and were never detected by detection and monitoring assets.

Chairman LEVIN. Just with our Coast Guard.

General FRASER. Yes, sir.

Chairman LEVIN. Okay.

We have cooperation with Cubans on matters of mutual interest, particularly going after narcotics; is that correct?

General FRASER. Yes, sir. There is coordination between U.S. Coast Guard and the border patrol from Cuba.

Chairman LEVIN. The Cubans I gather are cooperative in terms of trying to get the narcotic traffickers; is that accurate?

General FRASER. Senator, I don't know what their efforts are within Cuba. But the coordination—when there is a transit that is leaving Cuba towards the United States, there is coordination with a U.S. Coast Guard representative who is resident within the U.S. interest section in Havana. That information is exchanged.

Chairman LEVIN. As far as you know, is that a cooperative relationship?

General FRASER. Yes, sir, it is a cooperative relationship.

Chairman LEVIN. Relative to SOUTHCOM's requirement for U.S. Special Operations Forces, is the requirement being met?

General FRASER. Senator, yes, it is being met.

Chairman LEVIN. Okay. General, you've indicated that there's a big focus in Colombia on espousing human rights. I want to talk to you about a problem that we have down there in terms of the killing of union officials and bringing the killers to justice, because the record's not very good. Is that part of the human rights effort that we work with the Colombians about?

General FRASER. Senator, we have worked very diligently and the Colombians continue to do that. They have a human rights education process within their own organization, talking from a military standpoint. There was an incident about 6 months ago where there was killing of some young individuals by some soldiers. The Colombian army, the Colombian military, the Colombian minister of defense, attacked that issue very deliberately and arrested and continues that prosecution.

We have worked with the Colombians on establishing rules of engagement, rules for the use of force, as they work throughout. So I see a continued effort to focus on it. But much like we, they don't have a perfect record, and we don't have a perfect record as you look at some of these issues. But their focus on it continues and they continue to make progress.

Chairman LEVIN. Do you know what their record is in terms of bringing to justice the murderers of union officials?

General FRASER. I don't have that, no, sir.

Chairman LEVIN. Admiral, relative to Cyber Command, you said in your prepared statement that you're closely examining the role NORTHCOM would play in response to a cyber attack, in order to synchronize our efforts with the STRATCOM and the Cyber Command; and that you view your role as assisting the lead Federal

agency in mitigating the physical effects of such an event, while staying close to our partners working in the cyber domain.

What would NORTHCOM do beyond what the Cyber Command would do in the event of a cyber attack?

Admiral WINNEFELD. I think it depends, obviously, on the nature of the attack. If it were an attack, for instance, that took down a significant portion of the electrical grid and if it took that grid down for an extended period of time, we would start to see some pretty serious physical effects inside the country. When you can't pump gas out of a gas station, the transportation network starts to break down. When you can't pump fresh water, that sort of thing starts to happen.

So we would probably find ourselves in some fairly basic physical roles of transportation and support, just using the capacities that we have as a military applied to a serious problem like that.

In terms of the cyber response, though, we really have resisted the temptation at NORTHCOM to become a cyber command, to be the lead military agency in support of the lead Federal agency. We've left that to General Alexander and Cyber Command. But we have a good, close, cooperative working relationship with them.

Chairman LEVIN. Admiral, relative to those two flight tests of the GMD system that failed, do you support the need to take the time to understand and to fix the problem, to conduct whatever testing is necessary to confirm the fix, and to demonstrate that the system works?

Admiral WINNEFELD. Absolutely.

Chairman LEVIN. Whatever time it takes?

Admiral WINNEFELD. Yes, sir. I give General O'Reilly a lot of credit. It would be tempting to stop at the first thing you find wrong in any given test failure, and he's going beyond that. This is why I think it's going to take him a little bit longer to fully dissect what occurred.

I watched that test personally. It was going amazingly well until the last 10 seconds. It was very frustrating. But I think he has a good handle on what the problem was, and I do believe we need to do subsequent tests.

Chairman LEVIN. I hope you'll continue to take that position, because there's been too much pressure to move the system before it was operationally effective and proven to be operationally effective, and it's had some real costs as a result. These decisions with missile defense ought to be made like any other system. We ought to make sure that it works before we deploy them, and I hope that you will continue to take the position that you're going to make sure that you fix the problems before we continue to manufacture and deploy.

Okay, is that fair enough?

Admiral WINNEFELD. Yes, sir. I would point out that the missiles that failed were a new and upgraded version of the current missiles we have. So based on the test results from the existing what we call Capability Enhancement-1 (CE–1) missiles, I have a lot of confidence in the system. Don't have confidence yet in the CE–2 system, as you point out. I fully support the appropriate type of testing that General O'Reilly will want to do.

Chairman LEVIN. We thank you both very much again for your being here this morning and for your great service and the great service of the men and women with whom you work. We will stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

DUAL STATUS COMMANDERS

1. Senator LEVIN. Admiral Winnefeld, at the hearing you discussed the "dual-status commander" initiative for improving the cooperation and coordination of Federal and State military forces to respond to a natural disaster. Could you explain the details of how the dual-status commander concept would work in practice, using an example of the types of Federal and State officers and chains of command involved?

Admiral WINNEFELD. The Contingency Dual Status Commander (CDSC) concept aims to achieve unity of effort over military operations by placing one military officer as commander of National Guard forces operating under State control in a title 32, U.S. Code status, or State Active Duty status, and over military forces under Federal control in a title 10, U.S.C. status. In this capacity, the designated CDSC will serve as an intermediate link in two distinct chains of command flowing from different authorities. Under this arrangement, Federal and State military forces have separate chains of command that intersect in the person appointed as the CDSC. Command authority within each of the separate chains of command may be exercised by the appointed CDSC through the separate chains of command. While acting pursuant to State authority, the commander may issue orders only to State military forces; while acting pursuant to Federal authority, the commander may issue orders only to Federal military forces. As such, the establishment of a CDSC does not give the President command of State military forces, or the Governor of a State command of Federal military forces.

EXO-ATMOSPHERIC KILL VEHICLE

2. Senator LEVIN. Admiral Winnefeld, you are the combatant commander with operational responsibility for the Ground-based Midcourse Defense (GMD) system to defend the Homeland against limited missile attack from nations such as North Korea and Iran. The last two flight tests of the GMD system failed. The Missile Defense Agency (MDA) is working to understand and fix the problem, and plans to conduct two flight tests to verify and demonstrate that the problem has been fixed. Until the fix has been verified, MDA has halted production of the Exo-atmospheric Kill Vehicle (EKV) that experienced the problem. Do you agree with the MDA that we should make sure the problem is fixed before resuming production of the EKV that failed in the flight tests?

Admiral WINNEFELD. Yes, I agree with the MDA decision. I think it is good stewardship to fix the EKV problems now on the production line, rather than potentially needing to invest additional dollars in the future to repair faulty EKVs.

JOINT NORTH AMERICAN AEROSPACE DEFENSE COMMAND EXERCISE WITH RUSSIA

3. Senator LEVIN. Admiral Winnefeld, your prepared statement mentions a first-time joint exercise North American Aerospace Defense Command (NORAD) conducted last year with Russia, called Vigilant Eagle, in which each side practiced passing control for monitoring and escorting a simulated hijacked aircraft into each other's airspace. Your statement says that exercise was an "overwhelming success and has helped create an environment for further cooperative efforts." What do you see as the benefits of such cooperation, and are you planning similar cooperative efforts with Russia?

Admiral WINNEFELD. We are building on the success of last year's Vigilant Eagle exercise to plan and conduct a similar event in August 2011 involving NORAD and the Russian Federation Air Force. I recently held detailed discussions on this exercise in my Headquarters with my Russian counterpart, General Zelin, and he too was pleased with the results of last year's event, and looking forward to a repeat performance this year.

The benefits we realize from this type of event are significant. The exercises are by their very nature complicated, requiring high levels of synchronization between NORAD and the Russian Federation Air Force. As a result, this process by itself

opens up new avenues for discussion and cooperation, establishes long-term contacts, and fosters better understanding among our governments, and especially among our militaries. These open lines of communication help our respective militaries avoid misunderstandings that can result in heightened tension and unintended consequences. Vigilant Eagle is a symbol of what can be achieved using an incremental, stepping-stone process—each event building on the success of the prior year's effort—which I hope over time will lead to even greater levels of openness and cooperation between our nations.

RECOMMENDATIONS FROM THE INDEPENDENT REVIEW RELATED TO FORT HOOD

4. Senator LEVIN. Admiral Winnefeld, your prepared testimony says that U.S. Northern Command (NORTHCOM) is "fully implementing the relevant recommendations of the Department of Defense (DOD) Independent Review Related to Fort Hood." What are the specific recommendations you are implementing?

Admiral WINNEFELD. We are implementing the following recommendations:

- Recommendation 3.6, Create a Process for Sharing Real-Time Force Protection Event Information Among Installations
- Recommendation 4.5, Develop an Operational Approach that sets Force Protection Conditions (FPCON) Appropriately

Per these recommendations, the Secretary of Defense tasked that, "By April 2011, Combatant Commands will ensure there is an unclassified means to notify all DOD facilities within their Area of Responsibility (AOR) of a FPCON change."

In September 2010, I directed the use of the Automated Notification and Recall System as NORTHCOM's mass notification means of addressing this task. This web-based mass notification system is now populated with the phone numbers and email addresses of over 500 DOD installation Emergency Operations Centers, DOD leased facilities, organizations, and emergency services points of contact; as needed, it is ready to immediately send out FPCON change information or FP-related event information via telephone and email.

We have tested this system five times since October 2010. The final test was conducted on 22 March 2011, with 100 percent of all TACON for FP subordinates confirming receipt of the test message; most within 7 minutes of initial notification. (Note: The 7-minute figure includes the DOD Agencies and Field Activities. All four of the Service components responded in less than 2 minutes).

ELECTRICAL GRID SECURITY

5. Senator LEVIN. Admiral Winnefeld, your prepared testimony states that, with respect to its counterterrorism mission, NORTHCOM has a responsibility to "ensure military infrastructure across our AOR is properly postured to mitigate and prevent potential terrorist attacks." As part of this responsibility, does NORTHCOM monitor risks to the electrical grid that supplies power to U.S. military facilities and critical infrastructure?

Admiral WINNEFELD. On a daily basis, we monitor events across the NORTHCOM AOR and evaluate the information for potential impacts on DOD missions and supporting infrastructure. This includes impacts from the electric grid. We collaborate with our Department of Energy (DOE) and Department of Homeland Security (DHS) partners through venues such as the DOD Energy Grid Security Executive Council (EGSEC) to evaluate the health of the electric grid. We are also in the process of developing near real-time information sharing with the Federal Energy Regulatory Commission on the status of the electric grid across the Nation.

Additionally, the NORTHCOM Cyber Fusion Center is constantly monitoring risks to global data networks for impact on our NORAD and NORTHCOM enterprise, while paying close attention to potential risks to the electric grid industrial control systems that could impact our mission sets. We receive this information from organizations that lead these efforts, such as the Defense Cyber Crime Center or DHS Industrial Control Systems Cyber Emergency Response Team, then analyze for NORAD and NORTHCOM impacts and equities, and share it with our other mission partners to enhance the cyber security posture or our mission sets.

6. Senator LEVIN. Admiral Winnefeld, what actions, including any training and exercises, is NORTHCOM taking to mitigate and prevent potential risks to the electrical grid that would degrade the capabilities of U.S. military facilities and critical infrastructure?

Admiral WINNEFELD. NORTHCOM is actively engaged in a number of interagency activities to mitigate potential risks to the electric grid and related impacts to national security and military readiness. Some examples are:

1. NORTHCOM is a member of the EGSEC, which serves as a forum for the exchange of information on energy grid security issues. The EGSEC is co-chaired by the assistant Secretary of Defense (Homeland Defense and Americas' Security Affairs), assistant Secretary of Defense (Operational Energy Plans and Programs), and Deputy Under Secretary of Defense (Installations and Environment). We also support the Technical Working Group, a subcommittee of the EGSEC, on developing assessment methodology for critical infrastructure interdependencies. We are working closely with the Mission Assurance Division at the Naval Surface Warfare Center in Dahlgren, VA in their Energy Security Case Studies to identify the systemic vulnerabilities of the DOD regarding the commercial electricity sector and appropriate mitigating solutions.
2. We have also stood up an Electric Energy Security Working Group to investigate and evaluate issues that relate to potential impacts of the electric grid on DOD mission assurance.
3. U.S. Pacific Command and NORTHCOM are co-sponsoring a fiscal year 2011 Joint Capabilities Technology Demonstration to demonstrate a cyber-secure electric grid security architecture in partnership with DOE and DHS.
4. 2011 Secure Grid Table Top Exercise (TTX), led by DHS and co-sponsored by DOE and DOD (NORTHCOM supporting), will focus on Geomagnetic Disturbances due to a solar storm and its impact on the Power Grid in September 2011 at the National Defense University (NDU).
5. 2010 Secure Grid TTX, jointly hosted by NORAD and NORTHCOM in July 2010, examined crisis and consequence management related to a prolonged electrical outage (6 weeks) resulting from a domestic cyber attack on the Colorado electric grid. The TTX was attended by more than 100 participants representing both public and private interests at the State, local, and Federal levels. This TTX examined industry's requirement for Federal support and NORTHCOM's ability to deliver capabilities in accordance with the National Response Framework and NORTHCOM Concept Plan 3501, Defense Support of Civil Authorities. The TTX further explored ways to reduce the impact of a prolonged electricity outage on NORAD and NORTHCOM operational readiness. Significant findings were compiled into a subsequent After Action Report and entered into the DOD Joint Lessons Learned Information System for corrective action and further investigation. NORAD and NORTHCOM continue to support the Secure Grid series of energy reliability exercises in partnership with the DHS, DOE, and NDU.
6. In May 2006, the NORAD and NORTHCOM Directorate of Training and Exercise sponsored an Electric Power Grid Terrorism TTX. The Electric Power Grid Terrorism TTX was a scenario-driven, facilitated discussion providing a forum for military, interagency and private sector participants to build relationships, refine coordination procedures, and deconflict responsibilities relating to major power outages of such a magnitude as to require DOD consequence mitigation support.

TROPAS GUARDA FRONTERAS

7. Senator LEVIN. General Fraser, the relationship the United States enjoys with the Cuban Ministry of Interior's Counternarcotics Unit, known as the Tropas Guarda Fronteras, is positive. The Cubans are eager to expand their cooperation with the United States in areas of mutual interest, such as search and rescue operations, migration operations, and counternarcotics operations. What is your view regarding increased cooperation with the Cubans on matters of mutual interest?

General FRASER. I view increased cooperation with the Cubans on matters of mutual interest as a positive step toward better achieving our strategic objectives. Two potential areas of increased cooperation are counter illicit trafficking and disaster preparedness/disaster relief activities, which could better prepare both our Nations to respond to regional disasters.

8. Senator LEVIN. General Fraser, could offering the Cubans the opportunity to place a liaison officer at Joint Interagency Task Force-South (JIATF–S) in Key West, FL, help expand cooperation efforts between the United States and Cuba further?

General FRASER. Historically the flow of illicit contraband into Cuba has not met the threshold to request a Cuban liaison officer for JIATF–S. The last documented

illicit trafficking event involving Cuba was in 2006. As with all countries in the JIATF–S Joint Operating Area, if the situation changes and Cuba becomes a center of illicit trafficking, JIATF–S will reevaluate the need for a liaison officer.

FINANCIAL SUPPORT TO MEXICO AND CENTRAL AMERICA

9. Senator LEVIN. General Fraser and Admiral Winnefeld, both of your prepared statements discuss the increasingly dangerous region along the southern border of Mexico and the devastating impact transnational criminal organizations (TCO) are having on the people and security of southern Mexico, Guatemala, Belize, Honduras, and El Salvador. The United States has increased its assistance in this region, but—to date—the DOD has had only a small role. Each year since 2005, the National Defense Authorization Act (NDAA) has provided DOD with an expanded counternarcotics authority to support the Colombian military and law enforcement in their efforts to counter the role of TCOs and insurgent groups. Do your respective commands have the authorities needed to support host nation military and law enforcement efforts in Central America?

General FRASER. Our authorities are adequate to conduct more traditional support however, as we explore options on how the authorities can be modified, I think we'll see that they can be improved. We are currently reviewing whether SOUTHCOM would benefit from an expansion of current counternarcotic (CN) authorities contained in the NDAAs in terms of permitted forms of support under Section 1004 and expansion of Section 1021 authorities to other Latin American states.

Admiral WINNEFELD. NORTHCOM has adequate authorities to conduct the missions assigned. NORTHCOM is providing support to Mexico as our neighbor and partner nation. We have sufficient authorities to continue working closely together to succeed in disrupting TCOs.

QUESTIONS SUBMITTED BY SENATOR KIRSTEN E. GILLIBRAND

NATIONAL GUARD

10. Senator GILLIBRAND. Admiral Winnefeld, in Admiral Mullen's National Military Strategy published earlier this year he stated, "We will continue to dedicate, fund, and train a portion of the National Guard for Homeland defense and defense support of civil authorities. Working with Canada and Mexico, we will remain prepared to deter and defeat direct threats to our North American Homeland." What is your assessment of the terrorist infiltration threat along our northern border?

Admiral WINNEFELD. [Deleted.]

11. Senator GILLIBRAND. Admiral Winnefeld, I was very interested in the discussion of dual-hatting the Reserves in order to enable them to support domestic emergency needs. Given that cybersecurity is inherently both a domestic and national security issue, as evidenced by the Memorandum of Understanding (MOU) between DOD and DHS, do you expect that such dual-hatting for cyber attacks on our key infrastructure sectors would be appropriate?

Admiral WINNEFELD. Although we have not yet explored this concept with U.S. Strategic Command (STRATCOM), there may be instances where using a Dual Status Commander to mitigate the results of a cyber attack on civilian key infrastructure would be appropriate. The DHS–DOD Memorandum regarding Cybersecurity addresses support provided by DOD to DHS, which is the Federal agency lead for cybersecurity. For a purely cyber incident, the lead Combatant Command would more likely be STRATCOM, with expertise provided by their subordinate command (U.S. Cyber Command (CYBERCOM)). Since the National Guard in the States has cyberspace operational expertise, they could have the capacity to provide Defense Support of Civil Authorities for cyber incidents within the State. Thus, in this situation, STRATCOM/CYBERCOM may choose to establish the CDSC relationship between their Title 10 Federal forces with cyberspace capabilities and those of a State's National Guard. Therefore, the simultaneous Title 10 civil support for cyberspace by STRATCOM/CYBERCOM and the State National Guard support could conceivably be commanded and controlled by a Dual Status Commander.

12. Senator GILLIBRAND. Admiral Winnefeld, might this be an issue that could be raised with the Council of Governors?

Admiral WINNEFELD. Yes, the issue of a CDSC relationship between Title 10 Federal forces and a State's National Guard for cyber incidents could be raised with

the Council of Governors. Within DOD, this would also need to be discussed with STRATCOM and their subordinate command, CYBERCOM.

WIND FARMS

13. Senator GILLIBRAND. Admiral Winnefeld, you stated that you are "watching closely the pace of wind farm development. Increases in the number of wind farms raise the likelihood that radar signals vital to our ability to protect the national airspace will be obstructed. We believe enabling the construction of alternative energy sources and conducting our national defense mission are not mutually exclusive ..." Your testimony further supports development of "technical solutions, and future surveillance infrastructure that will provide both national security and renewable energy at the same time." I am very pleased that this is DOD's policy since there are wind farms close to Fort Drum, NY, and my office has been briefed by experts in the radar field on a low cost radar system that mitigates the operational issue caused by wind turbine clutter. Would you agree that the immediate testing and evaluation of this radar system be performed with the results subsequently shared with this committee?

Admiral WINNEFELD. I am encouraged by recent technological innovations and I agree they should be evaluated and, if warranted, endorsed by DOD. We should continue to conduct research and development this area. In many cases, a solution for one sensor does not transfer to another type of sensor. However, DOD continues to evaluate emerging technical solutions that show promise in mitigating risks to military missions from wind turbine radar interference.

GROUND-BASED MIDCOURSE DEFENSE

14. Senator GILLIBRAND. Admiral Winnefeld, you are the combatant commander responsible for the operation of the GMD system to defend the United States against limited ballistic missile attack from countries such as North Korea and Iran. I was pleased to learn that Fort Drum is under consideration as the deployment site for the planned GMD In-Flight Interceptor Communications System Data Terminal (IDT) on the east coast that was included in the President's fiscal year 2012 budget request. Do you know when a final basing decision for the east coast IDT will be made and when the system is planned to be operational?

Admiral WINNEFELD. The Department has selected Fort Drum as the deployment site for the planned East Coast IDT. Based on the President's fiscal year 2012 budget request, the East Coast IDT should achieve initial operational capability in 2015.

HOMELAND SECURITY

15. Senator GILLIBRAND. Admiral Winnefeld, I would like to hear what we are doing to leverage similar or similarly situated missions carried out by DOD and DHS to increase efficiencies and cut costs without compromising security or law enforcement. For example, on New York's northern border, we have the Niagara Air Reserve Station, while the Customs and Border Patrol operates in the same area and is likely to have a need for runways and other facilities. Are you aware of other institutions under your command where DOD and DHS missions are collocated?

Admiral WINNEFELD. There are no institutions under my command where DOD and DHS are collocated; however, there are numerous instances of where DOD and DHS units share the same facility. For example:

- Joint Base Charleston, which is comprised of Air Force, Navy, Army, Marine Corps, Coast Guard, Homeland Security, and other DOD missions—all working together in the global fight against terrorism
- Selfridge Air National Guard Base, which is home to DHS's Operational Integration Center. The center provides a centralized location for Customs and Border Protection, along with Federal, state, local and international partners, to gather, analyze and disseminate operational and strategic data in the Great Lakes region of the Northern border for use by frontline agents and officers.

While NORAD and NORTHCOM do not have units collocated with Department of DHS assets on a permanent basis, throughout DOD and DHS, there are continuous planning and evaluation efforts ongoing, which result in collocated capabilities during disaster response. By way of illustration, DOD installations are used as Base Support Installations, Interagency Incident Support Bases, and as Modular Airborne Firefighting Systems operating bases in support of DHS or other primary agencies

for contingency responses. Most recently, DOD provided installation support in response to Federal Emergency Management Agency mission assignments for severe winter weather response efforts to preposition equipment and Federal personnel.

16. Senator GILLIBRAND. Admiral Winnefeld, what would you see as the benefit of such co-location at Niagara?

Admiral WINNEFELD. I believe the benefit of any colocation decision at Niagara would need to be based on an assessment of the current threat, mission requirements, synergy of operations, and fiscal constraints.

IRAN

17. Senator GILLIBRAND. General Fraser, I am concerned by your testimony with respect to Iran's growing contacts and institutions in Latin America. Can you please list the locations of Iran's missions, their purpose, and any credible evidence of Iranian military activities in the countries involved?

General FRASER. Iran continues to expand its regional diplomatic initiatives and seeks to impede U.S. and European international sanctions to allow its nuclear enrichment program to succeed. Long term, Iran will continue to seek financial, energy, and military engagements in Latin America.

Iran has 10 embassies in Latin America and the Caribbean (Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Ecuador, Nicaragua, Uruguay, Venezuela) an increase of 6 since 2005, and has diplomatic ties with St. Vincent and Grenadines. Iran's Ambassador to Mexico is also a nonresident ambassador to a majority of Central American countries. Iranians can travel to Bolivia, Ecuador, Guyana, Venezuela, and Central America without a visa.

Since 2008, Iran has nearly doubled its socio-cultural efforts. Iran funds 40 Shi'a mosques and/or cultural centers in 17 countries in the region. Since 2005, Iran has pursued arms deal with Latin America.

Combined, Argentina and Brazil account for 94 percent of Latin America's trade with Iran totaling over U.S. $2 billion. Venezuela replaced Ecuador as Iran's third-largest trading partner in the region. Traditionally, most Caribbean, Central and South American countries do not conduct major trade with Iran.

QUESTION SUBMITTED BY SENATOR KELLY AYOTTE

ARGENTINA

18. Senator AYOTTE. General Fraser, could you please describe the nature and status of U.S. Southern Command's (SOUTHCOM) interaction with the Argentine military. Please include a detailed list of SOUTHCOM's contributions to Argentina (e.g., exercises, training). The list should clearly delineate how Argentina benefits from this support and how much SOUTHCOM's support to Argentina costs the U.S. taxpayers in fiscal years 2009 and 2010.

General FRASER. SOUTHCOM's interaction with the Argentine military has traditionally embraced a wide gamut of engagement activities, ranging from exercises (Peacekeeping Operations, Humanitarian Assistance/Disaster Relief, Search and Rescue, etc.) to conferences, seminars and programmed staff talks (i.e., between the Joint Chiefs of Staff and equivalent, and the Office of the Secretary of Defense and equivalent). However, since 2003, those engagements activities have been greatly curtailed due to Argentine political considerations and Argentine legal and funding constraints. SOUTHCOM activity with Argentina cost approximately $2.1 million in fiscal year 2009 and $1.8 million in fiscal year 2010 (a list of activities is provided in an attachment). From this support, Argentina has benefited in educational and training opportunities not otherwise available, increased professional military education/professional development, increased access to science and technology expertise, and enhanced interoperability.

USSOUTHCOM INTERACTION WITH THE ARGENTINE MILITARY

$M	FY09	FY10
EXERCISES TOTAL	**0.9**	**0.6**
PKO AMERICAS		
UNITAS		
FA PANAMAX		
FUERZAS COMMANDO		
SOUTHERN EXCHANGE		
CONFERENCES/SEMINARS/STAFF TALKS TOTAL	**0.3**	**0.3**
Conferences		
Orientation/Senior Officer Visits		
Subject Matter Expert Exchange		
IMET TOTAL	**0.9**	**0.9**
GRAND TOTAL	**2.1**	**1.8**

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

INSTABILITY IN MEXICO

19. Senator CORNYN. Admiral Winnefeld, cartel-driven violence in Mexico continues to rage. You mentioned in your prepared statement that over 34,000 Mexicans have lost their lives in the last 4 years as the Government of Mexico and the Mexican military have courageously taken up the fight against the drug cartels, the so-called TCO. This is clearly a terrible situation, both for Mexico and the United States. What is the Mexican Government currently doing, militarily and otherwise, to address this very serious problem?

Admiral WINNEFELD. President Calderon and the Mexican Government have displayed extraordinary courage in their efforts to combat difficult transnational organized crime challenges. They recognize this struggle is about the future of Mexico and their efforts have achieved some significant successes. In addition, their military has been directed by President Calderon to support law enforcement in this struggle and they are aggressively engaged in the land, maritime, and air domains. Overall, the Mexican Government is employing a multi-pronged, interagency approach to eliminate the TCO leadership, disrupt their networks, reform Mexico's judicial system, and transform the police force. Some highlights of these efforts follow:

- Mexican military and Federal police force are conducing intelligence-driven operations to disrupt TCO activities and fracture their organizational structures. They have apprehended 20 key TCO leaders over the past year. While these actions have resulted in an increase in violence directed at Mexican law enforcement and military forces, in the longer term, these activities show great promise in diminishing the capabilities of the TCOs.
- President Calderon has transformed local police departments into unified commands that are more cohesive and professional forces, which in large measure resulted in the October 2010 confiscation of 134 metric tons of marijuana—one of the largest seizures to date.
- Mexican Congress has passed legislation to impose tougher penalties for trafficking crimes, tightening control on money laundering and toughening forfeiture laws.

- The Mexican Government is also working closely with our government to reduce the volume of illicit weapons and cash flowing south from the United States into Mexico.

20. Senator CORNYN. Admiral Winnefeld, General Barry R. McCaffrey, USA (Ret.), former commander of SOUTHCOM and U.S. Drug Czar, released a report in December 2008 regarding his visit to Mexico to assess first-hand the impact of the Mexican drug cartels. General McCaffrey, in his report, warned that the incoming Obama administration should have immediately focused on the dangerous and worsening problems in Mexico, "which fundamentally threaten U.S. national security." He went on to predict that, "before the next 8 years are passed—the violent, warring collection of criminal drug cartels could . . . establish de facto control over broad regions of northern Mexico." Although this report is 2 years old, I believe General McCaffrey's findings and analyses remain relevant and accurate. What do you see as the risks to our own national security if the Mexican drug cartels are not defeated?

Admiral WINNEFELD. I believe it is in our interest as a nation to have secure, stable, and prosperous neighbors. The drug trade does not respect borders or national sovereignty. It is a transnational, trans-border problem that must be approached in a holistic, interagency manner, taking into account the regional and international nature of the problem. The TCOs currently operate in 270 U.S. cities; gangs are in 2,500 U.S. cities with total gang members exceeding 900,000 and we are seeing Latin American gangs push out traditional American gangs. We have not seen a spillover of violence from Mexico yet; however, the threat of violence is ubiquitous. The demand for illegal drugs in the United States continues unabated despite the dire consequences. According to the Office of National Drug Control Policy, nearly 40,000 people die each year of drug-induced causes and the economic cost to our Nation exceeds $180 billion annually.

21. Senator CORNYN. Admiral Winnefeld, it is my understanding that NORTHCOM has conducted a number of military-to-military engagements with Mexico, which I see as very positive. What is your assessment of the current state of our military-to-military relationship with Mexico?

Admiral WINNEFELD. The military-to-military relationship between the United States and Mexico is very positive and has progressed to unprecedented levels of cooperation. We work closely to enhance planning, tactical skills, and adherence to human rights principles, and meet frequently to build personal relationships and cooperation. As an example, we conduct combined planning and exercises such as Quickdraw, which is a tactical-level exercise that tests the capability of U.S., Canadian, and Mexican maritime forces in a joint response against illicit activity threatening North American Maritime Security. We have also incorporated bilateral/multilateral agreements such as the North American Maritime Security Initiative Subject Matter Expert Exchanges, which allow us to learn from each other with regard to military best practices. We also conduct bilateral and multilateral conferences dealing with issues such as natural disasters, pandemics, and search and rescue for broader coordination. The United States also shares information with the Mexican military in resource management and logistics, operations development, and aviation training.

Additionally, for the past few years, NORTHCOM has had a resident Mexican Foreign Liaison Officer from both SEMAR (Mexican Army) and SEDENA (Mexican Navy), which has helped tremendously to improve cooperation.

22. Senator CORNYN. Admiral Winnefeld, where is the Mexican military making the most progress?

Admiral WINNEFELD. Mexico is facing tremendous challenges to its security, economic development and human capital. The military is moving aggressively on all fronts and making progress. Notable progress has been made in three key areas:

- Conducting intelligence-driven operations
- Greater awareness, sensitivity, education, and practice in human rights
- Understanding the importance of working jointly and with Mexican interagency partners to address the challenges posed by TCOs.

23. Senator CORNYN. Admiral Winnefeld, where can NORTHCOM and DOD do more to help Mexico defeat the TCOs, while respecting Mexico's national sovereignty?

Admiral WINNEFELD. NORTHCOM can build on recent successes in working with the Mexican military to help them transition from a traditional military force to one that is more capable of combating an irregular threat. We will continue to share

lessons learned from our experiences overseas that are relevant to Mexico's struggle against TCOs and provide material and operational support to enable Mexico's efforts to disrupt illicit trafficking. Our near-term focus is on assisting Mexico in integrating intelligence with operations.

The United States and Mexico are developing an interagency approach to combating TCOs in Mexico. One important aspect of this approach continues to be sharing information on how DOD supports interagency partners to facilitate arrests and successful prosecutions by law enforcement agencies. In all we do with our Mexican military partners, we will continue to demonstrate respect for Mexico's sovereignty and reinforce the importance of protecting human rights.

JIATF–S MODEL FOR ADAPTATION ALONG SOUTHWEST BORDER

24. Senator CORNYN. General Fraser, in your role as commander of SOUTHCOM, you oversee the work of the JIATF–S, based in Key West. Your predecessor, Admiral Stavridis, called JIATF–S "the gold standard for future joint and combined interagency and international security organizations." It is clear that this interagency approach has greatly increased America's ability to combat illegal trafficking of all kinds. Please explain how and why JIATF–S has been so successful.

General FRASER. JIATF–S's successes stem from the fact that their team is a fully integrated international and interagency organization that capitalizes on the finer aspects of "unity of effort" and builds upon the idea of matching capability with authority across the whole of government and the international community to conduct their detection, monitoring and support to interdiction mission in order to achieve results against illicit trafficking organizations.

JIATF–S is able to gain insight into the flow of illicit trafficking through their Tactical Analysis Teams (TAT) and intelligence liaison officers deployed to 44 locations in 34 countries and in U.S. Organized Crime Drug Enforcement Task Forces (OCDETF). These teams of intelligence research specialists are embedded in U.S. Law Enforcement country teams and OCDETFs and facilitate the flow of law enforcement information to provide JIATF–S with cueing information for illicit trafficking events. Working with our international partners, through JIATF–S's Joint Operations Center (JOC) and their Joint Interagency Intelligence Operations Center, the TATs provide JIATF–S with critical, tactically actionable information on illicit trafficking. The intelligence that comes from law enforcement is analyzed and fused ("stacked") with multiple national, commercial, and international sources to create actionable target packages which are prioritized through JIATF–S's Targeting Process for action by U.S., allied, and partner assets under JIATF–S's Tactical Control and directed through the JOC. JIATF–S also has 17 senior country liaison officers from 13 key countries. These officers coordinate with their national headquarters, their ships and planes supporting the JIATF–S mission, and the entry and pursuit of traffickers in their nation's territorial waters and airspace.

25. Senator CORNYN. Admiral Winnefeld, in contrast to JIATF–S, the U.S. Government takes a much less unified (and less effective) approach along the U.S. land border with Mexico, where counter-trafficking and border security operations are critical. For example, although there is solid interagency coordination in the area of intelligence fusion, there is no similar interagency integration and synchronization function in the areas of interdiction operations and border security. This is a gap that needs to be filled, in order to maximize the efforts and resources of the various Federal agencies that play a role here. In my opinion, we need to take the successes and lessons learned from JIATF–S and apply this model on the southwest border. Applying a JIATF–S approach could serve as a sort of force multiplier, but it would need to be specially tailored to the unique requirements of the border. I believe such an interagency effort there should be civilian-led, but should be supported by our military, which could bring to bear its substantial resources whenever needed. I believe any such effort on the border should be not just interagency, but also intergovernmental. The State and local law enforcement agencies on the border play a huge role, and their Federal counterparts would be well-served to coordinate efforts, wherever possible. Do you agree that this type of approach would make a positive impact in counter-trafficking and border security efforts on the southwest border?

Admiral WINNEFELD. I believe it would be prudent and timely to re-evaluate our efforts to achieve a higher degree of synergy and efficiency with the interagency community. One potential approach could include a civilian-led JIATF-like model/concept with intergovernmental integration and synchronization functions in the areas of interdiction operations and border security for the southwest border. In

fact, The Interdiction Committee (TIC) was tasked by the Office of the National Drug Control Policy (ONDCP) to lead the development of a National Arrival Zone Task Force (NAZTF) Implementation Plan with full interagency and state and local participation, to be provided to ONDCP by 1 November 2010. My staff participated in preliminary discussions with TIC staff on these efforts. TIC response to ONDCP on 2 November 2010 was to monitor the progress of a number of complementary, parallel efforts intending to improve U.S. Government efforts on the border. Those efforts are led by the DHS/Customs and Border Protection and the Department of Justice, with NORTHCOM in a supporting role. TIC will monitor the progress of these ongoing efforts and will reassess and lay a track-line for where collectively we need to go in 12 months.

The desired goal of a NAZTF model/concept is to disrupt, degrade, or defeat TCOs and associated transnational threats by integrating multiple Federal coordination centers for air, land, and sea with regional and local intelligence and coordination centers enabling dissemination of intelligence to support interdiction operations.

26. Senator CORNYN. Admiral Winnefeld, would it improve the U.S. Government's ability to stem the flow of drugs into the United States?

Admiral WINNEFELD. I believe the establishment of a JIATF-like model/concept, regardless of its title, has the potential to reduce organizational redundancy, increase agility, and facilitate better/faster decisionmaking. A whole-of-government approach could help counter TCOs responsible for the drug flow, which are a viable regional, hemispheric, and global threat to national security and interests.

COLOMBIA

27. Senator CORNYN. General Fraser, in your prepared remarks you spoke very highly of efforts in Colombia to combat narco-terrorist groups that finance their activities through drug trafficking. You went on to request continued congressional support for U.S. efforts in Colombia—efforts which have resulted in a valuable and reliable regional partner. Do you believe that economic advancement in Colombia will help combat illegal trafficking in Colombia?

General FRASER. Economic advancement will undoubtedly help combat illicit trafficking. All too often, the traffickers prey upon the disenfranchised who often have little or no opportunity for social and economic advancement. Whether through cultivation, production, or distribution, participation in illicit trafficking is their only means of livelihood. The Government of Colombia's approach is to establish security and governance in previously ungoverned areas, and subsequently establish economic clusters that provide opportunities to escape the endless entrapment to the narcoterrorists.

28. Senator CORNYN. General Fraser, if economic growth is impeded in Colombia, what are the ramifications to stability within the country?

General FRASER. Colombia has made impressive economic strides, but 16 percent of the population still lives in extreme poverty—a condition that disproportionally affects rural Colombians and Colombians of African and indigenous origin. Establishing a solid economic base is a critical component of solidifying the security advances of the past decade. If Colombia's economic growth is impeded, it will slow advances in security and may create a situation that could actually lead to additional instability.

WIND FARMS

29. Senator CORNYN. Admiral Winnefeld, in your prepared remarks, you stated that you are closely watching wind farm development because, "increases in the number of wind farms raise the likelihood that radar signals vital to our ability to protect the national airspace will be obstructed." In a 2006 report to Congress, titled "The Effect of Windmill Farms on Military Readiness", the Office of the Director of Defense Research and Engineering concluded that: "wind turbines located in radar line of sight of air defense radars can adversely impact the ability of those units to detect and track, by primary radar return, any aircraft or other aerial object. Should the impact prove sufficient to degrade the ability of the radar to unambiguously detect and track objects of interest by primary radar alone this will negatively impact the readiness of U.S. forces to perform the air defense mission." In your understanding, how does a wind farm negatively affect an air defense radar facility?

Admiral WINNEFELD. Wind turbines interfere with radar operation in a variety of ways. First, wind turbines create clutter and undesired reflected signals, potentially obscuring actual airborne objects of interest. While there are other sources of clutter such as buildings, trees, terrain, power lines, birds, road traffic, and precipitation, most clutter can be filtered out by signal processing techniques. The effects of rotating wind turbine blades are not easily filtered because they are very dynamic, varying with rotor speed, blade pitch, and turbine aspect, so the clutter can appear and disappear sporadically as conditions vary. Under certain conditions, an operating wind turbine can present a radar cross section and Doppler shift that are similar to that of an aircraft, creating problems for both aircraft detection and tracking.

Additionally, wind turbines increase ambient electromagnetic noise. As large reflectors, they can increase the noise level in the radar view of the surrounding area. This decreases the signal-to-noise ratio and raises the noise floor, and thus, lowers the probability of detection of legitimate targets in the area.

Another problem is the radar shadows they cast by blocking radar signals, effectively masking targets above and behind the turbines. At very close range, a wind turbine can create radar shadows or data spikes that extend for the entire range of the radar along that azimuth. Because wind turbines are highly reflective, radar returns from aircraft near wind farms can reflect off multiple wind turbines creating multipath interference or scattering, leading to errors in target bearing, or even "ghost" targets. Scattering can result in target tracking errors, false alarms, and obscuration.

In combination, wind-turbine interference reduces the probability of detection, and can lead to target tracking interference, increased false alarms, and saturated radar processors.

30. Senator CORNYN. Admiral Winnefeld, how can the United States ensure that wind farm development does not negatively impact national defense?

Admiral WINNEFELD. I believe that to ensure we continue to have an adequate detection capability, we need to invest in research and development to improve radar performance and mitigate the impact of radar interference, including interference from wind turbines. However, impacts from wind turbines extend beyond NORAD's Air Defense mission and therefore this question would be best answered by the DOD Energy Siting Clearinghouse, which can provide a whole-of-DOD perspective that includes training and test impacts.

31. Senator CORNYN. Admiral Winnefeld, what are the risks to military readiness?

Admiral WINNEFELD. From a NORAD Air Defense perspective, it's not so much a question of readiness, but rather the potential risk to mission execution. Degraded radar coverage resulting from wind turbine interference can contribute to late or false detections of potentially threatening aircraft. This late or false detection could, in a worst case scenario, result in the loss of life or national assets. The DOD Energy Siting Clearinghouse is best suited to provide DOD-wide impacts of wind turbine interference on other DOD activities such as testing and training.

32. Senator CORNYN. Admiral Winnefeld, section 358 of the NDAA for Fiscal Year 2011 gives DOD 30 days to assess renewable energy proposals that have unacceptable impacts on military operations. In response to a recent request for information from my office, the Air Force stated that, "proposals that are found to present significant operational impacts will be hard-pressed to meet the new requirements within 30 days." Do the NDAA for Fiscal Year 2011 provisions provide the military with adequate time to conduct a thorough analysis and make informed objections to proposed wind farm developments when necessary because of impacts on military operations?

Admiral WINNEFELD. From a NORAD and NORTHCOM perspective, we are postured to provide Preliminary Reports to the DOD Energy Siting Clearinghouse in order to meet the initial 30-day Preliminary Assessment requirement established in Section 358 of the 2011 NDAA. The 30-day requirement is adequate for our initial screening to determine which projects will have only a minimal impact on our Air Defense mission. However, for projects we deem as having potential for significant impact, we believe the additional 30 days prescribed in the 2011 NDAA will not provide NORAD and NORTHCOM enough time to accurately determine the actual impact or to recommend proper mitigation strategies. This question as it pertains to the rest of DOD would be best answered by the DOD Energy Siting Clearinghouse.

33. Senator CORNYN. Admiral Winnefeld, in your interpretation, do the NDAA for Fiscal Year 2011 provisions take into account the electromagnetic effects of wind

turbines on radar systems and provide adequate protection for military radars and other sensors?

Admiral WINNEFELD. The capability to recognize and characterize wind turbine affects on radars and developing solutions is an evolving field. The NDAA for Fiscal Year 2011 provisions that allow DOD to work with industry to employ solutions will help us protect the effectiveness of military radars and other sensors.

34. Senator CORNYN. Admiral Winnefeld, as you may know, when a wind farm is proposed, an application must be submitted to the Federal Aviation Administration (FAA). In response, the FAA determines whether or not a hazard to aviation exists. However, in its review process, the FAA fails to take into account the electromagnetic effects of wind turbines on radar systems when the proposed wind farm would be within line of sight of a military radar tower. In your opinion, how could the FAA's "Obstruction Evaluation/Airport Airspace Analysis" (OE/AAA) be enhanced to adequately take into account the impact of electromagnetic (or any other) interference on airport surveillance and long-range radars?

Admiral WINNEFELD. Since 2006, NORAD and the Air Combat Command Long-Range Radar Joint Program Office have been working closely with the FAA's Obstruction Evaluation process. While the NDAA for Fiscal Year 2011 has improved the FAA's process, there is room for revised and updated guidance in situations where wind turbines impact the DOD, but do not cause an "obstruction to air navigation" as contemplated by the FAA OE/AAA process and the applicable Federal Aviation Regulation (14 C.F.R. Part 77)." The DOD Energy Siting Clearinghouse is the best organization to address this issue from an overall DOD perspective.

[Whereupon, at 11:40 a.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, APRIL 7, 2011

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

U.S. TRANSPORTATION COMMAND AND U.S. AFRICA COMMAND

The committee met, pursuant to notice, at 9:35 a.m. in room SD–106, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Reed, Webb, Hagan, Begich, Manchin, Shaheen, Blumenthal, McCain, Inhofe, Sessions, Brown, Ayotte, Graham, and Cornyn.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Creighton Greene, professional staff member; Jessica L. Kingston, research assistant; Michael J. Kuiken, professional staff member; and Gerald J. Leeling, counsel.

Minority staff members present: David M. Morriss, minority staff director; Adam J. Barker, professional staff member; Christian D. Brose, professional staff member; and Michael J. Sistak, research assistant.

Staff assistants present: Jennifer R. Knowles, Hannah I. Lloyd, and Brian F. Sebold.

Committee members' assistants present: Vance Serchuk, assistant to Senator Lieberman; Carolyn Chuhta, assistant to Senator Reed; Gordon Peterson, assistant to Senator Webb; Roger Pena, assistant to Senator Hagan; Lindsay Kavanaugh, assistant to Senator Begich; Joanne McLaughlin, assistant to Senator Manchin; Chad Kreikemeier, assistant to Senator Shaheen; Jeremy Bratt, assistant to Senator Blumenthal; Anthony J. Lazarski, assistant to Senator Inhofe, Lenwood Landrum, assistant to Senator Sessions; Clyde Taylor IV, assistant to Senator Chambliss; Charles Prosch, assistant to Senator Brown; Brad Bowman, assistant to Senator Ayotte; Taylor Andreae, assistant to Senator Graham; and Dave Hanke, assistant to Senator Cornyn.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. We want to welcome our witnesses this morning, General Duncan McNabb, Commander, U.S. Transportation Command (TRANSCOM), and General Carter Ham, Commander, U.S. Africa Command (AFRICOM), to testify on the programs and budget needed to meet the current and future requirements within their respective commands.

Gentlemen, please extend on behalf of this committee our gratitude to the men and women of your commands and their families for the many sacrifices that they've made on behalf of our Nation. Thanks to both of you for your long careers of leadership and service. I guess the best way we can thank the troops and their families is to make sure there's no gap in the receipt of their paychecks. I know every member of this committee is thinking about how to avoid that gap.

General Ham, congratulations on your recent swearing in as Commander of AFRICOM. Your first month on the job has been extraordinarily busy. However, as Admiral Stavridis told this committee, AFRICOM has demonstrated, just a few years after reaching full operational capability, that it is capable of conducting and coordinating a major multinational effort to prevent a tyrant from massacring his own people, people who simply wanted to exercise their fundamental human and democratic rights. You and your staff at AFRICOM are to be commended for your performance in this effort.

Over the past few weeks, international military action in Libya has established an arms embargo and a no-fly zone, stopped Qadhafi's advancing army, and has seamlessly passed the command of the military effort from a U.S.-led joint task force to the North Atlantic Treaty Organization (NATO). Moving forward, the question is whether the coalition or a coalition member or members should supply the opposition with arms. I believe it is important that any such decision be made with the support or at least the acquiescence of our coalition partners because of the military and political importance of maintaining broad international support for the mission.

President Obama has been cautious in weighing the considerations and conditions for the use of military force and I am confident that he will continue to do so in considering the many questions surrounding supplying weapons to the opposition forces.

We look forward, General, to hearing your views on this issue and other Libya-related issues.

From a transnational terrorism perspective, there are many other areas of concern to this committee, including Somalia and northwest Africa. Today, large regions of Somalia are ungoverned spaces where the terrorist organization Al-Shabaab operates freely and with impunity. To make matters worse, Al-Shabaab numbers are growing as it recruits young men from the Somali diasporas in Europe and North America.

To counter this growing threat, a small African Union Mission in Somalia, known by its acronym AMISOM, stands between Al-Shabaab and the Somali Transitional Federal Government. So, General Ham, this committee looks forward to what you can tell us about that as well.

In the region that includes Niger, Mali, and Mauritania, al Qaeda in the Lands of the Islamic Maghreb (AQIM) is growing stronger through the extraction of ransoms, taxing illicit trafficking, and general banditry. Over the past year this group has stated in no uncertain terms that it intends to strike western targets in the region and possibly in Europe. That is a cause of great concern, not only to the United States, but to our allies in Europe. We must also make sure that AQIM does not take advantage of the fog of war in Libya to its advantage. If these al Qaeda franchises grow unchecked in the Horn of Africa or across northwest Africa, it may lead to further attacks against U.S. interests overseas or in the Homeland.

While Libya is in the headlines today, there remain many other challenges in General Ham's area of responsibility (AOR), including the evolving political situation on the Ivory Coast, the post-protest recovery in Tunisia, the growth in illicit trafficking across the continent, and the ongoing elections in Nigeria. While confronting some of these issues falls squarely in the lap of a combatant command, many do not, which means that your command is being directed to assist in both traditional and nontraditional ways, and often where the jurisdictional lines within the Federal Government are blurred.

General McNabb, we know that things have been busy for you as well ever since you assumed your job at TRANSCOM. TRANSCOM has played a critical role in supporting our war efforts in Iraq and Afghanistan. Less well known, but no less important, has been TRANSCOM's role in supporting the Japanese earthquake and tsunami relief efforts, as well as previous relief efforts around the world. We applaud those efforts. We also know that TRANSCOM forces have been involved in supporting forces engaged in operations in Libya.

A number of ongoing critical issues confront TRANSCOM. One is modernizing the forces. One acquisition program supporting TRANSCOM has received a lot of visibility and has been resolved, and that's the strategic tanker modernization program.

TRANSCOM has received congressional additions to the budget to buy C–17 aircraft in excess of what the Department of Defense (DOD) and TRANSCOM said were needed to support wartime requirements. As the Air Force is taking delivery of those extra C–17s, the Air Force is seeking authorization to retire C–5A aircraft because it believes that they do not need the extra aircraft and cannot afford to operate them.

TRANSCOM is also facing other, less well-known modernization challenges. The Ready Reserve Force, a group of cargo ships held in readiness by the Maritime Administration, is aging and will need to be modernized with newer ships over the next 10 years. While perhaps not as glamorous as airlift operations, sealift support is critical to our capabilities. We have relied on sealift to deliver more than 90 percent of the cargo to Iraq and Afghanistan, similar to previous contingencies.

This committee has sought to ensure that our combatant commanders have what they need to succeed in all of these missions, conflicts, and challenges. This committee will continue to support the needs of our warfighters in these conflicts.

Senator McCain.

STATEMENT OF SENATOR JOHN McCAIN

Senator MCCAIN. Thank you, Mr. Chairman, and let me thank our distinguished witnesses for their many years of dedicated service to our Nation. This is an important moment to discuss the issues within both of our witnesses' commands.

In the AFRICOM AOR, Libya is obviously the top priority, even though General Ham is no longer the operational commander of the military effort there. I remain a strong supporter of the President's decision to take military action in Libya. It averted what was an imminent slaughter in Benghazi and has given us a chance to achieve the goal of U.S. policy, as stated by the President, to force Qadhafi to leave power. That goal is right and necessary.

I'm very grateful that we have capable friends, especially our Arab partners and NATO allies, who are making critical contributions to this mission. But for the United States to have withdrawn our unique air-to-ground capabilities at this time is only increasing the odds that this conflict will last longer, that more civilians will be lost unnecessarily, and that what began as a peaceful protest could turn into a long and bloody stalemate.

Qadhafi's forces are regaining the momentum and they're clearly adapting to NATO's capabilities and tactics, which is only making it harder for our coalition to identify and attack regime forces that are threatening Libyan civilians. We cannot say that we intervened to prevent an atrocity in Benghazi only to accept one in Misurata or some other city.

As the leader of Libya's opposition forces, General Abdul Fatah Younis, said, as reported in this morning's New York Times: "NATO blesses us every now and then with a bombardment here and there and is letting people in Misurata die every day." That's not success, and that's why the United States needs to remain engaged militarily, especially with our unique close air support capabilities, such as the AC–130 and the A–10.

Let's be honest with ourselves and the American people. Our objective in Libya is regime change, whether the administration wants to call it that or not. That's not to say that we should commit ground troops to remove Qadhafi from power. I don't support that. But it is to say that our military mission should work toward the goal of our policy, which is to compel Qadhafi to leave power. This is not the case at present.

Rather than playing a supporting role within NATO, America should be leading. Our military should be actively engaged in degrading Qadhafi's forces in the field, which could significantly increase the pressure on his regime. There continues to be hope that his regime will crack and that he will leave. I hope it does. But hope is not a strategy.

With so much focus on Libya, we mustn't lose sight of other important developments in Africa. The situation in Somalia remains an increasing source of threat to the United States and our friends, especially as Al-Shabaab now appears to have aligned with al Qaeda. However, it's not clear that we have a strategy to foster stability in Somalia while marginalizing and defeating al Qaeda and

its allies in East Africa. To the contrary, their influence in the region has experienced, to quote General Ham, a "dramatic increase."

Similarly with the growing threat of piracy, I would welcome an explanation of what more we and our partners need to do to disrupt and defeat pirates operating in and out of Somalia and East Africa.

Finally, on a more positive note, the peaceful revolution in Tunisia started the entire Arab spring and we must help their transition to democracy succeed. The Tunisian military has played a vital role throughout this process and I'd like to hear from our commander what more we can do to support the Tunisian military in protecting their borders, policing their coastal waters, and performing their other essential duties during this historic opportunity for the country.

What happens in Tunisia will have a major impact across North Africa and the Middle East, especially in Egypt, which is the heart of the Arab world and the major test case of whether the hopeful opening of the Arab spring will endure and thrive.

There are pressing issues within TRANSCOM, especially the security and effectiveness of our supply routes into Afghanistan. Our southern supply line has been and remains plagued by uncertainty, instability, and growing threat, and the strategic consequences of our dependence on it have been problematic. So last year we added two additional routes, through the Baltics and Central Asia, helping to facilitate a faster flow of cargo with less cost and risk. I'd like to hear from the commander about his efforts to support the Northern Distribution Network (NDN) and how we might expand it further.

At the same time, informed by the results of a critical airlift study from last year, Congress mandated a 316-aircraft floor for large-size cargo planes. From testimony presented earlier this year, the committee has learned that the Air Force has hit the congressionally-mandated floor for cargo planes. The Air Force now wants appropriate relief from the restriction in last year's defense bill, meaning that as new C–17 Globemaster aircraft are delivered, the Air Force wants to start retiring C–5A Galaxy aircraft, which are too old to reengine cost-effectively.

The administration's proposal to this effect seems reasonable, especially considering that congressional appropriators earmarked $13.2 billion for 44 C–17s that the Air Force did not request and does not need, but which they now have a surplus of, thanks to congressional earmarks. For this reason, I am leaning toward supporting the retirement of some of our oldest, least capable C–5As. However, I'd like to hear the commander's views on the administration's proposal to repeal the statutory requirement imposed by Congress for the Air Force to maintain a large-size cargo aircraft inventory of 316 aircraft.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain.

General McNabb.

STATEMENT OF GEN. DUNCAN J. MCNABB, USAF, COMMANDER, U.S. TRANSPORTATION COMMAND

General MCNABB. Chairman Levin, Senator McCain, and distinguished members of this committee: It is my distinct privilege to be here with you today representing more than 145,000 of the world's finest logistics professionals. Throughout 2010 and continuing today, the TRANSCOM team of Active Duty, Guard, Reserve, civilians, merchant mariners, and commercial partners accomplished incredible feats in the face of historic challenges. I have three outstanding components who execute our global mission every day: the Air Mobility Command, led by General Ray Johns; the Military Sealift Command, led by Rear Admiral "Buzz" Bueby; and the Surface Deployment and Distribution Command, led by Major General Kevin Leonard.

When a regional combatant commander like General Ham is given a mission that requires TRANSCOM support, we rapidly plan solutions, and then as the TRANSCOM commander, all I do is unleash them. It is amazing to see that, no matter the challenges our components face in execution, it is their amazing men and women who figure it out and then get it done.

We have a saying at TRANSCOM: "We view our success through the eyes of the warfighter." Our mission is to always support the six regional combatant commands and their Joint Task Force Commanders. Working with the Defense Logistics Agency, the Joint Staff, the Services, the combatant command staffs, our log nation, and transnation teams have provided unparalleled logistics superiority to the combatant commanders.

From the Services and the Joint Forces Command getting the forces ready to go, the TRANSCOM team delivering the force, and the theater commanders receiving the force, this is the best overall performance I have seen of the end-to-end logistics chain in my almost 37 years of service.

Sitting next to me is one of our finest warfighters and my good friend, General Carter Ham. I was proud to support him as he commanded military operations over the skies of Libya in Operation Odyssey Dawn, I look forward to continuing to support him as he takes AFRICOM to new and even higher levels. It is he and the other combatant commanders that I am always supporting, and we view our success through their eyes.

I feel blessed to be the custodian of one of our Nation's greatest asymmetric advantages, our strategic ability to move. Since taking command of TRANSCOM in the fall of 2008, I have been amazed to see some of the unique capabilities that are inherent in the command. First and foremost, is the power of the total force team. Nobody matches up our Active-Duty Force with our Guard and Reserve partners like TRANSCOM.

When we called for volunteers to help relieve some of the suffering in Haiti last January, the men and women of the Guard and Reserve stepped up in huge fashion. This included a contingency response group from the Kentucky Guard that was just coming up to speed. During the surge of forces into Afghanistan, we relied heavily on activated C–5 and C–17 crews, maintainers, and aerial porters and they were crucial to meeting President Obama's deadline to complete the plus-up by 31 August last year. Most recently,

we saw their patriotism in action in responding rapidly to the air refueling requirements in support of the Libyan operation.

I'm also in awe of the power of the U.S. flag fleet in the air, on the sea, and over land. The U.S.-flag maritime fleet and their outstanding merchant mariners stepped up during our historic surge last year into Afghanistan and out of Iraq, and we didn't have to activate one ship for either operation. Our commercial team delivered. They continue to be key to supplying our forces in Afghanistan, whether coming up through Pakistan or over the NDN that Senator McCain talked about.

In the air, our commercial partners have continued to meet the demands of the surge in Afghanistan and most recently responded brilliantly to bringing Americans home from Japan following the recent earthquake, tsunami, and nuclear incident.

We know the combatant commanders around the world depend on us to deliver the forces and their sustainment day in and day out. From resupply of the South Pole to air-dropping food, water, and ammo to a forward operating base in Afghanistan, to delivering fuel to our fighters and bombers enforcing the Libyan no-fly zone, TRANSCOM delivers. If we do this right, our warfighting commanders do not worry about their logistics lifeline.

This is what the Secretary of Defense intended when he made TRANSCOM the distribution process owner (DPO) in 2003. He gave the DPO influence over the entire supply chain, from factory to foxhole, and we constantly look for more effective solutions for the warfighter, while also being good stewards of the taxpayers' dollars.

Since its inception, the DPO has realized over $5.3 billion in savings and we're still counting. Last year alone, that savings was $1.7 billion.

A big part of the savings is taking advantage of lower-cost surface transportation whenever possible. When we match surface to air and commercial to military modes of transportation, we are leveraging our enterprise to maximum advantage for both the warfighter and the taxpayer.

We recently saved over $110 million a month moving lifesaving mine-resistant all-terrain vehicles to our forces in Afghanistan using a combination of commercial, surface, and military air. We also did it faster than air alone by maximizing every air sortie into Afghanistan. We continue to look for every opportunity to use multimodal operations throughout our global enterprise.

My final callout is to the power of the interagency and joint team. President Obama in ordering the plus-up of forces in Afghanistan and drawdown in Iraq set a very tight time line for execution. We knew we would need some help increasing capacity on our existing supply lines and help in establishing new supply routes—Senator McCain, what you were alluding to. We took our recommendations to the interagency and the whole of government came through with excellent results.

The National Security Council, ambassadors around the world, the Department of State (DOS), the Office of the Secretary of Defense, the Maritime Administration, the combatant commands, and the log nation and trans-nation teams came together to make logistics magic. This was at a time when we were asked to expand

quickly and redirect flow due to the earthquake in the Caribbean that devastated Haiti, a volcanic eruption that shut down European air space for 3 weeks, a coup in the country where we have our major passenger transload operation, the Deepwater Horizon oil spill in the Gulf, and the worst floods in Pakistan's history during the last month of the plus-up. We still closed the force on the President's deadline of August 31.

Our operations continue today at recordbreaking pace, as, Mr. Chairman, you alluded to. We continue to support our forces in Afghanistan and the drawdown in Iraq. We pivoted the transportation enterprise rapidly to support General Ham in the implementation of the no-fly zone over Libya, and we moved out urgently to help with disaster relief in Japan and provide immediate responses to the nuclear incident with special equipment and nuclear specialists, and we stand ready to do more.

I could not be more proud of the men and women of TRANSCOM. I've flown with our air crews and loaded and moved containers with our stevedores. I've walked through the pilot holding areas with our aerial porters in Afghanistan and explored the cargo holds of our Ready Reserve Fleet with our merchant mariners. Daily I'm amazed and humbled by what our people accomplish.

Chairman Levin, Senator McCain, and all members of this committee, thank you for your continued superb support of TRANSCOM and our men and women in uniform. It is my distinct honor and privilege to appear before you today to represent the 145,000-plus men and women who are TRANSCOM and to tell you their story.

I ask that my written statement be submitted for the record and I look forward to your questions.

[The prepared statement of General McNabb follows:]

PREPARED STATEMENT BY GEN. DUNCAN J. MCNABB, USAF

INTRODUCING THE U.S. TRANSPORTATION COMMAND

Mission/Organization

The U.S. Transportation Command (TRANSCOM) is a Total Force team of Active Duty, Guard, Reserve, civilian, commercial partners, and contractors who lead a world class Joint Deployment and Distribution Enterprise (JDDE). Through our component commands, the Army's Military Surface Deployment and Distribution Command (SDDC), the Navy's Military Sealift Command (MSC), the Air Force's Air Mobility Command (AMC) and our commercial partners, we execute military and commercial transportation, distribution process integration, terminal management, aerial refueling and global patient movement across the full range of military and humanitarian operations. We operate effectively and efficiently to deploy and sustain the warfighter ... and 2010 was a banner year. Together with our Service, Combatant Command, Interagency and Coalition partners, the TRANSCOM team responded superbly to the President's direction to increase forces by 30,000 in Afghanistan, to drawdown forces to 50,000 in Iraq and to an unprecedented series of world events and natural disasters. Whether delivering combat power to Afghanistan through logistics or humanitarian relief to the people of Pakistan, Haiti, and Japan, our team kept our promises and delivered on time, on target and at best value to the taxpayer.

Our People

When faced with immediate- and long-term world events, the men and women of our superb TRANSCOM team overcome colossal obstacles to support our Nation's objectives with world-class logistics. In the history of the command, we've never had a better group of experienced, dutiful and enthusiastic individuals to fulfill the promises we make to the combatant commanders and warfighters. As challenges

arise, this team ignites their talent, insight, flexibility, and ingenuity to swiftly design a way to deliver, whenever, wherever. Simply put, the spirit and work of the people who make up the Total Force TRANSCOM team has put the command on the world stage as the best of the best for delivering global logistics superiority.

SUPPORTING GLOBAL OPERATIONS

Over the past year, TRANSCOM components moved near-record quantities of cargo and supplies and tens of thousands of service personnel to all parts of the globe. AMC and our Civil Reserve Air Fleet (CRAF) commercial partners airlifted more than 2 million passengers and 848,000 tons of cargo, while AMC's aging air refueling fleet delivered 202 million gallons of fuel to U.S. and coalition aircraft. Equally impressive, MSC, SDDC and our commercial sealift partners moved over 3.8 million tons of cargo worldwide. Finally, MSC's tankers delivered 1.5 billion gallons of fuel to support operations around the world.

Support to CENTCOM

TRANSCOM continued its focus on supporting operations in the U.S. Central Command (CENTCOM) Area of Responsibility (AOR). In 2010, we deployed and redeployed 48 Brigade Combat Teams, 75,000 Air Expeditionary Forces, 12 Security Force packages, and moved Marine Expeditionary, Stryker and Combat Aviation Brigades. The centerpiece of our efforts this year was the team's successful and on-time deployment of the 30,000 surge force into Afghanistan and drawdown from 130,000 to 50,000 servicemembers in Iraq—both completed on our target date of 31 August 2010.

In Iraq, and in close coordination with CENTCOM, we began the drawdown in earnest in May 2010 and redeployed 9,000 servicemembers per week. We were able to achieve this remarkable volume of passenger movement by leveraging an additional strategic redeployment hub in Al Asad, Iraq. The addition of Al Asad to our existing hub in Kuwait, and the great flexibility and responsiveness of our CRAF partners, allowed us to nearly double our capacity to move military passengers and meet the President's 31 August 2010 deadline.

In Afghanistan, the lack of developed and robust infrastructure required close collaboration with other combatant commanders, the Joint Staff, and our interagency partners to further expand capacity of our existing ground lines of supply in both Pakistan and the Northern Distribution Network, to increase through-put at airfields and to add further seaport and airfield capacity. The team was successful in our capacity-building efforts. In 8 months, TRANSCOM's components and our commercial partners delivered 30,000 troops and 60,000 tons of equipment and supplies to Afghanistan by 31 August 2010, again meeting the President's direction to increase the force by the end of August.

At the height of the drawdown in Iraq and surge in Afghanistan, an almost monthly occurrence of world events and natural disasters took place. Each of these events carried significant transportation and logistics implications, which challenged the TRANSCOM team and our partners to both meet emerging requirements and stay on time in Iraq and Afghanistan. This demonstrated TRANSCOM's flexibility to use its Total Force and U.S Flagged carriers to surge capacity to meet worldwide requirements.

In January 2010, a 7.0 magnitude earthquake struck Haiti and required an immediate response by all three TRANSCOM components and our commercial sealift partners in support of U.S. Southern Command (SOUTHCOM) and USAID. The team reacted magnificently providing aid and relief supplies within hours and days of the devastation. In February, a coup in Kyrgyzstan disrupted operations at our primary Operation Enduring Freedom personnel transit hub at Manas Transit Center in the Kyrgz capital of Bishkek. This required us to quickly reroute thousands of military passengers to Kuwait. Once again the system responded immediately, and deployment operations to Afghanistan continued without delay. Almost immediately after the return to normal operations in Kyrgyzstan, we were challenged in March by the month-long volcanic eruptions in Iceland which dramatically affected most, and sometimes all, of European airspace.

Again, TRANSCOM and our partners responded immediately and rerouted cargo, passenger and aeromedical evacuation missions around the affected airspace and vital cargo and passenger missions arrived with little or no delay. Finally, and as the drawdown in Iraq and the surge in Afghanistan were coming to a close, Pakistan experienced unprecedented devastation due to heavy rains which flooded over one fifth of the country and displaced 20 million people. TRANSCOM, in coordination with CENTCOM, responded by delivering 400,000 meals within 72 hours to those in greatest need. We also mobilized contingency response elements and delivered helicopters and boats to distribute over 8,500 tons of aid to remote provinces.

Improving throughput and expanding capacity in our surface networks which supply Afghanistan has again been a centerpiece of our efforts in 2010. The Northern Distribution Network (NDN) remains a priority for TRANSCOM, and we have delivered over 30,000 containers via this network. In 2010, we added two additional routes through the Baltics and Central Asia and continue to improve the processes, facilitating a faster, less costly cargo flow.

In addition to the NDN improvements, we added capacity in intermodal Persian Gulf locations. Realizing we needed more capacity to support the surge of forces into Afghanistan and the movement of thousands of Mine Resistant Ambush Protected (MRAP) Vehicles, the team worked closely with CENTCOM and the Department of State to secure access to additional airfields and seaports in the Persian Gulf. Using a concept called multi-modal operations, we moved large volumes of cargo and thousands of vehicles by sea to locations in closer proximity to the CENTCOM area of operations, by truck from the seaports to the nearby airfields and then by air to Afghanistan. This concept was used with great success throughout 2010 as we moved almost 7,000 MRAP and MRAP all-terrain vehicles to Afghanistan. Utilizing the combination of air, land and sea modes of transportation resulted in increased velocity, better utilization of aircraft and ultimately reduced costs by almost $400M in 2010.

The mountainous terrain and poor infrastructure in Afghanistan also required an increased reliance on aerial delivery, and 2010 was a record year with over 60 million pounds of cargo delivered by airdrop—almost double the amount in 2009. The mobility air force continues to add new capabilities such as Low-cost, Low-altitude (LCLA) Delivery and Low-cost Aerial Delivery System (LCADS). TRANSCOM is also exploring a high-speed container delivery system capability for the C–130J and C–17. This capability will improve both the survivability of the aircraft and accuracy of aerial delivery.

Finally, threats to our operations in CENTCOM are not isolated to Afghanistan. Somali-based pirates continue to hazard our commercial sealift partners. TRANSCOM and MSC continue to actively engage with the Maritime Administration, the Coast Guard, the Navy and our industry partners to further reduce the vulnerability of the U.S. Flag commercial fleet. One tactic which has been extremely successful is the mindful use of contracted armed security teams aboard U.S. flag commercial vessels.

Support to Other Combatant Commands

SOUTHCOM was a very active AOR. As previously mentioned, Operation Unified Response provided relief to Haiti after a massive earthquake on January 12, 2010, and TRANSCOM was a key partner in that effort. Within 2 days of the earthquake, TRANSCOM deployed its Joint Task Force-Port Opening units to re-establish airfield and seaport operations after the earthquake had largely destroyed Haiti's existing infrastructure. This rapid response allowed TRANSCOM and our commercial partners to deliver over 400,000 tons of lifesaving cargo, more than 2.5 million meals, and over 5 million liters of water to Haitians in need. Further, TRANSCOM aeromedical evacuation teams safely moved 361 critically injured earthquake victims.

Support for the NATO security presence in Kosovo continued in the U.S. European Command (EUCOM) AOR. TRANSCOM moved over 2,500 servicemembers into the Balkans in support of that mission, and provided strategic airlift support to 5 major EUCOM and NATO exercises.

Our support to U.S. Africa Command (AFRICOM) continued to increase this year. We moved 1,476 servicemembers and more than 16,000 tons of cargo for Exercise African Lion, AFRICOM's largest combined exercise.

This past year, we began a close partnership with the newly constituted U.S. Cyber Command to improve information operations security and to counter cyber threats to our networks. Winning the cyber fight is critical to safeguarding the systems and information which enable our global logistics network to operate. TRANSCOM not only moves cargo and people, we move information as well. Our vigilance will only increase as we work with our partners to defend our networks and information in this new battlespace.

In the U.S. Northern Command (NORTHCOM) AOR, TRANSCOM deployed 3 Modular Aerial Spray System-equipped C–130 aircraft and over 60 personnel to begin immediate oil dispersant operations over the Deepwater Horizon oil spill in the Gulf of Mexico. Throughout the 33-day deployment, the team flew 92 sorties and released more than 156,000 gallons of oil dispersant over the spill. Additionally, TRANSCOM airlifted over 259 tons of booms, skimmer boats, and other oil spill containment equipment to support the clean-up.

TRANSCOM also supported a series of NORTHCOM exercises which provided realistic homeland defense and Defense Support to Civil Authorities training for joint and interagency partners throughout the Federal Government.

The U.S. Pacific Command (PACOM) AOR is the largest and most diverse in the world, and TRANSCOM supported operations from Alaska to Antarctica and around the Pacific Rim and the Indian Ocean. In support of the National Science Foundation's Operation Deep Freeze, TRANSCOM delivered more than 3,250 passengers, 10,000 tons of cargo, and 5.1 million gallons of fuel into McMurdo Station, Antarctica. In the Pacific Rim, TRANSCOM provided humanitarian assistance and disaster response in the wake of Typhoon Fanapi in the Philippines and the Mount Merapi volcanic eruptions in Indonesia. Additionally, TRANSCOM transported more than 687 passengers and 13,300 tons of cargo for Operation Enduring Freedom—Philippines.

Support to the Warfighter

Global patient movement remains one of TRANSCOM's most demanding missions as it requires 100 percent accuracy. Thanks, in large part, to rapid global patient movement, the wounded warrior survival rate has increased from 75 percent a decade ago to over 92 percent today. The survival rate increases to 98 percent if a wounded warrior makes it to a hospital alive. In 2010, TRANSCOM completed more than 26,600 patient movements, all without incident. Additionally, TRANSCOM rapidly deployed patient movement expertise all over the globe. Within 48 hours of the earthquake in Haiti, TRANSCOM patient movement personnel were on-scene coordinating the movement of critically injured patients. When the Icelandic volcano erupted, TRANSCOM rapidly altered aeromedical evacuation flight routing through the Mediterranean to ensure uninterrupted return of our wounded warriors from Southwest Asia.

TRANSCOM support to the warfighter is not reserved solely for the battlefield. We recognize the need to care for families, including the effective and efficient movement of household goods. To that end, TRANSCOM continued to field the Defense Personal Property System (DPS). DPS is a next generation, web-based system for management of personal property shipments and is helping to provide the best-value move for DOD families.

DPS executed more than 338,000 shipments in fiscal year 2010 and will soon be used for nearly all shipments of household goods for DOD military and civilian personnel and their families.

Leading the Joint Deployment and Distribution Enterprise

The ability of the United States to project and sustain our forces over global distances is one of our Nation's greatest asymmetric advantages. Our success depends on our ability to synchronize deployment distribution planning and execution across DOD, the regional combatant commands, the Services, and our coalition and interagency partners. To that end, upon the President's approval, TRANSCOM is poised to assume an additional Unified Command Plan mission as the "Global Distribution Synchronizer." In collaboration with our partners, this new mission will enable us to shape the distribution environment and gain greater access to distribution lanes that cross multiple theaters to project and sustain forces globally. Collectively, we will "knit the seams" between multiple combatant command theater distribution campaign plans and create a more robust and adaptive distribution network that reduces operational risk.

Enhancing DOD Supply Chain Management

TRANSCOM is leading the transformation of the DOD supply chain through a series of Distribution Process Owner Strategic Opportunities (DSO) initiatives. These include five major opportunities to enhance readiness, improve velocity and reduce DOD supply chain cost.

Strategic Surface and Air Optimization lower the cost of shipments by consolidating surface cargo into single containers, as well as modifying pallet build rules and using "less-than-planeload" commercial freight services for air cargo. Through Strategic Network Optimization and Supply Alignment, TRANSCOM optimizes the number, location and function of supply chain nodes to increase distribution effectiveness by positioning selected materiel in forward locations to reduce reliance on high-cost air transportation. Finally, through process improvement, TRANSCOM increases velocity across the enterprise by identifying and removing "dead time" throughout the supply chain process.

These initiatives are generating benefits to the warfighter by delivering higher levels of service at lower costs. To date, the DSO initiatives have generated savings of $80 million and an improvement in delivery time of up to 34 percent.

Global distribution efficiency begins with the best value movement of DOD freight in the Continental United States (CONUS). This is the purpose of the Defense Transportation Coordination Initiative (DTCI). Using commercial best practices, DTCI improves the reliability, predictability, and efficiency of DOD materiel moving in the CONUS. Thus far, DTCI has saved $182 million and meets or exceeds goals for on-time pickup, reduced damage claims and small business participation.

Business process reengineering and Corporate Services Vision are at the heart of TRANSCOM's transformation efforts. Agile Transportation for the 21st Century (AT21) is one such effort which uses industry best practices and government and commercial off-the-shelf optimization and scheduling tools to deliver best value, end-to-end distribution and deployment solutions. Business process reengineering improves transportation planning, forecast accuracy and on-time delivery of forces and sustainment to combatant commanders at a lower cost to the Services. Equally important, our Corporate Services Vision aligns information technology systems with these reengineered business processes with a one-stop information technology shop. We expect our AT21 to deliver a significant return on investment. We are also investigating industry-leading collaborative technologies, computer gaming, and social networking innovations to provide additional capability.

In cooperation with the Defense Logistics Agency (DLA), TRANSCOM is improving visibility across the supply chain through the Integrated Data Environment/Global Transportation Network Convergence (IGC) initiative. The purpose of IGC is to collect supply, transportation and deployment data from disparate systems and allow access to that data from anywhere in the world. This capability provides warfighters access to real time, actionable logistics information and allows them to make informed decisions.

As DOD's lead proponent for radio frequency identification (RFID) and related automatic identification technology (AIT), our focus is on implementing the proper technologies to enhance supply chain business processes. While active RFID remains the primary AIT enabling in-transit visibility, this year we used satellite technology in high-threat areas where it is necessary to have near real-time location of critical assets while in transit. Additionally, we are exploring the use of sensor technology to enhance security of high-value cargo. Container intrusion sensors also provide a force protection layer, alerting the warfighter to take extra safety precautions due to a container breach. Finally, passive RFID will enable supply chain process improvements such as increased inventory accuracy and decreased time to receive, store, and issue material.

Realigning the Organization and Personnel

Another notable achievement in 2010 was the completion of the Base Realignment and Closure (BRAC) relocation of SDDC to Scott Air Force Base. The cornerstone of the project was the $130 million BRAC-funded MILCON facility, which was operational well ahead of schedule. Coincident to the colocation of SDDC with AMC and TRANSCOM, we reengineered business processes and consolidated functions to achieve operational and fiscal efficiencies. Operational benefits include fused operations and intelligence centers, a joint billing center and consolidated acquisition and analysis centers of excellence. The results have been impressive—470 fewer billets, a 20 percent reduction in contracts, elimination of two leased buildings, and a projected cost saving of $1.2 billion over 20 years.

TRANSCOM continues to emphasize professional development of our human capitol. Our focus is to develop joint logisticians who can perform core functions inherent in the command's Distribution Process Owner (DPO) responsibilities. Innovative logistics solutions, like the NDN, require new ways of thinking about supply chains, developing sustainable infrastructure, running distribution networks in remote geographies, and building enduring international relationships. To develop that intellectual capital and critical thinking ability in our people, we added industry-leading courses from the University of Wisconsin, Pennsylvania State University, Carnegie Mellon University, Stanford University, University of Tennessee and Massachusetts Institute of Technology to our professional development curriculum.

Maintaining Air Mobility Readiness

Rapid global mobility is a key enabler to the effectiveness of the joint force. The ability to mobilize forces and materiel within hours, rather than days or weeks, depends on versatile, ready and effective air mobility forces.

In order to maintain our decisive global mobility advantage, we must have a viable tanker fleet. Therefore, the re-capitalization of the tanker fleet remains my top acquisition priority. The KC–46A will fulfill its primary refueling role and also have the flexibility to contribute to an array of mobility missions. It will dramatically im-

prove our ability to do the air refueling mission and allow us to make the whole air mobility system much more efficient.

Likewise, our national defense strategy requires a viable fleet of about 300 strategic airlift aircraft. The C–17 Globemaster III will continue to be our premier airlifter, and our modernized C–5s are achieving their expected levels of mission readiness. However, in order to achieve the correct mix of C–17 and C–5 aircraft, and take full advantage of our critical aircrews and maintainers, the Air Force should be given the authority to retire the oldest, least capable C–5s.

C–17s will continue to meet TRANSCOM's future requirements through currently funded purchases, upgrade programs, and fleet rotation. New C–17s arrive with improvements which increase the reliability of the weapon system. Older aircraft enter into the Global Reach Improvement Program to increase sustainability and reliability. Aircraft located in corrosive and training environments are monitored and analyzed for stress and rotated to maintain structural integrity of the fleet. Furthermore, two additional Reserve component units will take on the C–17 mission as they retire their C–5s.

The C–5 is critical to our oversized and outsized air cargo capability. C–5 fleet management has two main focus areas: C–5 reliability and C–5A retirements. The Reliability Enhancement and Re-Engining Program (RERP) will increase the mission capable rate (MCR) of the C–5 fleet. All C–5 B and C models and one C–5A model aircraft will undergo RERP resulting in a total of 52 C–5Ms in the inventory. Additionally, the new maintenance processes changed our focus from "fly to fail" on major components to preventative replacement. This has reduced the number of C–5s stranded off-station awaiting parts and will result in a 7 percent increase in MCR. Finally, C–5A retirements will improve aircraft availability by removing maintenance intensive jets from the fleet and will allow us to focus our maintenance personnel and resources on the right sized fleet.

The intra-theater workhorse supporting the warfighter is the C–130. The Mobility Capabilities and Requirements Study-2016 (MCRS–16) determined that 335 C–130s are required to perform general support intra-theater airlift missions. Follow-on analysis of the direct support mission determined that 20 additional C–130s and the 38 C–27Js already in the program can perform the direct support mission. Air Mobility Command's assessment is that a total of 355 C–130s and 38 C–27Js, in both general and direct support roles, will support the warfighter.

Finally, I support the Air Force's plan to acquire up to 134 C–130Js, modernizing 221 legacy C–130s with the Avionics Modernization Program (AMP), and fielding 38 C–27Js.

Our mobility aircraft routinely operate in threat areas across the spectrum of conflict from humanitarian relief to combat resupply. To operate safely in these environments, I strongly support continued defensive systems upgrades. These upgrades include equipping aircraft with the Large Aircraft Infrared Countermeasures system and beginning development of the Advanced Situational Awareness and Countermeasures capability for operations in low-medium threat environments.

Operational Support Airlift (OSA) is another key component of our mobility force. Our senior leaders require immediate airlift to carry out military and other missions in a fluid strategic environment. It is important that we not only right-size and modernize the OSA fleet, but we need to develop a management system with a common multi-Service database and operational picture. The goal is to achieve real-time visibility of worldwide senior leader and OSA movements to enable TRANSCOM and Geographic Combatant Commanders to exercise command and control of the OSA fleet within their area of responsibility.

Just as command and control of OSA assets is critical, the leaders aboard the aircraft must be able to communicate while they travel. This requires secure, reliable communications for U.S. national leaders anywhere on the globe. TRANSCOM continues to work with other DOD and U.S. Government stakeholders through the National Leadership Command Capability Executive Management Board to provide the proper level of Senior Leadership Command, Control and Communications-Airborne (SLC3S–A). The Senior Leader In-transit Conference Capsule (SLICC) is a transportable "office in the sky" that provides a secure, interconnected meeting place for Senior Leaders traveling aboard C–17, KC–10 and C–130 aircraft. Designed with flexibility and affordability in mind, the SLICC promises to reduce operating costs by enabling combatant commanders to support DV missions using available theater assets and regularly scheduled airlift routes.

The Civil Reserve Air Fleet (CRAF) is a critical component in our ability to rapidly deploy forces and equipment. In this past year, through discussions with our commercial industry partners, we made the most sweeping changes to the CRAF program in 15 years. These changes will result in a stronger, more viable program and address congressional mandates to improve predictability of DOD commercial

requirements and incentivize carriers to use modern aircraft. Perhaps the most profound change is the implementation of a "flyer bonus" which, for the first time in the history of the CRAF, rewards peacetime mission participation in addition to the traditional reward for wartime commitment. Our plan for fiscal year 2012 is to amend the flyer bonus to provide increased reward to those carriers who fly peacetime CRAF missions with modernized aircraft.

To ensure the CRAF partnership remains strong, TRANSCOM created the Executive Working Group (EWG), modeled after a similar venue with our sealift partners. The CRAF EWG brings together TRANSCOM and AMC leaders with Chief Executive Officers, Presidents, and other representatives of the commercial airline industry to discuss issues with the CRAF program. Since its first meeting in March 2010, this group has met six times and proved instrumental in crafting the changes to the fiscal year 2011 contract. The CRAF EWG will continue to meet on a regular basis to discuss additional changes to this vital program.

Maintaining Sealift Readiness

Sealift is the primary means for delivering ground forces and sustainment during major combat operations, and has been responsible for delivering over 90 percent of all cargo to Afghanistan and Iraq. Because of the superb volunteer participation of commercial U.S.-Flagged vessels in the Maritime Security Program (MSP), we did not have to activate a single ship in the Surge Fleet or the Ready Reserve Force (RRF) to meet the President's aggressive timeline for the surge and drawdown of forces in Afghanistan and Iraq—a remarkable achievement.

The large, medium speed, roll-on, roll-off ships in the Surge Fleet, the vessels of the RRF and the commercial U.S. Flag Fleet in the MSP and Voluntary Intermodal Support Agreement are all required to meet the Nation's strategic sealift requirements. While cargo preference laws and national defense sealift policies ensure the viability of the U.S. flag commercial fleet, we must also continue to keep the Surge Fleet and Ready Reserve Force vessels at an equal state of readiness as well as our citizen mariners who man these vessels during operations in CENTCOM and around the world. In fact, the Maritime Administration is conducting a thorough study of cargo preference laws to ensure that they most effectively support the delicate balance of commercial viability and readiness which is so critical to our sealift capability.

TRANSCOM's partnership with the U.S. commercial sealift industry and the Department of Transportation has been vitally important in developing new routes for conveying cargo around the globe—particularly to regions with undeveloped infrastructure. Through programs like the Maritime Security Program (MSP), the Voluntary Intermodal Sealift Agreement and the Voluntary Tanker Agreement, the Department of Defense gains access to U.S. commercial capabilities and transportation networks while ensuring the continued viability of both the U.S. flag fleet and the pool of citizen mariners who man those vessels. Last year, Congress ensured the continuation of the MSP by extending it an additional 10 years to 2025. We look forward to working with Congress and this committee to refine this program between now and the MSP implementation date in 2015.

We also work closely with the DLA Energy office to meet DOD's fuel requirements. On October 7, 2010, MSC took operational control of the first of two U.S.-built, U.S.-flagged State-class tanker vessels. These new double-hulled 331,000-barrel ships will provide vital sealift capabilities. The MV Empire State and her sister ship, MV Evergreen State, will carry refined petroleum products between commercial refineries and DOD storage and distribution facilities worldwide. While these two new tankers increase the total number of U.S.-flagged tankers with international trade rights to five, our Nation would benefit greatly from even further increases in U.S.-flagged tanker capacity. Additionally, the Maritime Administration is currently examining the feasibility and potential benefit of developing a strategic access program outside of MSP solely for tankers.

Finally, we look forward to working with the Navy and combatant commanders to fully realize the logistics capabilities of the Joint High Speed Vessel across all its missions from Theater Security Cooperation to its use as an operational and tactical logistics platform.

Maintaining Surface Readiness

TRANSCOM depends on our en route structure to rapidly support theater COCOMS. On August 9, 2010 TRANSCOM submitted its inaugural En Route Infrastructure Master Plan (ERIMP) 2010 to the Chairman of the Joint Chiefs of Staff. The purpose of the ERIMP is to guide the en route infrastructure investment decisions necessary to ensure we support the regional Combatant Commander Theater Campaign and Theater Posture Plans. The ERIMP frames the en route strategy by

identifying our most important enterprise-wide infrastructure requirements. It includes recommendations from the combatant commands and takes an enterprise approach to global deployment and distribution.

Because en route infrastructure is key to global logistics, Rota, Spain; Camp Lemonier, Djibouti; Souda Bay on the island of Crete; and Guam remain TRANSCOM near-term priorities as strategic locations. Similar to our multi-modal MRAP movement through the Persian Gulf, movement of Combat Aviation Brigade helicopters by ship to the intermodal port at Rota, Spain, then flying them into Afghanistan significantly increases velocity. Camp Lemonier is the only en route node on the African continent with enduring presence; an unrefueled C–17 can reach two-thirds of the continent from Djibouti. Funding the expansion of the aircraft parking area and the taxiway will help ensure Camp Lemonier's continued viability as a critical strategic intermodal location. Located on the island of Crete in the central Mediterranean Sea, Souda Bay is key to the JDDE en route mission due to its proximity to the Black Sea, the Middle East, and Africa. Funding for a multi-access road, aircraft parking expansion, an air operations complex, and the Marathi logistics facility will help tremendously as we support three separate Geographic Combatant Commanders from Souda Bay. Guam is our intermodal crown jewel in the Pacific. The TRANSCOM-led 2009 Global En Route Infrastructure Steering Committee identified two necessary military construction projects at Anderson Air Force Base, Guam: an Air Freight Terminal Complex and Air Passenger Terminal/Joint Personnel Deployment Center. Each of these projects will greatly enhance the effectiveness, efficiency and safety of the passenger and the cargo handling process.

At home, our highways, railroads, and ports for National Defense Programs work in partnership with the Department of Transportation to identify DOD's requirements for the civil sector infrastructure between our installations and ports and integrate these requirements into the civil sector planning cycle. These programs play a key role in ensuring our infrastructure in CONUS is ready to support DOD's deployment and distribution needs.

Developing New Capabilities

Global logistics is an incredibly fluid business. As the geopolitical, diplomatic and operational landscape changes, TRANSCOM understands the need for innovative mobility and distribution strategies, processes and technology.

Our Research, Development, Test, and Evaluation Program searches for these emerging enablers to support the future force. Through this program, we leverage new technologies, cutting edge business processes and innovative logistics strategies to address mobility challenges before they arise.

Given the poor infrastructure in Afghanistan, much of our work focuses on new methods of aerial delivery. We are working with the Natick Soldier Center to develop the Helicopter Sling Load of the Joint Precision Airdrop System. The project integrates elements from various airdrop programs into a new capability that will allow for the delivery of payloads from a helicopter cargo hook. The system also ensures rapid distribution for both delivery over land and ship-to-shore applications.

We also continue to invest in intelligent unmanned aircraft technology to autonomously deliver critical supplies to forward points of need. Our intent is to address extended lines of communication susceptible to weather, degraded road conditions and enemy threats, such as improvised explosive devices, ambush, and sabotage.

Through the Joint Capabilities Technology Demonstration program, we are supporting High Speed Container Delivery Systems (HSCDS) to improve airdrop accuracy, increase tonnage dropped, and enhance survivability of airlift and aircrews. HSCDS is a high-speed, low altitude airdrop system that provides the warfighter more cargo, more often and with more accuracy than any comparable delivery system. It optimizes aircraft threat avoidance and tactical maneuverability while enhancing our ability to deliver vital cargo to small combat units at the point of need.

Hybrid airships can revolutionize logistics by moving the supply chain above the battle space to deliver large volumes of cargo directly to the point of effect, without the need for an airfield or roads. By delivering directly, hybrid airships bypass many supply-chain "touches," thereby reducing cost and risk. The continued exploration of the hybrid airship concept is essential to support future operations in austere and infrastructure-challenged locales where TRANSCOM will likely be required to support military or humanitarian relief operations.

The Joint Recovery and Distribution System (JRADS) achieved tremendous success in its first demonstrations with the 101st Sustainment Brigade. The JRADS technology enables quick and efficient recovery of damaged MRAPs on the battlefield, which minimizes troop exposure to attack when recovering damaged vehicles.

TRANSCOM is committed to innovative sealift solutions as well. Sea basing is one such innovation which affords alternatives to the traditional use of seaports of de-

barkation. It enables discharge, reception, staging and assembly at sea; and interfaces with both organic and commercial sealift assets. The Large Vessel Interface Lift-On/Lift-Off system provides the ability to load and offload containers between ships at sea with precision and in much higher sea states than is currently possible. In April 2010, the technology was successfully demonstrated in the Gulf of Mexico between Ready Reserve Fleet vessels SS Flickertail State and MV Cape Texas. Together with the Navy, we will further develop this technology.

The Joint High Speed Vessel represents a transformational sealift capability. Bridging the traditional gap between high-speed, low-capacity airlift and low-speed, high-capacity sealift, it affords the promise of enhanced logistic response to military and civil contingencies around the globe. Forward deployment of the vessel in combination with warehoused stocks of equipment and supplies will leverage its speed and capacity to quickly deliver needed cargo.

Fiscal Stewardship

Good stewardship of the taxpayers' dollars is a TRANSCOM hallmark. In everything we do, we are always effective, but mindful of cost. Since 2003, we and our enterprise partners have avoided costs in excess of $5.2 billion through transformational distribution initiatives, 1improving inventory and transportation alignment, optimizing strategic air and surface processes and effectively utilizing multimodal transportation solutions; all while improving end-to-end velocity and effectiveness.

Given our global mission, the AMC Fuel Efficiency Office has been laser-focused on increasing fuel efficiency. The result is a significant cost decrease to the customer and taxpayer. For example, information technology (IT) improvements such as Mission Index Flying for the C–17 and C–5 reduce each sortie's fuel burn during mission execution. Other improvements, such as the Advanced Computer Flight Planning overlay, reduce the excess fuel carried which increases the amount of cargo the aircraft can carry—again lowering the cost to the taxpayer.

TRANSCOM continues to lead the certification effort for alternative fuels. Most aircraft in AMC's fleet are approved to fly on a synthetic blend of coal or natural gas-based Fischer-Tropsch fuel and JP–8 military grade jet fuel. The workhorse of AMC, the C–17, underwent flight tests and certification on a cutting-edge, renewable jet fuel blended with JP–8 this past August. In addition to allowing the DOD to target renewable sources, alternative fuels are more environmentally friendly than traditional jet fuel.

Final Thoughts

TRANSCOM has the critical national responsibility to support the men and women who fight to preserve our liberty and security and to support those who provide lifesaving relief to those in need . . . and to do so in an global operating environment increasingly characterized by uncertainty, complexity, and rapid change. Looking to the future, TRANSCOM, along with our enterprise partners, will continue to transform the Joint Deployment and Distribution Enterprise to meet this challenging new environment and continue to provide effective and best value support to our Nation. We will always, always deliver.

Chairman LEVIN. Thank you so much, General McNabb.

General Ham.

STATEMENT OF GEN CARTER F. HAM, USA, COMMANDER, U.S. AFRICA COMMAND

General HAM. Mr. Chairman, Senator McCain, members of the committee: Thank you for this opportunity to discuss with you today the accomplishments of the men and women of AFRICOM. I am honored to be here seated beside General McNabb, a highly distinguished airman and joint force leader, and it is no exaggeration to say that Operation Odyssey Dawn would not have occurred as it did without TRANSCOM's great support.

This is indeed a historic time for AFRICOM. We completed a complex, short-notice, operational mission in Libya and have now transferred control of that mission to NATO. The situation in Libya and the conduct of Operation Odyssey Dawn highlights some important matters about Africa. First, this event illustrates the dy-

namics of the African political-military environment, one that has seen the growing threat of transnational extremists in Somalia, election crises, coups, the Southern Sudan referendum, and the scourge of the Lord's Resistance Army (LRA), to name just a few of the challenges to security on the continent.

In order for AFRICOM to reduce threats to our citizens and our interests both abroad and at home, we need to contribute to operations, programs, and activities that help African states provide for their own security in a manner consistent with the rule of law and international norms. We must continue our efforts to enhance regional stability through partnerships with African states and sustained, reliable support to African regional organizations.

AFRICOM's programs are designed to help prevent conflict while simultaneously ensuring that the command is prepared to respond decisively to any crisis when the President so directs, as demonstrated in our conduct of Operation Odyssey Dawn.

Second, building the coalition to address the situation in Libya was greatly facilitated through the benefits of longstanding relationships and interoperability, in this case through NATO. This is the kind of regional approach to security that AFRICOM seeks to foster on the continent. AFRICOM's priority efforts remain building the security capacity of our African partners. We incorporate regional cooperation and pursuit of interoperability in all our programs, activities, and exercises so our African partners are postured to readily form coalitions to address African security challenges as they arise.

Everything that AFRICOM has accomplished is the result of the professionalism and dedication of the uniformed and civilian women and men of the command and our teammates from across the U.S. Government. Their dedicated efforts are a testament to the American spirit and determination and reflect our commitment to contributing to the well-being and security of the people of Africa.

Our guiding principles within the command are: first, that a safe, secure, and stable Africa is clearly in the best interests of the United States; and second, that we seek to help Africans find solutions to African challenges.

I am cognizant that this command is only able to accomplish its missions with the enduring support of this committee. I thank you for that and invite you to come visit us at our headquarters, or better yet, come see us at work in Africa.

Mr. Chairman, with that, I welcome your questions.

[The prepared statement of General Ham follows:]

PREPARED STATEMENT BY GEN CARTER F. HAM, USA

INTRODUCTION

It is my privilege as Commander of U.S. Africa Command to present to Congress our Posture Statement for 2011. U.S. Africa Command protects American lives and promotes our national interests by advancing security and stability in Africa. We follow two main lines of effort: building the security capacity of our African partners and preparing for a wide range of potential crises. U.S. Africa Command's operations, programs, and activities contribute to reducing the threats to our citizens and interests both abroad and at home by helping African states provide for their own security. We seek to enhance regional stability through support to and partnership with African regional organizations. Our planning and training are designed

to prevent conflict while simultaneously ensuring that U.S. Africa Command is prepared to respond decisively to any crisis when the President so directs.

A prosperous and stable Africa is strategically important to the United States. An Africa that can generate and sustain broadbased economic development will contribute to global growth, which is a longstanding American interest. However, poverty in many parts of Africa contributes to an insidious cycle of instability, conflict, environmental degradation, and disease that erodes confidence in national institutions and governing capacity. This in turn often creates the conditions for the emergence of a wide-range of transnational security threats that can threaten the American homeland and our regional interests.

Our primary effort for increasing stability and deterring conflict is focused on building partner capacity—one of six core Department of Defense (DOD) mission areas identified in the 2010 Quadrennial Defense Review (QDR). The Command is helping African states transform their militaries into operationally capable and professional institutions that are subordinate to civilian authority, respect human rights, adhere to the rule of law, and are viewed by their citizens as servants and protectors of the people. We assist our African partners in building capacities to counter transnational threats from violent extremist organizations; to stem illicit trafficking in humans, narcotics, and weapons; to support peacekeeping operations; and to address the consequences of humanitarian disasters—whether manmade or natural—that cause loss of life and displace populations. In many instances, the positive effects we achieve are disproportionate to the modest investment in resources.

Dramatic events taking place in Africa, as demonstrated by the unfolding situation across North Africa, have shown how quickly the strategic environment can change. It has also shown the value of the Nation's investment in the command. As of the writing of this report, the situation in Libya remains unclear. The command is prepared to respond in a variety of ways pending national decisions. We will maintain our steady focus on security cooperation with our African partners, and stand ready to protect American lives and interests.

STRATEGIC ENVIRONMENT

The challenges and opportunities in U.S. Africa Command's Area of Responsibility (AOR) are dynamic and complex. Our AOR includes 52 African states more than 800 ethnic groups, over 1,000 languages, and a diverse geography three and a half times the size of the continental United States.[1] Its rapidly growing population presents a complex mix of political, economic, social, and demographic challenges.

Continent-wide Trends

The global economic crisis disrupted a period of sustained economic growth in Africa. However, according to a 2010 report developed jointly by the African Development Bank, the Organization for Economic Cooperation and Development, and the United Nations (U.N.) Economic Commission on Africa, the continent's economies are resilient and the prospects for regaining economic momentum are good. Earlier debt relief and aid programs ensured that many African Governments were not burdened with onerous financial obligations, and their commodity-based economies appear poised to rebound faster than countries that are more dependent on financial and manufacturing sectors.

Demographic trends highlight the urgent need for sustained and broadbased economic growth throughout Africa. High birth rates, a youth bulge, and urban congestion stress the ability of many governments to provide basic services, education, and jobs. Forty-three percent of sub-Saharan Africa's population is below the age of 15. This population could provide further advances in developing and consolidating democracy; however, if unaddressed, this potential pool of undereducated and unemployed youth could present a possible source of instability and potential recruiting pool for violent extremist organizations or narcotics traffickers. The rapid expansion of already strained urban areas with limited infrastructure will increase competition for limited jobs, social services, housing, food, and water as Africa's population is expected to double to 2 billion by 2050.

A welcome development across the continent is that several African conflicts have ended in the last 10 years—Liberia, Angola, Burundi, Sierra Leone, Chad, and the North-South Sudanese conflict. However, as recent events in Cote d'Ivoire and Darfur illustrate, many of these settlements and compromises remain fragile.

[1] Egypt is in U.S. Central Command's AOR. The United States does not recognize the Sahrawi Arab Democratic Republic (Western Sahara); however, it is recognized by the African Union.

African states are working hard to meet their own security challenges. Today, Africans comprise 30 percent of UN peacekeeping forces worldwide and 50 percent of peacekeeping forces deployed across the African continent. At any given time there are approximately 25,000 African soldiers deployed in support of UN and African Union (AU) peacekeeping missions. Five African countries—Nigeria, Rwanda, Ghana, Ethiopia, and South Africa—rank amongst the top 15 UN troop-contributing nations, and Uganda and Burundi are the major contributors to the AU peacekeeping mission in Somalia. Also, the development of the AU and its Regional Economic Communities, growing regional cooperation among neighboring states, the efforts to establish the African Standby Force, regional cooperation by Gulf of Guinea states to improve maritime security, and combined efforts to combat the Lord's Resistance Army (LRA) demonstrate a growing continent-wide commitment to establishing stability.

Though much of Africa is peaceful today, conflict remains a significant problem that drains resources and saps the confidence needed for Africa to realize its potential. These lingering conflicts are predominantly driven by internal fissures rather than external interstate disputes. The conflict between the Nigerian Federal Government and a variety of alienated groups in the oil and gas rich Niger Delta region continues and is a concern as the 2011 elections approach. The Democratic Republic of the Congo (DRC) continues to recover slowly from one of Africa's most devastating wars. With over 20,000 soldiers, the UN mission in the DRC is the largest and most expensive peacekeeping operation in the world. Additionally, the LRA, although diminished since Uganda began operations against it in 2008, continues its horrific actions, which threaten stability in central Africa.

Sudan remains a concern as the governments of the north and south implement the results of the January 2011 independence referendum. North and South Sudan will need to resolve contentious issues like oil wealth sharing, debt, and border demarcation before the end of the mandated Comprehensive Peace Agreement timeline set for July 2011. The new government of Southern Sudan will face significant challenges uniting an ethnically disparate populous while building both state institutions and economic infrastructure.

Concerning elections, the positive democratizing trend that emerged in the 1990s has slowed somewhat during the last few years as some nations continue to suffer from constitutional tampering, rigged elections, and intimidation of opposition candidates. African elections in the near term are likely to produce mixed results for democratization. However, the proliferation of civil and political opposition groups enabled by social media, increased voter participation, local press coverage of political events, greater citizen access to information, and continued international attention will help promote transparent and democratic elections in the 22 national contests scheduled in 2011. The recent changes of government in Tunisia and Egypt vividly illustrate these trends, as the power of social media and greater citizen access to information has empowered ordinary citizens.

Good governance builds the trust and confidence necessary for regional cooperation and economic development, and provides the leverage for national and regional programs to foster growth and stability. The African states making progress toward free and fair elections, open regulatory practices, and the provision of essential services are, more often than not, reliable partners trusted by their neighbors. Those states with weak governments are less stable and less dependable.

Transnational Threats

There are numerous transnational threats in Africa, with violent extremism, piracy, and narcotics trafficking constituting three of the most dangerous. Many African states recognize these threats and are taking positive actions—often with Africa Command's assistance—to confront them.

Somalia remains a failed state: divided, weak, and fragile. Despite the intentions of the Transitional Federal Government (TFG) to establish the sinews of a functioning state, Somalia is unable to provide essential services or control of its territory on its own. It does not have a civil service, central bank, judicial system, police force, or functioning cross-clan military. Inter-clan rivalries and the Islamic extremist groups al-Shabaab and Hizbul al-Islam continue to challenge Somali's ability to form a functioning and stable government, and al-Shabaab controls much of southern Somalia. The survival of the TFG in Mogadishu depends, in large measure, on the presence of the African Union Mission in Somalia (AMISOM) and the more than 8,000 troops supplied by willing African partners.

Linked to Somalia's instability is al Qaeda's dramatic increase in influence in east Africa over the last year. In early 2010, al-Shabaab announced their alignment with al Qaeda. This alliance provides al Qaeda a safe haven to plan global terror operations, train foreign fighters, and conduct global terror operations. The July 2010

attacks in Kampala, Uganda, demonstrate a willingness and capability to expand the conflict beyond Somalia. This situation poses a direct threat to the security of the United States.

Piracy remains a significant problem off the coast of Somalia. The murder of four U.S. citizens aboard the sailing vessel Quest this February demonstrates that piracy is a lethal threat—not just an economic inconvenience or acceptable business risk. The pirates have adapted to the increased international naval presence in the Gulf of Aden by extending their operational reach as far south as the Mozambique Channel and east into the Indian Ocean by hundreds of miles. The number of ships and hostages held by Somalia-based pirates is at an all-time high. The increasing operational reach of Somali pirates vividly illustrates that the dangers emanating from ungoverned spaces rarely remain local.

The Sahel region continues to experience attacks and kidnappings by al Qaeda in the Lands of the Islamic Maghreb, an Algerian-based group with relative safe haven in northern Mali. If al Qaeda affiliates grow unchecked in the Horn of Africa or across the Sahel, it may lead to further attacks against U.S. interests overseas or in the homeland.

Illicit trafficking of narcotics poses a significant threat to regional stability in both West and East Africa. Western Africa is a critical transshipment point for South American cocaine. Increasing European cocaine demand, transportation availability, and negligible risk of interdiction contribute to West Africa's importance in the narcotics trade. The cocaine transiting through this area constitutes from 30 to 60 percent of European demand, with relative wholesale values exceeding the gross domestic products of some affected West African states. East Africa is also facing trafficking challenges, but in the form of Afghan heroin via the Makran Coast of Pakistan pouring into world markets.

U.S. AFRICA COMMAND'S APPROACH

U.S. Africa Command's approach to the continent is guided by our national interests and priorities, our theater objectives, and three operating principles.

- We listen and learn from our African partners;
- We understand and address the continent using a regional framework; and,
- We collaborate as part of an interagency team.

U.S. Security Interests, Priorities, and Theater Objectives

U.S. Africa Command's programs and activities directly support American national security interests. Our vital national security interest in Africa is protecting the lives and interests of the American people by reducing threats to the homeland and abroad. We support the U.S. Government's five priorities in Africa: good governance, economic progress, preventing and resolving conflicts, strong public health programs, and helping our African partners develop the capacity to meet the demands of transnational challenges. In supporting these national priorities, U.S. Africa Command focuses on preventing and resolving conflict and helping our African partners develop their own security capacity.

To focus our efforts, U.S. Africa Command has established the following theater objectives:

- Ensure that the al Qaeda networks and associated violent extremists do not attack the United States;
- Maintain assured access and freedom of movement throughout our AOR;
- Assist African states and regional organizations in developing the will, capability, and capacity to combat transnational threats such as terrorism, piracy, and the illicit trafficking of weapons, people and narcotics;
- Assist African states and regional organizations in developing the capacity to execute effective continental peace operations and to respond to crises; and,
- Encourage African militaries to operate under civilian authority, respect the rule of law, abide by international human rights norms, and contribute to stability in their respective states.

Listening to Our African Partners

U.S. Africa Command values the views of our African partners and learns from them. Our partners have expressed four common defense-oriented goals consistent with American interests and the command's theater objectives. These goals are:

- That they have capable and accountable military forces that perform professionally and with integrity;

- That their forces are supported and sustained by effective, legitimate, and professional security institutions;
- That they have the capability to exercise the means nationally and regionally to dissuade, deter, and defeat transnational threats; and,
- That they have the capacity to increase their support to international peacekeeping efforts.

These goals are in agreement with our emphasis on preventing conflict and enhancing regional stability to protect American lives and interests in Africa and in our homeland.

A Regional Perspective

To identify and analyze the relationships among crosscutting security issues on the vast continent, we view Africa regionally. The five regions—East Africa, West Africa, Central Africa, North Africa, and Southern Africa roughly correspond to the AU's five primary Regional Economic Communities. The Command's staff is responsible for establishing and supporting our African partnerships and developing programs and activities, and is organized along the same regional lines.

East Africa

The East African states include: Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania, Burundi, Uganda, and the island states of Comoros and Seychelles. The interlocking security challenges of Somalia's instability, Southern Sudan's transition to statehood, al-Shabaab's dangerous alignment with al Qaeda, which threatens not only the region but also the American homeland and interests, and the persistent threat from LRA require both regional and bilateral solutions. East African states recognize these challenges and are taking steps to meet them. Uganda is a major troop contributor to AMISOM and is involved in operations against the LRA. Moreover, Djibouti has emerged as a stable partner in a dangerous region and provides our only enduring military infrastructure in continental Africa, Camp Lemonnier.

In East Africa, Combined Joint Task Force-Horn of Africa (CJTF–HOA) is essential to U.S. Africa Command's effort to build the partner capacity necessary to counter violent extremism and address regional security issues. It is the Command's element for conducting Operation Enduring Freedom-Horn of Africa. CJTF–HOA conducts engagement activities by employing small teams throughout the region. Typical military-to-military engagements include officer and non-commissioned officer mentoring, counter-terrorism training, peace support operations, and disaster response planning and preparation. Civil Affairs teams operating from Camp Lemonnier in Djibouti help partner nations improve civil-military relations in their communities. CJTF–HOA is a model for multinational and interagency collaboration, and plays a key role in supporting two important Department of State initiatives; the Africa Contingency Operations Training and Assistance (ACOTA) program as part of the larger Global Peace Operations Initiative, and the Partnership for Regional East Africa Counterterrorism (PREACT).

West Africa

The countries of Senegal, Mali, Gambia, Guinea Bissau, Guinea, Sierra Leone, Liberia, Cote d'Ivoire, Burkina Faso, Ghana, Togo, Benin, Nigeria, Niger, Cape Verde, and Sao Tome and Principe comprise West Africa. West Africa features a diverse population, straddles the transition zone between Christianity and Islam, and retains overlapping French, Portuguese, and British influences. Today West Africa experiences political instability and great disparities in wealth. Recent election disputes in Guinea and Cote d'Ivoire are indicative of stubborn regional problems. Liberia's revitalization, however, demonstrates that West African states can take positive steps to overcome violence, poverty, and disorder.

Nigeria, by virtue of its location, population, significant gross domestic product, and oil Reserves is a major power in the region, and one of the continent's most politically and economically significant states. Nigeria provides regional leadership through the Gulf of Guinea Commission and Economic Community of West Africa States. Nigeria, along with Ghana and Senegal, are emerging in West Africa as critical partners essential to our efforts to enhance stability and security in this important region.

U.S. Africa Command assists in developing the capacity of individual West African states and encourages regional security cooperation. Exercise Flintlock 11 in February and March 2011 was a special operations exercise focused on military interoperability and capacity building with partner nations in North and West Africa. Approximately 669 African, European and U.S. participants from 17 nations trained together in this 17-day exercise. In addition, 9 of the 15 West African coun-

tries participate in Africa Partnership Station, where their focus is on enhancing their maritime capabilities and developing multinational approaches to security in the Gulf of Guinea.

In support of Liberia's revitalization, U.S. Africa Command contributes to a sustained multi-year defense sector reform operation to help establish effective armed forces in Liberia: Operation Onward Liberty (OOL). OOL is a dedicated DOD and Department of State effort that follows three interrelated lines of operation that include security force assistance to the Armed Forces of Liberia, a U.S. Coast Guard effort to help establish a maritime law enforcement capability in the Liberian Economic Exclusion Zone, and mentorship and advisor support to the Liberian Ministry of Defense.

Central Africa

The Central African states of Chad, Cameroon, Equatorial Guinea, Gabon, Republic of the Congo, Angola, DRC, and Central African Republic extend from the middle of the continent east to the Great Lakes, and westward to the Atlantic Ocean. This is one of the most geographically diverse regions in the world and is wealthy in resources. For example, Angola is reaping the rewards of new oil wealth, but is still developing programs to generate broadbased, sustained economic growth. Corruption, weak political institutions, high instances of pandemic disease, and an inability to secure their maritime domain, borders, and natural resources hinder Central Africa's progress.

The lingering effects of the DRC conflict remain the primary challenge to peace and stability in the region. As part of the effort to help the DRC establish the rule of law and legitimate national institutions, U.S. Africa Command has been working with other U.S. agencies and international partners to improve the Congolese military's ability to serve its citizens. Specific examples of U.S. Government efforts include strengthening the military justice system, improving training capacity, developing agricultural projects designed to reduce military personnel dependency on local populations, and improving indigenous training capacity.

The LRA continues to threaten vulnerable populations in northern Uganda and parts of the eastern DRC, Central African Republic, and Southern Sudan. The "Lord's Resistance Army Disarmament and Northern Uganda Reconstruction Act of 2009" directed the U.S. Government to develop a strategy to "mitigate and eliminate the threat to civilians and regional stability" posed by the LRA. U.S. Africa Command is the key DOD participant in the interagency effort to assist our regional partners in apprehending or removing the group's leaders, to protect civilians, to provide humanitarian assistance, and to promote justice and reconciliation in LRA-affected areas.

North Africa

The countries of North Africa are Algeria, Libya, Mauritania, Morocco, and Tunisia. Separated physically and culturally from sub-Saharan Africa by the Sahara Desert, this region maintains strong links to Southern Europe and the Middle East. North Africa is a critical gateway to sea-lane choke points as well as air and sea routes into Europe and sub-Saharan Africa. Trafficking of all types (human, drugs, weapons), economic stagnation, and ungoverned space in the Sahel make the region vulnerable to extremist influences and activities. The political and social upheaval that erupted across North Africa has captured the attention of the international community. However, it is too early to assess properly either the myriad causes or the outcomes of these important events.

Al Qaeda in the Lands of the Islamic Maghreb has emerged as a direct threat to the stability and security of North Africa as well as the West African Sahelian countries of Niger and Mali. To assist these countries in meeting this extremist challenge, U.S. Africa Command supports the Department of State led interagency Trans-Sahara Counter-Terrorism Partnership through Operation Enduring Freedom-Trans-Sahara (OEF–TS). OEF–TS strengthens regional counterterrorism and security capabilities by employing small Mobile Training Teams, Civil Military Support Elements, Joint Planning and Assistance Teams, and through Senior Leader Engagements.

Southern Africa

Southern Africa comprises nine continental states including Namibia, South Africa, Lesotho, Swaziland, Botswana, Mozambique, Zimbabwe, Zambia, Malawi and two island states—Madagascar and Mauritius. In many dimensions, Southern Africa is highly developed economically; yet, the region still has some significant problems. Governance challenges, inflation, and refugees from Zimbabwe present challenges to Southern African nations. Two states with great potential, Zimbabwe and Madagascar, have difficult internal political challenges and are under economic

sanctions, while Botswana continues to rise from one of the world's poorest countries to middle-income status. South Africa and the United States recently institutionalized a steadily improving era of cooperation when Secretary Clinton and South Africa's Minister of International Relations and Cooperation, Maite Nkoana-Mashabane, established an ongoing Strategic Dialogue to foster cooperation in areas of mutual concern. South Africa is an active participant in U.S. Africa Command's primary maritime security engagement initiative, Africa Partnership Station (APS).

Integrated Interagency Team

U.S. Africa Command is part of a diverse interagency team with abundant talents, expertise, and capabilities. An integrated interagency effort requires understanding the institutional perspectives of each agency, as well as each agency's statutory responsibilities and authorities.

U.S. Africa Command's contribution to an integrated approach starts in our Stuttgart headquarters, where the Deputy to the Commander for Civil-Military Activities is a senior U.S. diplomat. In addition, a U.S. Agency for International Development (USAID) Senior Development Advisor helps ensure that our military programs and activities support and complement our government's development programs and activities. We have made progress in creating a collaborative interagency environment in U.S. Africa Command. While we welcome the skills and capabilities our interagency partners bring to our mission, we are still working toward fulfilling our vision of an integrated whole-of-government approach to the challenges in Africa. We would benefit from increased interagency support from other U.S. Government agencies and departments.

U.S. Africa Command also works closely with embassy country teams to ensure that our programs and activities support and complement their Mission Strategic and Resource Plans. To enhance this cooperative interagency effort, our annual Theater Security Cooperation Conference brings together over 300 stakeholders from U.S. embassies in Africa, U.S. Government agencies, and our component commands to ensure our programs and activities are synchronized and integrated with those of the other government agencies.

PROGRAMS AND ACTIVITIES

U.S. Africa Command is committed to the delivery and sustainment of effective security cooperation programs that build our partners' security capacity. At our partners' request, we design and develop programs, activities, and exercises that support their four common defense goals. When we complete an activity, we stay engaged with our partners to foster long-term gains and successes. Our intent is to achieve a persistent and sustained level of engagement.

Our Army, Navy, Air Force, Marine, and Special Operations Forces as well as CJTF–HOA set the conditions for the success of our security cooperation programs and activities on the continent.[2] They perform detailed planning, provide essential command and control, establish and sustain relations with our partners, and develop processes to provide timely operational assessments.

Partner security capacity building programs focus on three overlapping capacity building functions:

- Building operational capacity;
- Building institutional capacity; and,
- Developing human capital.

Building Operational Capacity

Building Operational Capacity is about more than the number of troops and pieces of equipment. It is about aligning the right military capabilities—ground, maritime, and air—against a partner's unique mission requirements, as well as developing the necessary operational enablers that foster the independent sustainment of those capabilities. We work closely with our partners to align the right military capabilities against threat and mission requirements, as well as develop the necessary operational enablers. Examples of programs and activities that help our African partners build operational capacity, as mentioned earlier, include OEF–TS, exercise Flintlock, PREACT, and the GPOI/ACOTA programs.

Beyond these important programs and activities, the National Guard State Partnership Program, APS, the African Maritime Law Enforcement Partnership, exer-

[2] U.S. Africa Command has four component commands, one sub-unified command, and the Combined Joint Task Force—Horn of Africa. The four component commands are U.S. Army Africa (USARAF), U.S. Naval Force, Africa (NAVAF), and U.S. Air Forces (AFAFRICA/17AF). U.S. Special Operations Command, Africa (SOCAFRICA) is the sub-unified command.

cises Africa Endeavor and Natural Fire, Medical Capabilities and Readiness Exercises, and Africa Deployment Assistance Partnership Team all contribute to partner operational capacity.

The State Partnership Program connects a U.S. State's National Guard to an African nation for military training and relationship building. This program builds long-term relationships, promotes access, enhances African military professionalism and capabilities, strengthens interoperability, and enables healthy civil-military relations. Our current National Guard partnerships are: Botswana and North Carolina, Ghana and North Dakota, Liberia and Michigan, Morocco and Utah, Nigeria and California, Senegal and Vermont, South Africa and New York, and Tunisia and Wyoming. Working closely with the National Guard Bureau, the Command will seek to expand this highly effective program.

Africa Partnership Station (APS) is U.S. Africa Command's primary maritime security engagement program. APS strengthens our partners' maritime security capacity by focusing on the development of planning skills, maritime domain awareness, response capabilities, and regional integration. In 2010, APS included representatives from 9 European allies, 23 African countries, and Brazil. This was more than double the number of partners participating in the planning and execution in previous years.

African Maritime Law Enforcement Partnership (AMLEP) is a maritime partner program conducted with the U.S. Coast Guard that contributes to operational as well as institutional capacity. AMLEP develops partner capacity in maritime governance and maritime security by engaging partner nations at both the national interagency level and tactical enforcement level. AMLEP operations result in the apprehension of vessels engaged in illegal operations and enable U.S. diplomatic efforts that foster good governance.

Africa Endeavor is our premier communications exercise designed to encourage interoperability, information exchange, and regional cooperation among African nations so they can coordinate with one another during natural disasters and emergencies. Last year in Ghana, communications experts from more than 30 African nations participated in the continent's largest communications interoperability exercise. A highlight was the direct satellite link and associated command and control tactics, techniques, and procedures established between the African Union's Peace Support Center in Addis Ababa and the exercise main body in Accra, Ghana.

Joint and multinational exercise Natural Fire seeks to improve interoperability and build partner capacity to respond to complex humanitarian emergencies, specifically planning for possible pandemic influenza outbreaks. The fiscal year 2010 exercise included more than 500 U.S. soldiers training alongside more than 600 troops from Burundi, Kenya, Rwanda, Tanzania, and Uganda. The fiscal year 2011 exercise will be held for the first time in Tanzania and is scheduled for July and August 2011.

Medical Capabilities and Readiness Exercises, referred to as MEDFLAG, provide medical training to the host nation's medical personnel as well as offering clinics for residents in the local area. A September 2010 MEDFLAG bi-lateral exercise in Kinshasa, DRC, saw 90 servicemembers from U.S. Africa Command and its components train more than 200 members of the Armed Forces of the Democratic Republic of the Congo in combat lifesaving skills, preventative medicine, and mass casualty procedures. As part of the exercise, doctors from the DRC worked side-by-side with their American counterparts to treat more than 1,800 Congolese in a three-day clinic.

Africa Deployment Assistance Partnership Team assists African partners to build logistics capacity by training African partner noncommissioned officers how to deploy their equipment in support of peacekeeping operations. Of the eight partner nations who completed the training in 2009, the Ugandans were the first to get their 23 noncommissioned officers certified to plan, palletize, and load cargo on peacekeeping missions.

Building Institutional Capacity

To support the building of institutional capacity, we focus on developing and sustaining a government's ability to program and allocate security resources, establish national command and control, provide civilian oversight of military forces, and develop military and security recruiting, training, and sustaining programs and policies. These functions help to ensure the readiness and independent sustainability of our partners' military forces. An underlying premise of our building institutional capacity efforts is that military forces must be subordinate to civil authority and accepted as legitimate members of a civil society based on the rule of law.

We have learned from Operation Onward Liberty in Liberia that rebuilding a state's security institutions requires more than military means. Institutional capac-

ity building is an inherently interagency endeavor. Success in this mission requires a long-term commitment by numerous U.S. Government agencies and sufficient resources in all departments to ensure success. Onward Liberty illustrates how we can achieve positive effects that enhance the capability of our partners and support U.S. interests disproportionate to our modest investment in resources. With a small investment, the U.S. Government is helping Liberia transform their Ministry of Defense, Armed Forces, and Coast Guard. Liberia's progress will contribute to regional stability and provide a model for other African states transitioning from conflicts. Moreover, these lessons will inform how we approach Security Force Assistance in other areas of Africa, such as Southern Sudan.

Other programs and activities that are building institutional capacity include Partnership for Integrated Logistics Operations and Tactics, The Pandemic Response Program, Military Intelligence Security Cooperation, and special staff assistance and mentoring programs.

Partnership for Integrated Logistics Operations and Tactics is an operational-level seminar jointly designed and funded in partnership with the Canadian Ministry of Defense, Pearson Peacekeeping Centre and the GPOI program. This program builds long-term operational logistics planning capacity within the AU Standby Force, and promotes interoperability with the U.S. military.

The Pandemic Response Program focuses on strengthening our African partners' military capacities to plan and respond to potential pandemics. Our efforts are reinforced with 3 years of funding from USAID, which cooperates with the International Federation of the Red Cross and Red Crescent Societies and other partner organizations in African countries.

Military Intelligence Security Cooperation develops not only institutional capacity, but also human capital by enhancing partner country military and security service professionalism and the development of military intelligence organizations that respond to civilian authority and respect the rule of law. Military intelligence operational capacity building is designed to support the execution of full-spectrum operations, including counter terrorism, intelligence support to peacekeeping operations, and intelligence support to humanitarian assistance and disaster relief.

To support the development of institutional capacity, we also conduct special staff programs. Through mentoring and exchanges, our inspector general, chaplain, legal counsel, surgeon, public affairs, and other special staff elements work closely with partners to improve readiness and professionalism. Additionally, our African partners recognize that the backbone of a professional military is an effective noncommissioned officer (NCO) corps. Depending on the need, we help develop doctrine, training plans, and facility plans while also engaging with partner leadership in developing their NCO corps.

Developing Human Capital

To develop human capital, we focus on developing the professional attributes and values that complement capacity and institution building efforts and enhance the standing of the military among members of civil society. We encourage our partners to develop the capacity to take care of their military forces and their families, which increases readiness. Each positive engagement and activity alongside our forces helps our partners develop the professional attributes and values essential for an effective military.

The African Leader Development Initiative is a U.S. Africa Command program that assists in the strengthening of our African partner's warrant officer and noncommissioned officer corps. U.S. Africa Command and our components accomplish this by providing warrant and noncommissioned officer academies with curriculum development assistance, instructors, guest speakers, and familiarization visits for our African partners to our Services' premier NCO academies. Additionally, 2010 saw the first annual African Defense Joint Warrant Officer/Sergeant Major Symposium convene in Washington, DC. This symposium brought together senior warrant and noncommissioned officers from 17 African countries to collaborate on civil-military relations, regional security issues, peace support operations, Human Immunodeficiency Virus prevention, sexual and gender based violence prevention, and initiatives for women in the Armed Forces. This is an example of the outstanding support we receive from our Africa Center for Strategic Studies (ACSS), which cohosted the 2010 symposium as well as many other events. U.S. Africa Command relies on the social, cultural, and academic expertise ACSS provides to inform our cooperative efforts with our sub-Saharan African partners.

The Military Intelligence Basic Officer Course-Africa, the Military Intelligence Professionals Course, and the Military Intelligence NCO Course-Africa are U.S. Africa Command-sponsored courses that assist partner nations in further developing fundamental military leadership and intelligence skills. They enhance capacity for

intelligence analysis and sharing among nations and to provide an environment designed to improve collaboration within the region's military intelligence community.

International Military Education and Training (IMET) is a long-standing and well-regarded program funded by the Department of State. IMET provides military course education and training for foreign military and select civilian personnel. Professionalizing militaries and reinforcing the democratic value of elected civilian authority are among the benefits of the Department of State-led IMET and Expanded-IMET programs. These comprise the most widely used military assistance programs in U.S. Africa Command's AOR as almost every country in the AOR receives IMET. Sending African officers to our mid-level and senior staff colleges provides these officers an opportunity to not only learn about the United States and develop long-lasting professional relationships with our very best officers, but to assume greater responsibilities in meeting their security challenges upon return to their own country. Presently, 30 West and Central African flag and general officers have benefited from the IMET program. A notable IMET participant from Uganda is Major General Nathan Mugisha—the commander of the African Union's peacekeeping mission Somalia; a U.S. Army War College graduate.

RESOURCING FOR THE FUTURE

U.S. Africa Command maintains a long-term commitment to our partners to ensure that stability becomes self-sustaining on the continent. Simultaneously, there are potential crises requiring prompt, decisive action, and U.S. Africa Command must be ready for these contingency operations. As we assess our capacity to execute our operations, programs and activities, we continuously evaluate our progress in four key categories:

- Our ability to foster sustained engagement;
- Our ability to expand our operational reach;
- Our ability to respond rapidly to crisis; and,
- Our ability to take care of our people.

Fostering Sustained Engagement

The 2010 QDR identified building security capacity of partner states as one of six key DOD mission areas. U.S. Africa Command is developing, executing, and refining a range of programs and activities that help African states build capable, professional militaries.

Resourcing Sustained Engagement: Authorities

As the Chairman of the Joint Chiefs of Staff and the Secretary of Defense highlighted on numerous occasions, the strict compartmentalization of engagement funding sources can impede unity of effort and progress. Authorities are often inflexible and processes too cumbersome for today's security challenges. For example, the at-sea training platform APS involved the cobbling together of over a dozen different funding sources from Title 10 to resource its first 3 years of this important program. This made establishing and administering this important program a challenge. We have had tremendous success with APS, and today the Department of State provides dedicated Title 22 funding to implement the training aspect of this program.

The Global Security Contingency Fund proposed by the President offers a new approach to funding important assistance activities in an effective manner—pooling the resources and expertise of the Department of State and DOD. The administration has requested $50 million in the State Department budget for this fund, and DOD has committed to contribute significant funding as well. This approach would create a new business model that we believe will lead to collaborative programs to respond to emergent challenges and opportunities.

Resourcing Sustained Engagement: Forces

Maintaining a predictable pattern of available operational forces for sustained engagement activity is critical to the success of our efforts on the continent and an ongoing challenge. U.S. Africa Command's components and subordinate commands are the primary implementers of our programs and activities on the continent. In an environment of competing global demands for forces, we rely on the Global Force Management process for the necessary support of our engagements in Africa.

Funding for the Foreign Military Financing Program

Foreign Military Financing (FMF) is fundamental to our strategy of preventative rather than reactive response and represents an investment in critical relationships. Inadequate funding or inconsistent year-to-year distributions can compromise our efforts, turn our partners towards other sources, and inhibit peacekeeping and counterterrorism operations. The demand for FMF funds will always exceed re-

source availability. Therefore, U.S. Africa Command carefully prioritizes its FMF recommendations to the Department of State using a rigorous analytical process that considers national interests, DOD guidance, country team recommendations, host nation desires, and the host nation's capacity to absorb and effectively employ military equipment. For example, Senegal uses this program to maintain the fleet of U.S. military trucks they acquired for peacekeeping operations using the Excess Defense Article program.

Planning and Assessing Our Programs and Activities

U.S. Africa Command is a judicious steward of the resources provided to us by the American people to accomplish our theater objectives. With the fiscal challenges we face at home and the competing global demands on our military forces, we are dedicated to helping build partner nation capability at the lowest cost possible. In many instances, we achieve positive effects that enhance the capability of our partners and support U.S. interests with a modest investment in resources. We do this through a detailed planning process that links our programs and activities to our theater objectives and carefully justifies resources.

While it is difficult to attribute improvements in our partners' security capacity to individual activities or engagements, the evidence indicates that we are moving in the right direction with regard to our direct engagements. In CJTF–HOA, for example, we measure our effectiveness in several ways: socio-cultural research teams, informal and formal feedback from partner nations, and through surveys. We take a broad view of our programs and activities with a robust annual command assessment process, which incorporates indicators from a range of quantitative and qualitative sources and helps guide our planning for future programs and activities.

Funding for Exercises

A key component of our capacity building is our Joint and Combined Exercise program. This program is dependent upon funding from the Combatant Commander's Exercise and Engagement and Training Transformation (CE2T2) Program. These exercises improve not only the readiness of our African partners, but also increase the capabilities of U.S. forces. As our exercise program expands to meet the readiness needs of U.S. forces and partner militaries, U.S. Africa Command will place increasing demands on limited CE2T2 funds. We seek Congress' continued support of the DOD's request for the Combatant Commander's Exercise, Engagement, and Training Transformation Program.

Though we face challenges in the previously mentioned areas, we are also entering into a new era of opportunities.

Quadrennial Diplomacy and Development Review

The Department of State's recent Quadrennial Diplomacy and Development Review (QDDR) is a laudable milestone on the pathway to improving interagency cooperation and collaboration. Following in the footsteps of DOD's QDR, the QDDR made a sweeping assessment of how the Department of State and USAID could advance our national interests and effectively partner with the U.S. military in support of these interests. The QDDR's elevation of conflict prevention and response to a core civilian mission is notable, as is the commitment to developing an integrated capability to reform security and justice sectors in fragile states. We look forward to working with our interagency partners at the Department of State and across the government as they implement the QDDR's recommendations.

African Cooperation Authority

U.S. Africa Command makes maximum use of Traditional Combatant Commander Activities authorities for military-to-military and other activities. Section 1050a, a new revision to title 10, U.S.C., will be an important additional authority enabling engagements with civilian elements of Ministries of Defense, the AU, and other security organizations. This authority, provided through the Ike Skelton National Defense Authorization Act for Fiscal Year 2011, will open doors to broader cooperation and benefit both the United States and our African partners. We welcome this valuable addition and thank Congress for its support in creating this authority.

Enhancing Operational Reach and Ensuring Rapid Response to Crisis

U.S. Africa Command works to enhance our operational reach across the Command's AOR. This supports our ability to respond to crises promptly and our long-term efforts for security as well. U.S. forces are often employed in austere environments with limited to non-existent infrastructure, port, and logistics networks. Improvements in these areas enhance our ability to respond to emergencies and threats and to meet the needs of sustained engagement.

Theater Infrastructure and Posture Requirements

U.S. Africa Command evaluates and refines its access needs on a regular basis, in close cooperation with the Department of State. This effort centers on gaining and maintaining the access and freedom of movement necessary to conduct day-to-day security cooperation activities and crisis response operations. We work with our components, the Office of the Secretary of Defense, and the Department of State to update the network of Cooperative Security Locations and supporting agreements required to enable the Command to carry out its activities. As U.S. Africa Command's sole Forward Operating Site on the continent, Camp Lemonnier, Djibouti, serves as a critical operational and sustainment facility (a hub for lift, logistics, intelligence, and Command, Control, Communications and Computers (C4)) in support of DOD activities in the region. It is critical for activities and operations across AOR boundaries in the Red Sea, the Gulf of Aden, and the Arabian Peninsula.

Camp Lemonnier's proximity to Djibouti's air and seaport make it ideal for supporting U.S. Africa Command operations throughout the region. Of equal importance is the Camp's ability to support DOD's global transportation infrastructure network as a key node. Camp Lemonnier, Djibouti, is essential to U.S. security interests in East Africa and the Gulf of Aden. The fiscal year 2012 military construction request contains a number of important projects that will allow us to continue to enhance the capabilities of this facility. We appreciate your attention to these requests.

Ensuring Rapid Response to Crisis

U.S. Africa Command conducts prudent operational planning for a range of possible humanitarian and security contingencies beyond fostering sustained engagement and working to expand our operational reach. This requires the staff to continually assess potential force requirements and the lift, logistics, C4, and intelligence, surveillance, and reconnaissance enablers required to support a range of contingencies. We share our assessments regularly with Joint Staff and the Office of Secretary of Defense.

Taking Care of Our People

U.S. Africa Command team members and their families serve in Stuttgart, Alconbury (Molesworth), and across Africa. Quality of Life (QoL) Programs affirm our commitment to our team members and their families wherever they serve. This Command is committed to providing a strong, supportive environment fostering growth and excellence, while providing the highest quality of resources and services to our U.S. Africa Command family consistent with their commitment and dedication to serve the Nation. To that end, we created a QoL office to manage and oversee activities at the Stuttgart headquarters, Alconbury, and on the African continent.

In order to understand the needs of our families stationed throughout the continent, U.S. Africa Command hosts the annual 'Africa Command Families on the African Continent' working group. This annual forum addresses emerging QoL issues and provides the foundation for our QoL Action Plan. This forum recently identified two issues that family members highlight on a regular basis. First, family members have requested changes that would allow expectant mothers to elect an alternate destination for obstetric care, providing an option to be with their families instead of alone at the nearest Military Treatment Facility. The second issue is the provision of student travel benefits for dependents attending accredited overseas colleges or universities off the continent in locations such as Europe. We appreciate Congress' attention to these two important issues.

To further assist our team members and their families in solving problems resulting from deployment, reunions, and other family changes, U.S. Africa Command implemented the Military and Family Life Consultant Program to support the command headquarters, remote locations and the African continent. We currently have three consultants supporting the Stuttgart and Alconbury communities, as well as CJTF–HOA in Djibouti. We continue to focus our efforts on our members and their families, both on and off the African continent, to ensure their quality of life remains a priority and is funded properly.

CONCLUSION

U.S. Africa Command is protecting American lives and promoting our national interests today by helping our African partners assume a continually increasing role addressing their own security concerns. Africa's long-term growth, stability, and economic prosperity is largely dependent on our partners' ability to develop capable and professional militaries that are subordinate to civilian authority, respect human rights, and adhere to the rule of law. There are no short cuts to growth and stability

in Africa; we must shape our efforts with an understanding of the continent and patiently sustain our efforts over time.

A prosperous and stable Africa is strategically important to the United States. An Africa that can generate and sustain broadbased development will contribute to global economic growth and vitality—a longstanding American interest. Prosperity and stability in Africa will ensure that it does not become a haven for those who wish to do harm to our citizens and our interests—both in the homeland and abroad.

In the coming year, we will continue to support African leadership in addressing shared security challenges, take advantage of opportunities, deepen our strategic partnerships—regionally, bilaterally, and with the AU—and refine our focus in our security cooperation efforts, while also ensuring the military readiness and operational capability of U.S. Africa Command.

I am grateful for the outstanding support U.S. Africa Command has received from Congress. The continued support for our uniformed men and women, our DOD civilians and the other U.S. Government departments and agencies assigned to the command will allow their tremendous work to continue. I am proud to serve on the U.S. Africa Command team with these dedicated Americans.

Chairman LEVIN. Thank you very much, General.

Let's try a 7-minute first round.

General Ham, let me start with some questions about Libya. You were the operational commander at the time our mission was initiated in Libya. My first question would be whether or not you supported the limited military mission in Libya?

General HAM. I did.

Chairman LEVIN. Do you continue to do so?

General HAM. I do.

Chairman LEVIN. Now, in your judgment was it important to obtain United Nations (U.N.) Security Council and Arab League support for the mission before the military operations were initiated?

General HAM. Mr. Chairman, I believe that was important. I think absent that support the negative reaction regionally would have been fairly dramatic and made it difficult for AFRICOM to continue its enduring mission on the continent.

Chairman LEVIN. Would it also have been more difficult to put together the coalition?

General HAM. I believe that would be the case, yes.

Chairman LEVIN. Now, in your judgment should the military mission be expanded to include regime change?

General HAM. While it's clearly our U.S. policy that the current leader has to leave, adding that as a military task greatly complicates the matter. So I would advise that that's a difficult task to achieve militarily and would add to a greater complexity and make the duration and extent of U.S. military involvement much more uncertain than it is today.

Chairman LEVIN. Because of that, would you recommend against it?

General HAM. I would at this point, Mr. Chairman.

Chairman LEVIN. Now, did you support the policy to hand off this mission promptly to NATO?

General HAM. I did, Mr. Chairman.

Chairman LEVIN. Could you tell us why?

General HAM. A couple of reasons, Mr. Chairman. First of all, there's great capability within NATO. Though we didn't know when we started that NATO would be the organization to whom we would hand off the mission, it was our hope that that would be the case. But we were prepared to hand off to some other coalition

should that be necessary. There is great capability in those other nations.

But more so, most of the U.S. military forces who were engaged in this operation are either recently returned from or preparing to deploy for operations in Afghanistan, Iraq, or elsewhere. They are in the so-called dwell period. While we can certainly surge to meet operational needs, as we did for operations in Libya, there is a longer-term effect if greater numbers of U.S. forces had been committed for a longer period of time in Libya, and it would have had downstream operational effects in other missions.

Chairman LEVIN. The surge you're referring to was in Afghanistan, I believe; is that correct?

General HAM. Sir, I'm sorry. I wasn't clear. No, the ability to surge assets for an unforeseen operation, which was the operation in Libya.

Chairman LEVIN. I see. I understand.

Now, does NATO have the adequate capacity to carry out this mission?

General HAM. Sir, I believe they do.

Chairman LEVIN. Are the AC–130s and the A–10s available to the NATO commander upon his request?

General HAM. Sir, the AC–130, as a very precise and specialized capability, remains available. They were not available when I began, just because of the transit time to get those aircraft into theater. They are available now. The A–10s similarly were not available when AFRICOM began the operation and with good effect, and they are available, but NATO must request the A–10 availability.

Chairman LEVIN. The rebel commanders have expressed concern about NATO's willingness to strike the regime targets. In your view, is NATO willing to carry out this mission?

General HAM. Mr. Chairman, in my experience NATO is. In the conduct of several important NATO allies during the period for which AFRICOM was responsible for the mission, we saw several nations very active, very effective in the conduct of strike operations, and it is my assessment that that continues today.

Chairman LEVIN. Should the United States provide arms to the rebels?

General HAM. Not without a better understanding of exactly who the opposition force is. My recommendation would be we should know more about who they are before we make any determination to arm them.

Chairman LEVIN. Thank you.

General McNabb, you've been quoted in the press as stating that TRANSCOM, from a cyber perspective, is the most attacked command in DOD, that cyber attacks apparently are very large in number, hopefully not in effectiveness and hopefully never will be, but nonetheless numerically significant. What are the critical needs of TRANSCOM for cyber security?

General MCNABB. Yes. Mr. Chairman, we are indeed the most attacked of the combatant commanders, and it primarily has to do with our enterprise. We ride on a protected but not secure, much more like the rest of the whole of government, vice a lot of the other combatant commanders that primarily stay on the high side

or the Secret Internet Protocol Router Network. We do that, obviously, because of the nature of our mission and our working with the commercial partners. So we have special challenges along that line.

The kinds of things that we have found as they have attacked us, we ended up having over 33,000 hacking attacks last year. I would say that we have over 100 structured attacks. What we do is we watch that, we work very closely with Strategic Command and the new Cyber Commander, General Alexander, and we go through that and say, okay, how do we get at this. One, how do we protect it, but also two, can we watch it and make sure that we mitigate any damage that would go.

Right now, they will find the weakest link that we have. In some cases that's a cleared defense contractor that has an ability to get into our databases, and they will come through there.

So again, much like the whole of government, we have to figure out how to make sure that the whole network with all of its parts are protected. For instance, I sent out a message to all of our cleared defense contractors that help us with all of our systems and told them: "we need you to take a special look at how you're doing business, your security programs, and make sure that you have taken appropriate measures to protect the network."

The same thing with our components. We obviously do air, land, and sea. The Services have taken this on very seriously, but each Service does it a little differently. We have to make sure that we bring that all together so there's not a weak link in the seams between how we do this, especially as we do multimodal operations. Those are the things that we're working right now with General Kehler at STRATCOM and General Alexander at U.S. Cyber Command, and again we keep teaming with everybody to say we're ready to be test cases. Again, I think it has applicability to the whole of government.

Chairman LEVIN. Thank you very much, General.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

Hearing your testimony, General Ham, is almost an Orwellian experience for me. The fact is that if we had imposed a no-fly zone 3 or 4 weeks ago, Qadhafi would not be in power today. The fact is that the situation on the ground is basically a stalemate.

Would you say that the situation on the ground is a stalemate or an emerging stalemate?

General HAM. Senator, I would agree with that at present on the ground.

Senator MCCAIN. So our policy objective of the removal of Qadhafi is further from being achieved than it was 3 or 4 weeks ago?

General HAM. Senator, I don't know that I would agree with that, because that again was not a military mission. The military mission of protecting, I think, was not wholly achieved, but achieved in large part.

Senator MCCAIN. The citizens of Misurata would be very interested in hearing your comment.

General HAM. Senator, Misurata, as I mentioned——

Senator MCCAIN. Oh, it's only Benghazi that we need to worry about? We don't need to worry about Misurata.

General, you are trying to defend an indefensible position. Is a stalemate in the United States' national security interest?

General HAM. Senator, only if it allows the international community to seek a political or diplomatic solution through at least a cessation in attacks.

Senator MCCAIN. Qadhafi remaining in power which is the result of a stalemate is in the United States' national security interest?

General HAM. Sir, it is clear that the United States' position——

Senator MCCAIN. Is it or not? I'd like an answer to the question.

General HAM. Sir, I don't know that——

Senator MCCAIN. Is it in the United States' national security interest to see Qadhafi remain in power, which is the result of a stalemate? That's a pretty straightforward question, General.

General HAM. Sir, it is clear that the United States has said it is in the United States' interest for Mr. Qadhafi to no longer be in power.

Senator MCCAIN. So right now we are facing the prospect of a stalemate, which then means Qadhafi remains in power, which means that we will then have a very serious situation with Mr. Qadhafi in the future if he remains in power, particularly given his past record.

In other words, you believe we are doing exactly the right thing, which we pursued a course which you strongly support that leaves us in a stalemate situation; is that correct, General?

General HAM. Senator, the military mission which AFRICOM was assigned did not——

Senator MCCAIN. General, I didn't ask you about the task you were assigned. When you were nominated for your position, you were asked if you will state your personal opinion when asked by the members of this committee. I'd like to know if you think a stalemate is an acceptable outcome of the conflict in Libya?

General HAM. Senator, it is my personal opinion, that it is not the preferred solution.

Senator MCCAIN. Not the preferred solution, I see.

Is a stalemate more or less likely now than when you were in command, when you were commanding Operation Odyssey Dawn?

General HAM. It is now more likely.

Senator MCCAIN. General McNabb, on the issue of the supplies into Afghanistan, would you give us a little brief outline as to what the threats you face and how serious they are or how tenuous the situation might be?

General MCNABB. Yes, sir. When you talk about resupplying Afghanistan, as you mentioned in opening, we bring about, I would say, 30 percent of our stuff comes in through the port of Karachi and up through the Pakistan lines of communication (LOC). About 35 percent we're bringing over the NDN, and you asked how that was going and we continue to expand that to good effect. We've moved 38,000 containers coming over the NDN. But we are restricted from bringing military-type equipment through the NDN, so anything that we bring by surface must come through the Pakistan LOC, and that includes foreign military sales (FMS) stuff for the Afghan National Army.

We bring in 35 percent by air. That used to be 20 percent, but we are doing a lot more of the multimodal, where we take it by surface as far forward——

Senator MCCAIN. It's a lot more expensive, too.

General MCNABB. Sir, it is much less expensive, because you're taking advantage of the surface for the majority of the trip and you're only using the air for the last part. That allows you to really be efficient on your air, at the same time taking full advantage of the much lower cost of taking it by surface. That has paid very big dividends and that's allowed us to bring a lot more in for that last portion into Afghanistan.

Everything high value, everything sensitive, everything lethal, we bring in by air. So a couple of the things that we have really pushed hard is the discipline to make sure that if it's stuff that you're going to take through surface, that if it's a container of food, we can replace it with another container of food. If it's very valuable equipment to you, let's make sure we get that on the air.

We continue to work to make the Pakistan LOC work with better velocity. There's a Task Force Guardian that General Petraeus and General Mattis set up to work the pilferage issue on that and I will say that has had a very good effect. Then, as you mentioned, we're working very closely with the neighbors in the north to see if we can open up some additional routes.

What's been good about the routes is it is a network; competition has driven costs down, so actually costs have come down coming in from the north.

Senator MCCAIN. Does the Air Force need additional C–17s?

General MCNABB. Sir, not beyond the 222 that you have set. My take right now, as you had mentioned, is as we get those additional airplanes—we have 209 of those delivered now. We get about one a month now. There obviously are some C–17s that are being used in FMS, that's good for the alliance because we have more C–17s with our allies and friends.

So right now the Mobility Capabilities and Requirements Study (MCRS)–2016 said we need 32.7 million ton-miles per day (MTM/D), a measurement that we use. Right now the Air Force has come forward with a plan, as you mentioned, as those additional C–17s are delivered, to retire some of our oldest C–5As. I think that's a prudent thing to do for what you had mentioned. It frees up the crews and maintainers, the facilities, to be able to retire the C–5As. Our plan would be to flow the newer C–17s into places like Charleston and McChord, take some of our older C–17s, replace the C–5s, so we've modernized our strategic mobility fleet, and the plan that the Air Force has meets that 32.7 MTM/D, so I am good with that.

Senator MCCAIN. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator McCain.

Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Thanks to both of you. General Ham, let me come back to a question that the chairman touched on and I want to try to draw you out a little more on it. Senator McCain mentioned it too, which is this: certainly the impression or the opinion that the rebel forces,

the opposition to Qadhafi on the ground, has, as expressed by General Younis, who I guess is the head of their military, that the support they've been receiving has diminished since the transfer of operations went from your command to NATO.

If you were sitting at a table with General Younis now, how would you answer that? What would you say?

General HAM. Senator, I would say that that's not the case. What has changed dramatically has been the tactics applied by the regime forces. Where they have shifted from their traditional use of conventional armored equipment, which was easily identifiable as regime forces and therefore easily targeted, they now operate largely in civilian vehicles, and when those vehicles are intermixed with the opposition forces it's increasingly difficult to discern which is which.

Second, we have seen an increased tactic by the regime forces to put their military vehicles adjacent to civilian aspects, mosques, schools, hospitals, civilian areas, which would result in significant civilian casualties through the strike of those assets.

Then a third factor, Senator, would be, frankly, just the weather. We went through a period of a few days, significantly impeded the ability to collect and to strike.

Senator LIEBERMAN. You're an experienced commander. Isn't there a way around this response that Qadhafi forces have developed to the attacks that AFRICOM oversaw?

General HAM. Senator, there are some things that would help. One of the challenges is the opposition forces are not a regular military, not disciplined, and we have seen a tendency for them to get intermixed with the regime forces, rather than maintaining some degree of separation, which again would allow for more effective targeting of their regime's forces.

Senator LIEBERMAN. I want to come back to that in a minute. But there's been a lot of conversation here—we had it last week with Secretary Gates and Admiral Mullen—about the A–10s and the AC–130s. Would the A–10s and/or the AC–130s be able to operate more effectively either in the bad weather or in response to the kind of subterfuge that Qadhafi's forces are involved in now?

General HAM. Sir, we have tried that and, while AFRICOM had command, they had some effect, but frankly limited. The AC–130s are affected by weather, to be sure. They're also affected by a significant number of surface-to-air missiles and systems that remain effective and operational, the tactical mobile systems that the regime has, which do in fact pose a significant threat to the AC–130s.

For the A–10s, the weather has been probably the most significant factor in being able to identify and strike targets.

Senator LIEBERMAN. Which command has control of the A–10s and the AC–130s, yours or European Command (EUCOM)?

General HAM. Sir, EUCOM has operational control, and those can then be placed under NATO operational control if NATO requests that and the Secretary of Defense approves.

Senator LIEBERMAN. Are those planes remaining somewhere close by the Libyan——

General HAM. Yes, sir, they are.

Senator LIEBERMAN. What's required for the NATO commander to ask that the A–10s and AC–130s come back?

General HAM. Sir, the process is that the Canadian officer who is the task force commander would make a request through his NATO chain that would go ultimately to Admiral Stavridis as Supreme Allied Commander. He would then make a request to the Secretary of Defense. But that process would take a very short period of time.

Senator LIEBERMAN. Okay. Let me come to the rebels or the anti-Qadhafi forces. We all acknowledge that this is not an organized military force. But if you take the discussion that you had with Senator McCain, this has been a difficult inconsistency here for us. We have the political goal of getting Qadhafi out of power, but it's not a military goal.

So we're using diplomatic, economic pressure on him. On the other hand, it seems obvious to me that the boots-on-the-ground are the Libyan boots. The stronger they are, the more that puts pressure on Qadhafi, in addition to the diplomatic and political pressure, to get out.

But at this point, if we keep saying, as you did—and it's the answer that the administration basically gives—we don't know enough about the rebels to give them the arms and training, I'm afraid if we wait much longer, there's not going to be a reason to help them because Qadhafi will have effectively won the battle.

That's why I want to ask you again, don't you think that either we or NATO or somebody in the region has to work quickly? These rebels have a will, they have a passion for their cause, but they're not trained and they're not, in my opinion, as fully equipped as they should be to take on Qadhafi's forces. Shouldn't we be making sure that somebody's giving them some training, particularly a military organization, and additional weapons as determined they need?

General HAM. Senator, I have some indication that some Arab nations are, in fact, starting to do that at present. The points you make are great points and I know that that debate is occurring within the U.S. Government. There is a tactical urgency which I understand. But as the commander who also inherits the long-term security aspects for Libya as part of AFRICOM's AOR, I think the long-term effects also have to be considered.

Senator LIEBERMAN. What do you mean by that?

General HAM. Sir, again, I think not knowing who the opposition forces are, are they trustworthy? We have seen certainly media reporting of extremist organizations at least espousing support for the opposition, and we would need, I think, necessarily to be careful about providing lethal means to a group unless we are assured that those U.S.-provided weapons would not fall into the hands of extremist organizations.

Senator LIEBERMAN. A final question. Don't you also, as the head of AFRICOM with the responsibility for Libya, conclude that Qadhafi's remaining in power is a very bad result for Libya and for the region?

General HAM. Senator, I wholeheartedly agree with that.

Senator LIEBERMAN. To me, that's a much worse result than the possibility, which I understand is only a possibility from everything I hear about the opposition, that there may be some extremists involved. Everything we know says that the leadership of the Transi-

tional National Council and the military are not extremists, not Islamists by any means.

My time is up. Thank you.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman.

Thank you, Generals, for appearing today. There's been plenty of discussion from my colleagues about Libya, so I'm not going to beat a dead horse. But I will also echo my concern about the escalation of violence in Northern Africa and across the Middle East, and the state of Libyan affairs demonstrates the value that AFRICOM has to promote a secure and stable Africa. So I thank you for your efforts, and I recognize that there are a lot of challenges.

I'd like to discuss the piracy issues coming out of Somalia and how it frames the broader question of how to deal with the growing terrorism and failed states throughout that continent. The fact that piracy enjoys a safe haven is not a big surprise. Somalia has a per capita gross domestic product of $600. As a result, stealing a $5 million ship carries a pretty big incentive.

How would you recommend we begin fixing the problem?

General HAM. Senator, I would absolutely agree with you that in the mid-term the extremist threat emanating from East Africa, notably Somalia, is our greatest concern. Piracy has some play in that. I'm not exactly sure yet what it is. But I have to believe that at least Shabaab and others are drawing at least some economic support from the piracy activities.

I think also the murder of four Americans aboard the motor vessel *Quest* changes this dynamic. Some would argue that this had heretofore been exclusively an economic activity. I think the murder of four Americans, at least in my mind, very significantly changes that position.

I am headed to Tampa tomorrow to speak with U.S. Central Command (CENTCOM), who has responsibility for the maritime aspects of countering piracy, to see what we can do together between the two combatant commands to counter this growing threat more effectively.

Senator BROWN. Are there rules of engagement when it comes to dealing with the pirates and when you can engage them? Are there rules that you're dealing with or the ships themselves are dealing with?

General HAM. Sir, there are. The rules for the application of military force apply. That's probably something we should talk about in a closed session.

Senator BROWN. I'd enjoy that.

What's your assessment of al Qaeda's involvement in the piracy issue off Somalia? If none, do you think it's a matter of time before they do get involved?

General HAM. Sir, we have not seen the direct links. We have seen direct links between al Qaeda in the Arabian Peninsula and Al-Shabaab. So I believe it is indeed just a matter of time before al Qaeda is associated in some way with piracy activities in Somalia.

Senator BROWN. General McNabb, current law requires the Air Force to maintain 316 strategic airlifters to meet the global mobil-

ity demands. The surge of 30,000 troops into Afghanistan, humanitarian relief, massive drawdowns in Iraq, are just some examples. In your testimony you said our national defense strategy requires a viable fleet of about 300 strategic airlift aircraft, and you went from a 316 requirement down to 300. What changed from last year in your estimation?

General MCNABB. Sir, a couple of things. When we did the 316, at that time we had programmed 205 C–17s and 111 C–5s. After that time, we now have 222 C–17s coming to us, so that has increased. When we did the 316, at that time we had not done the MCRS–2016, that looked at all the things that had changed, all the lessons learned, and how we're using the airplanes.

Senator BROWN. You adapted to the situations as they came about.

General MCNABB. Right. It ended up that the 32.7 MTM/D, what we do is we say that's what the requirement is; Air Force, you figure out what you need on the mix of airplanes.

Senator BROWN. Okay. What is the Air Mobility Command's plan to sustain and recapitalize the C–5 fleet? I do agree that some C–5s should be retired. Some of the oldest C–5s were flown over 40 years ago. What's your plan to sustain and recapitalize?

General MCNABB. Sir, right now obviously we're continuing with the reengining and reliability program on the C–5Bs, the ones that were built in the 1980s. What that does is not only upgrade the engines, but a lot of the reliability enhancements. We have four of those now. We call them the C–5Ms.

When we have all of them, we'll have 52 of those.

Senator BROWN. When you say the C–5M, is that the avionics modernization program?

General MCNABB. No, sir. The avionics modernization program is for all the C–5s. You have to have that done. Then we plan to also reengine those newer C–5s.

Senator BROWN. Then how many would you like to actually retire?

General MCNABB. Sir, I think they want to go down to 27 C–5As. It ends up being about 32 C–5As that they'd like to retire, 30 to 32.

Senator BROWN. How many C–5s will undergo the reliability enhancement and reengining program?

General MCNABB. A total of 52.

Senator BROWN. How many years will the lives of the C–5Bs be extended as a result of the engine and avionics upgrades?

General MCNABB. Sir, we're figuring 30 to 40 years.

Senator BROWN. Does that meet the requirements?

General MCNABB. Sir, it will. The other portion that has been a real plus here is the new tanker. As we bring the new tanker, because it's multipurpose, it will actually free up additional strategic airlift that we are using to do transload operations, C–17s and C–5s, because now we'll be able to use the new tanker, to be able to do that because of it's other capability to move passengers, aeromedical, and cargo.

Senator BROWN. Great.

Thank you, Mr. Chairman. I'm finished. Thank you.

Chairman LEVIN. Thank you, Senator Brown.

Senator Begich is next.

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

General Ham, I just want to pursue one clarification here. I don't think—none of us—and I think I heard this from Secretary Gates that having Qadhafi out of there is a good thing. If we can get rid of him, great. But we've been in a stalemate for 40 years since he's been there; isn't that fair to say? He's been there for 40 years, and now we're in a different kind of level of stalemate. Isn't that a fair statement?

General HAM. Yes, sir, it is. But I don't think we had previously seen his very clearly stated intent to kill his own citizens.

Senator BEGICH. Maybe not publicly. Is that a fair statement, too?

General HAM. It is, Senator.

Senator BEGICH. I think there has been activities that a lot of citizens from Libya would tell you otherwise.

General HAM. I think that's accurate, Senator.

Senator BEGICH. We could probably point to multiple countries all around the world that we have concerns with their leadership, but this one we're engaged in right now to a certain level. Is that a fair statement?

General HAM. Yes, sir.

Senator BEGICH. I want to get to an issue that I started last week with Secretary Gates and I want to just make sure I clearly understand, not to debate the policy because I have some concerns, but I'm going to put that aside. It's the money issue that I'm now starting to get concerned about.

We've spent, at least reported, $550 million to date so far. I'm getting different reports on what the burn rate is now and where we are. Can you give me a sense of what you see and what your anticipated costs are to manage the affairs from your end of it? I know there's DOS, there's CIA, there's all these other players that are burning money at the same time here.

Can you tell me what you estimate your costs are going to be?

General HAM. Sir, the best estimate that I have seen from the Services and from the Office of the Secretary of Defense Comptroller Office is about that $550 million initially, and then about $40 million per month in continuing costs. The command does not oversee and budget those operations. The Services fund each of their Service components. So in this case, largely Air Force and Navy as the primary contributors to this to bear the burden. But the best estimate I have seen is about $40 million in sustained costs per month.

Senator BEGICH. Here's my struggle, because I heard that from the Comptroller also about a week ago or so. I read a report yesterday that the Air Force is burning about $4 million a day. So doing the math, on a 30-day cycle, that's more than $40 million. So I guess, when do we get to that $40 million level?

I understand there are other elements that deal with the budgetary, but at the end of the day you're going to have to figure out resource allocation for the command that you're involved in. If you're burning at a certain rate, which I don't know what it is today, and maybe you have an idea of what your costs are per day right now—when do we get to this supposed level of $40 million a

month, which seems pretty cheap from the perspective of $550 million in 10 days that we burned up?

General HAM. Senator, if you'll allow me to take that for the record so I can make sure I give you an accurate assessment.

[The information referred to follows:]

On March 29, the initial portion of the operation cost $550 million. Since March 29, we spent an additional $74 million for a confirmed total of $624 million through April 11, 2011.

Senator BEGICH. I'd appreciate that. My biggest concern is, for example, and another question I have for you, on the intelligence, surveillance, and reconnaissance (ISR) platforms in aircraft that were required in Afghanistan, Pakistan, and Iraq. Let me ask you this from just an equipment utilization: Have we utilized or have we shifted any of their missions or activities to this now that we're doing in Libya? In other words, some of those platforms that were maybe programmed or planned or utilized as backup for Afghanistan, Pakistan, and Iraq?

General HAM. Sir, we probably should have a detailed discussion in a closed session. But in general, I can say that there were some assets that were, in fact, diverted from the CENTCOM AOR to support operations in Libya. There were stateside assets which were either in training commands that are generating future capabilities, that were pulled from that mission and sortied to support operations in Libya. So there is and has been an effect. We probably should discuss the details in closed session.

Senator BEGICH. Thank you, General.

Now that NATO has taken the lead and is starting to move in that direction—I know we have the Airborne Warning and Control System and refueling and some other activities. What percentage of our assets are now being used compared to when we first started to where we are now? In other words, where are we—in the global picture of now NATO taking the lead? Are we 10 percent, 40 percent, 80 percent of the assets that they're utilizing or partnered with them? Does that question make sense?

General HAM. It does, sir. If I could divide it into two different categories. In the strike assets, those aircraft which were actually attacking targets on the ground, the United States now contributes a very small percentage of that. It is principally those U.S.-unique capabilities, surface-to-air, suppression of enemy air defense systems, which are unique to the United States. The AC–130s, which others have mentioned, which are a unique U.S. capability, are in that category.

So a very small percentage, I would guess maybe less than 15 percent of the strike assets.

Senator BEGICH. That's as of right now?

General HAM. Yes, sir.

Senator BEGICH. Okay.

General HAM. In the other category, in the support category, which are tankers, ISR assets, again a number of those are unique U.S. military capabilities. We are probably about, I would ballpark, 60 to 70 percent of that capability is United States, again because many of those systems are unique to the United States. Tankers are a special case. Many other nations have tankers, but they don't have tankers in the quantity that the United States has, and so we

are, again, while not a unique U.S. military capability, the quantity to sustain operations requires the United States to contribute some to that effort.

Senator BEGICH. We've frozen, I think, about $32 billion, give or take, in regards to the Qadhafi family assets. I'm just assuming here, within the efforts of conflict, he needs money to do what he needs to do. Have you seen any impact of that amount of money that we have frozen, the $32 billion that he could have access to? Have you seen anything that indicates any impact to his operations?

General HAM. Sir, not a direct tactical effect. But I think we are starting to see that now. I think one of the reasons that the regime forces are not pushing forward is that their sustainment capability has been significantly attacked by the United States and now by NATO, and he can't replace that. He doesn't have the money to replace those systems, and I think that is starting to have, if not a tactical, at least an operational impact.

Senator BEGICH. Very good.

My time is up. Thank you both for being here.

Chairman LEVIN. Thank you, Senator Begich.

Senator Sessions.

Senator SESSIONS. Thank you, Mr. Chairman.

General Ham, I remember the—I think I have it correct—Patton quote that: "A good plan, violently executed today, is better than a perfect plan tomorrow." I believe that Senator McCain and Senator John Kerry were close to correct. I tended to be supportive of their view early on that a no-fly zone would make a difference.

Now, you've talked about the advantages of international support, and there are advantages from that. I don't deny it. But we've waited about 3 weeks before we got all these international agreements and so forth somehow agreed to, and during those 3 weeks Qadhafi rallied, consolidated his power, and put the rebel forces, the contras, on defeat, on the defensive. It's not a good situation today and I'm worried about that.

Let's talk first about the U.N. We apparently spent a good bit of effort getting a resolution out of the U.N. China and Russia abstained. Had either one of those vetoed the resolution, could we have gotten the resolution out of the Security Council?

General HAM. Senator, I'm afraid that's pretty far beyond my area of expertise.

Senator SESSIONS. I would say that it's pretty clear that it takes an unanimous vote out of the Security Council to get a resolution. So, first of all, by going to the U.N. we put the policy of the United States in the hands of an unanimous vote there.

Then with regard to NATO, it operates on a consensus theory, does it not?

General HAM. It does, Senator.

Senator SESSIONS. Consensus means unanimous vote.

General HAM. 28 nations, yes, sir.

Senator SESSIONS. One nation can object and stop a military operation that's part of a NATO operation, can it not?

General HAM. That's correct, sir.

Senator SESSIONS. I saw in the Washington Times today that the rebels are blaming the lack of air strikes, the air strike lull, on Turkey. Is that correct?

General HAM. Sir, I also saw that report. But it is my military assessment that that is not the case.

Senator SESSIONS. Are you involved in the negotiations that lead up to the deployment of forces in the Libyan campaign?

General HAM. Sir, I was, but I am not now.

Senator SESSIONS. They say Turkey is blocking NATO attacks. Said one of the rebels: "We believe the reason why NATO attacks have come down in the last 4 or 5 days is Turkey is vetoing a lot of them."

Are you able to say with certainty that Turkey has not vetoed any air strikes?

General HAM. Sir, I have no evidence of that.

Senator SESSIONS. But you're not saying that that's true—not true?

General HAM. Sir, I am not privy to internal NATO discussions.

Senator SESSIONS. On the question of arming the rebels, Mr. Erdogan, the Prime Minister of Turkey, rejected the idea of arming the rebels, saying it could be conducive to terrorism. Isn't it a fact that if Turkey and Mr. Erdogan object to arming the rebels, even if we were to decide it's a good idea, we wouldn't be able to do that under the nature of the operation we're now in?

General HAM. Senator, I'm not sure that that would necessarily be the case, but others would have to address that more definitively.

Senator SESSIONS. As I remember in the Kosovo campaign the U.S. Air Force—what happened was NATO met and deployed the U.S. Air Force. Ninety percent of the sorties were flown by the United States and it took a virtually unanimous vote, and they voted on various targets inside Serbia, which ones we could hit and which ones we couldn't.

Doesn't that make it more difficult to act decisively in a military campaign when you have to get 28 nations to agree on the targets that your aircraft may take or the kind of attack that might be executed?

General HAM. Sir, it would. But I spoke with the Supreme Allied Commander Europe and the current NATO task force commander, and individual targets are not being subjected to individual target approval by the alliance.

Senator SESSIONS. Certainly the activities of the U.S. military are under the control of NATO. I don't think that is in dispute.

Now, the question of regime change. We're operating under the essential rules of engagement that the U.N. passed, are we not?

General HAM. No, sir. The forces are currently operating under NATO rules of engagement and before transition to NATO, under U.S. rules of engagement.

Senator SESSIONS. The U.N. clearly has stated that the objective is not regime change, isn't that right? They set forth a limited number of objectives and it did not include regime change.

General HAM. I believe that is correct. In my recollection of U.N. Security Council Resolution 1973, I think that is correct.

Senator SESSIONS. What about NATO? That's not one of the goals of NATO either, is it?

General HAM. No, sir.

Senator SESSIONS. It's explicitly not the goal. That's been discussed and explicitly decided it's not the goal of NATO to have a regime change in Libya. Does that not impact how you conduct a military operation?

General HAM. Sir, again I'm not privy to the internal NATO discussions, but I do know that, while the U.S. military mission did not include regime change, that did not in any way impede the conduct of our military operations.

Senator SESSIONS. It alters them, does it not? If regime change was one of the missions you were given, you'd be approaching this conflict a lot differently, would you not?

General HAM. We would, sir. We've devoted an increasing amount of intelligence collection and strike activity to an individual personality, and we've had some difficulty in that previously.

Senator SESSIONS. My time is up. I would just conclude by saying that, yes, it's good to have international bodies support us, but in this instance, I think we've all learned a valuable lesson. Weeks go by. From the time Senator McCain and Senator Kerry said to use a no-fly zone, 3 weeks plus went by. In the interim, bad things happened that leave us now in a stalemate which might not have been the case had we been able to act sooner. We ended up with an amorphous policy that's put us in a stalemate and it's just not a very comfortable position for this Senator to be in.

Now, I hope we're successful. I believe it would be good for the world if Qadhafi is gone. But we have to have more clarity and more decisiveness in our plans.

I would make one more complaint, that this administration apparently found time to consult with the U.N. at length, with NATO at length, but a totally unacceptable amount of time spent with the U.S. Congress to explain why they felt it necessary to commit the U.S. military to this action.

I think we should let this thing calm down a little bit. At some point we need to talk more in detail about congressional role under particularly these military actions that are actions of choice and not defending the direct interests of the United States.

Thank you.

Chairman LEVIN. Thank you, Senator Sessions.

Senator Reed.

Senator REED. Thank you, Mr. Chairman.

Thank you, gentlemen, for your service. General Ham, when you began to take air operations it appeared to me and others that the Qadhafi regime was on the verge of taking Benghazi, effectively ending the revolution and consolidating their position in a way which would likely be irreversible. But at this juncture the Qadhafi regime's going from the verge of victory now to a situation where their hold is weakening. Is that a fair estimate in your view of what took place?

General HAM. Senator, I would agree with that general characterization. The important part is that I think at this point the regime has a significantly degraded ability to continue to attack civilians. But if I may, with the notable exception of Misurata, and that

is a particular challenge and one that I will frankly bear responsibility for as long as I live for that particular situation.

Senator REED. Yes, sir. The Misurata situation is such that it is within their operational control except for the city itself, and they have been able to introduce forces in there and it's essentially street-fighting. It's difficult to strike from the air?

General HAM. Senator, that is correct. The opposition forces have held an area in the northeastern portion of the city in the port, and frankly the port has been operating to get some relief. But the regime forces are and remain active in the city against civilians.

Senator REED. Let me ask you from a military standpoint, does the fact that this is an international alliance that has been sanctioned by U.N. resolution, and supported by NATO and the Arab League increase the effectiveness of these forces and the military capabilities available?

General HAM. Senator, I believe that it does.

Senator REED. Thank you.

One area that I think many of my colleagues are interested in, and so am I, is the specific operational objectives of NATO. It was very clear initially that they were going to suppress any Qadhafi air activity, which they've done. They have the authority to intercept and to disrupt any activities designed to attack the Libyan people. But could you give us an idea more specifically. Is it their goal, for example, to degrade completely the command and control system of the Qadhafi forces? Is it their plan to try to disrupt and destroy all of the ammunition depots, et cetera? All that being factors that would help the overall mission of protecting the Libyan people.

General HAM. Senator, I believe that to be the case. It was clearly the case when the United States controlled the operations that those were objectives. As we transitioned those missions to NATO, I believe they share those same priorities.

Senator REED. From your perspective, which is again you're no longer the direct commander, but you have significant insights, those objectives, those plans, and the tactical operations are continuing as they were under your leadership?

General HAM. Sir, I believe they are.

Senator REED. Let me switch to General McNabb, who's the loneliest guy here in Washington today, sir. [Laughter.] We have opened up a northern route into Afghanistan to supply. Have you seen that in any way decrease the cost or increase, from another perspective, the leverage we have in moving material through Pakistan?

General MCNABB. Yes, sir, I do. I think primarily if you have options you bring competition in. I will say that the Pakistan LOC got better after we established the NDN. I think that's absolutely true.

We are working with the NDN, because all of the involved countries have agreed that we can move commercial-type cargo through them. Most of the countries have said we can move non-lethal military equipment, but not all. We're working to try to get all the countries to say that we can do that, because right now the only way to move by surface military equipment, again non-lethal, is up the Pakistan LOC.

The other portion that we're working very closely with them is to have a two-way flow. Right now we're allowed to flow stuff in, but we're not allowed to bring stuff out. Obviously, that helps us with retrograde. It helps us with swapping out units, those kinds of things.

Then the other one that we are working very closely with the whole interagency team and both CENTCOM and with EUCOM, General Mattis and again Admiral Stavridis, I would say we're looking for intermodal locations in the north that we could use to be able to jump stuff out, especially military equipment, and then be able to prepare it for surface transportation, then bring it home from there. Those are the things that we're really pushing hard on, because I think that will set us well. We'll have two ways, whether north or south.

Again, we use this to make sure that as we look at the Pakistan LOC, working on better security, better velocity, because every time you slow this down—during the floods in July, we saw almost a doubling of the pilferage rate. We're still below 1 percent, but we did see it go up. As I tell folks, when you talk this number of containers and you say it's less than 1 percent, if it's your container you don't really care that the rest of it made it through. So we really try to make sure that we're constantly looking at that to make it better.

Senator REED. Let's just for a moment get a quick assessment on the repositioning of forces and materiel out of Iraq. Presumably on schedule?

General MCNABB. Yes, sir. That has gone very well. Really, I can't say enough about General Odierno and now General Austin and his team and how they do that, working with the Army Materiel Command. That's commanded by General Ann Dunwoody. They basically make sure that it gets down to the ports in either Kuwait or Jordan. We have wash racks there where they prepare it, agricultural inspections, so that we can bring it back to the States.

They've done a superb job of sorting out what they would send to Afghanistan, what they will bring home for reset, and what they will work with the Iraqis to leave in country. My take is that it has really worked well and we'll just continue on that.

Senator REED. Just a final quick question in that regard. I know it's difficult to quantify. The flexibility and the additional capacity or head space you will have at the end of this year, once we've come out of Iraq? An estimate of that? Is that marginal or significant, i.e., you won't be doing as much flying up in there? You won't have to commit resources, et cetera. Can you elaborate very quickly?

General MCNABB. Yes, sir. The big thing here is we have not had to activate one military vessel to handle this. So it's all been done by our commercial partners. We worked very closely with them early on. In fact, General Dunwoody came out and gave them a forecast. They stepped up superbly to both bringing the stuff out of Iraq and the stuff into Afghanistan. I mentioned in my remarks that we didn't have to activate one ship.

We have a commercial-first if we can use commercial. It's the cheapest way to do it. It keeps our U.S.-flag fleet strong. It's good for jobs. All of those things are positive and that's what we do.

They have done superbly. I would say, our bigger worry is what happens to the U.S.-flag fleet as we reduce some of the requirements that we're depending on them now. We are working very closely with them to make sure that we maintain the robustness. They do depend absolutely on cargo preference. They absolutely do depend on our Maritime Security Program. Those two programs are really valuable so that we keep a very strong U.S.-flag fleet, which is in the interest of the taxpayers and in the interest of the warfighters.

Senator REED. Thank you, sir.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Reed.

Senator Cornyn.

Senator CORNYN. Thank you, Mr. Chairman.

General McNabb, General Ham, thank you for your service to our country.

General Ham, as a combatant commander and as a general proposition, do you think that it is important before the United States intervenes militarily that there be a clear mission, that the mission be authorized by Congress, and that that mission have the support of the American people?

General HAM. Senator, absolutely we have to have a clear mission. I would have to leave it to others about the second part of your question, but certainly it is preferable always to have the support of Congress and certainly the support of the people as represented by Congress.

Senator CORNYN. General, I thank you for your answer. It wasn't supposed to be a trick question. It strikes me that we have learned from sad experience what happens when the United States gets involved or stays involved in a military conflict where public support and support from Congress wanes in terms of its impact on our success of accomplishing the mission.

Let me move on, though, to the question of intelligence. It strikes me as unusual and maybe something that Congress needs to look at further that our intelligence capabilities are so limited that we don't even know the composition of the opposition force in Libya—I'm just using that as one example—before we intervene militarily, and that because we are in doubt about the composition of that opposition force that we are constrained from equipping them or providing them with access to the resources they may need in order to accomplish our goal and their goal at the same time.

Is this unusual in your experience or is this common?

General HAM. I think I would describe it as unique, at least in my experience, not having a clear understanding of who the opposition forces were. Senator, it is also important to remember that our mission was not to support the opposition, but rather to protect civilians. Now, certainly in the protection of civilians there was some obvious benefit to the opposition forces when we would do that. But it was a distinction in my mind of the purpose of the mission.

Senator CORNYN. To protect the civilians in Libya, there's been a lot of discussion about whether we should arm the opposition

forces or the rebels. I'm entirely sympathetic to your concerns and those expressed by others that we don't want to arm them if we don't know who they are and what they might become.

But it strikes me as very strange and certainly a deficiency in our intelligence capability if we've intervened in a military action, even for humanitarian purposes, and we don't know who the opposition is, so we are thus constrained from going further and giving them the resources they need in order to win and expel Qadhafi from power.

But let me ask you another question. What sort of signal does it send to our other adversaries in the region, notably Iran and others, for us to intervene militarily and fail to accomplish a regime change in Libya, whether it be by military or political means? Does it strike you as a sign of weakness or lack of American resolve or inadequacy of planning that we would actually go this far and yet not accomplish or seem ambivalent about accomplishing regime change?

General HAM. Sir, I would say again, I'd come back to the first part, which was the execution of the military mission to protect civilians, establish a no-fly zone, embargo, which I think was successful and I think a message to others around the world is the speed with which that was accomplished was pretty significant.

I don't think people should misunderstand a policy decision that says it is the policy for there to be regime change, but to seek that through means other than military. I don't think folks should misunderstand the lack of seriousness which that means. We certainly could use military force, but again we have some history in trying to apply military force to regime change where we have been less than successful.

Senator CORNYN. Yes, General. It's not your responsibility or your fault, but I go back to my initial questions with regard to clarity of mission, support from Congress, and support from the American people. Any ambiguity in any of those things would seem to me to give you less than the kind of support you need in order to accomplish that mission, whatever it may be.

I think Senator Lieberman or Senator McCain asked about the A–10s and the AC–130s, which you said are unique American capabilities. I think you and Secretary Gates and Admiral Mullen all said that these are available; although they're unique American capabilities, they're available to NATO if they request them.

To your knowledge, have they been requested?

General HAM. Yes, sir, they have, and they have been provided.

Senator CORNYN. They have been? They're currently being deployed in the fight?

General HAM. Sir, the AC–130s, I believe, are currently available. I believe the A–10s are currently available on request.

Senator CORNYN. So the AC–130s are in the fight now?

General HAM. I think they are. My last understanding was that they are available to the commander, should he want them.

Senator CORNYN. Then finally, let me ask, General, I think there's a mistaken impression that by the United States initiating this fight and then handing it off to NATO, it's somehow handing it off to a third party that is not the United States. But the truth

is that NATO could not function as a fighting force without U.S. support, could it?

General HAM. Senator, the Supreme Allied Commander is a U.S. officer. Much of the military capability that enables the current operation is provided by the United States.

Senator CORNYN. One of the perennial problems in NATO is that our allies do not resource either funding or in terms of personnel their military requirements like the United States. The United States spends more on our national security than I think the next 22 nations in a row. In other words, the United States is the biggest, most powerful nation as part of that coalition; wouldn't you agree?

General HAM. Sir, I would. The contributions of other nations have been significant and very important, but certainly the United States has provided to this point the preponderance of military force.

Senator CORNYN. That includes, as Senator Begich asked, the obligation as part of that NATO coalition to fund operations at whatever level is required by our agreements with NATO?

General HAM. Sir, my understanding is that NATO contributions are currently funded by the individual states. I'm not a NATO expert, but I'm not sure that NATO common funding is being applied.

Senator CORNYN. I certainly understand and appreciate that.

You've been very good about answering my questions. Thank you very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Cornyn.

Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman.

Once again, General McNabb and General Ham, thank you for your testimony, your service to our country, and being here today.

I wanted to talk about NATO and Libya. The Libyan rebel forces allege that NATO inaction and bureaucratic delays are placing the lives of civilians at risk, complicating the rebel efforts to fight Qadhafi's forces, and allowing Qadhafi's forces to advance against the rebels' strongholds. It seems that the pace of the NATO military operations in Libya is complicated, obviously, by the importance of protecting the civilians and avoiding any sort of collateral damage.

Meanwhile, Qadhafi's forces are reportedly using civilians as human shields and hiding armor in populated areas, decreasing NATO's ability to hit targets. I've read recently where Qadhafi's forces are keeping their heavy equipment, such as their armored vehicles, hidden in more highly populated areas and are actually using more trucks and light vehicles.

In terms of the use of air power, what is the proper balance between destroying Qadhafi's air force, neutralizing his air defenses, degrading the ability of his ground forces to wage war, and avoiding collateral damage?

General HAM. Senator, your characterization is one in which I would generally agree on the manner in which the regime forces are operating. So with the application of air power, even as precise as we are, in the circumstance as you described becomes increasingly problematic. Air power can do other things. Certainly when regime forces move is when they are most vulnerable, and we have

collection systems that are able to see them move, and then NATO is able to apply and has applied effective air power against moving forces, particularly their heavy equipment.

The air force is also very effective in degrading the regime's ability to sustain its operations, denying the movement of supplies, fuel, ammunition, and the like. It is my military assessment that the attacks on those kinds of targets are what have presently not allowed regime forces to continue their attacks against civilians.

Senator HAGAN. What is your assessment of the effectiveness of NATO assuming command and control of all phases of the missions in Libya?

General HAM. Senator, I believe actually it's been quite good. NATO assumed command first of the arms embargo, which is largely a maritime effort. That, I think, has gone quite well. There have been numerous instances where NATO vessels under NATO command have stopped, queried, inspected, and denied movement of shipments along the coast of Libya. It has been very successful.

Clearly, NATO's assumption of the no-fly zone remains effective. We have not seen regime aircraft operate in Libyan air space.

Then the toughest mission is the protect civilians mission, and it is my military judgment that NATO has done that effectively, but in an increasingly complex and difficult scenario in which to attack regime forces.

Senator HAGAN. Thank you.

Let me ask about arming, the question having to do with arming the Libyan rebels. Without allied intervention, from what I understand, Qadhafi would have continued to slaughter his people. The opposition in Libya wants Qadhafi out. They also, I understand, want democracy and freedom and economic opportunities and an end to the corruption that's been going on.

So I want to know more about the nature of the opposition. Some people have suggested arming them and I'm skeptical about that approach because I think we need to have a lot more information to know about whom exactly it is that we're talking about, the discussion going on about rebels, whether to arm them. Once you put those weapons out there, there's no getting them back. I understand in the early days of unrest the opposition forces broke open the Libyan military arsenals and obtained a large number of weapons.

Do you believe there are members of al Qaeda in this opposition and how concerned are you with the potential regional proliferation of weapons that the opposition has already acquired?

General HAM. Senator, to the second part of your question first, I'm very concerned about the proliferation of weapons, notably shoulder-fired surface-to-air missiles, which we assess there were perhaps as many as 20,000 in Libya as the operation began. Many of those we know are now not accounted for, and that's going to be a concern for some period of time.

The first part of your question, the presence of al Qaeda or other violent extremist organizations with the opposition to me is very much the important unanswered question that we must have to have better understanding of the opposition. We have seen intent expressed by AQIM, by the Libyan Islamic Fighter Group, and others to partner with the opposition, if you will, in an anti-Qadhafi

regime mode. I think we need to know more about what that means before we were to make a U.S. decision to arm, though I think others are working in that direction.

I would also note that the U.S. Special Envoy's presence and engagement with the opposition forces is an important step in trying to get a better understanding of exactly who the opposition is.

Senator HAGAN. Thank you.

Let me move to the Democratic Republic of the Congo. The Democratic Republic of the Congo needs an integrated and professional army to protect its citizens. What is your assessment of the effectiveness of AFRICOM's training and equipping of the armed forces of this area, and what lessons would you derive from this train-and-equip effort, and how does this fit under the context of the whole-of-government approach?

General HAM. Thank you, Senator. We have trained one battalion and, frankly, with good but some mixed results. Clearly there's a capability within the country. They have a willingness to participate in the training and become more operationally effective, subordinate to civilian control, respective of the rule of law, those are all attributes that we like.

There have been some technical challenges in the provision of weapons and communication, certainly some leader development challenges. But I think for a first effort it was okay. We're doing an assessment now to say what can we do in the future to make our training and our sustainment more effective. I would argue that it is indeed the sustainment—it's insufficient to just train one time and then let them go, but rather an enduring effort, and I think that one of the reasons that AFRICOM was established, was to have that kind of enduring effort, and we look to do that.

Senator HAGAN. Do you know what the retention is of the battalion that they have trained?

General HAM. I'll have to check. My indications are from a personnel standpoint it's pretty good, but there are concerns about the retention and maintenance of useable equipment.

[The information referred to follows:]

The U.S.-trained battalion retention rate has exceeded our expectations. There are 498 personnel assigned, 493 present for duty, and 5 in prison for absenteeism or criminal acts. While the nearly 100 percent retention rate is remarkable, we remain concerned about the military pay system and the government's ability to sustain the battalion over the long term.

Senator HAGAN. Thank you.

Chairman LEVIN. Thank you, Senator Hagan.

Senator Graham.

Senator GRAHAM. Thank you, Mr. Chairman.

General McNabb, we're going to just keep you in a holding pattern for a while. We'll call you if we need you. I appreciate your service. [Laughter.]

General Ham, I think you have one of the most fascinating commands in the whole military. I want to compliment President Bush for creating AFRICOM and President Obama for continuing to stand it up. It's really a region ripe with opportunity and heartbreak all at the same time.

I've been told Secretary Gates has instructed DOD to look for a stateside home for AFRICOM, to move you out of Stuttgart, and

that the leading contender, the most preferred site, was Charleston Air Force Base. Are you familiar with that decision?

General HAM. Senator, I'm not familiar with the decision. I have direction to assess and make a recommendation as to——

Senator GRAHAM. Would you like to live in Charleston? [Laughter.]

General HAM. Sir, I have visited Charleston and enjoyed that visit very much.

Senator GRAHAM. Good. We would like to have you. I just want to let you know that that was the preferred site in terms of the assessment and that the community is willing to provide infrastructure to DOD to move your headquarters to Charleston, so you won't have to do military construction contracts. All politics is local, so I really do want to talk to you about that potential move.

The other issue is that there's $7.6 billion being appropriated through the foreign operations account for Africa assistance. From a commander's point of view, how important are those funds, $4.78 billion for health-related issues in Africa? Could you tell this committee the importance of those funds to your mission?

General HAM. Senator, I believe that what that enables us to do is, as the military component of a U.S. whole-of-government approach, it allows us to more effectively achieve the U.S. Government's desired end states in Africa consistent with the goals which the President has described, to include health care.

Our military component of that is largely focused on building capable and credible military and security institutions responsive to the rule of law and responsive to civil authority, so that increasingly Africans can provide for their own security nationally and regionally.

Senator GRAHAM. America needs to know, we have a very small military footprint in Africa relatively speaking; is that true?

General HAM. Sir, it is very small, other than the defense attaches in the embassies, it is essentially one location at Camp Lemonier in Djibouti.

Senator GRAHAM. So I would just urge the committee to look at the fact that our foreign operations account probably is our most effective tool in achieving stability in Africa and helping the African continent develop in a positive way. So I just want to let that account be known as important from the military's point of view.

Now, let's go to Libya. What's the likelihood in your view—I know you're not the current commander—of the rebels being able, even with the air support provided by NATO today, to fight their way to Tripoli and replace the Qadhafi regime by military force?

General HAM. Senator, I would assess that as a low likelihood.

Senator GRAHAM. I think that's a very honest answer. I would assess it as almost impossible.

Now, the AC–130s and the A–10s, are they in the fight or not?

General HAM. Senator, my current understanding is that the AC–130s are provided as a U.S.-unique capability which are indeed available at present to the NATO commander should he need to employ them. The A–10s are part of the on-call package which the commander would have to request——

Senator GRAHAM. Is there an equivalent capability within the NATO countries to replace the AC–130 and the A–10? Can you replace those capabilities?

General HAM. Sir, the AC–130 is clearly a unique U.S. capability. No one else has a capability like that. The A–10 has great capabilities, some of which can be replicated or provided by other strike aircraft, but not as a total package like the A–10.

Senator GRAHAM. I'm going to stand up for Senator Ayotte's husband, who's an A–10 pilot, and she'll be the first to tell you that it's almost impossible to replicate the A–10's impact on the battlefield.

If the rebels can't fight their way there with air cover being provided, how does this end?

General HAM. Sir, I think it does not end militarily. The present condition with the regime forces and the opposition forces essentially opposed, but neither moving——

Senator GRAHAM. Could I suggest a scenario where the military part of it may actually help it end quicker? The inner circle of Qadhafi cracking is probably the most likely scenario, where people tell him and his inner circle: "You need to go." Do you agree that's the most likely way this ends for regime change?

General HAM. Sir, I think that's a likely outcome.

Senator GRAHAM. Okay. Would it be helpful in that regard in terms of putting pressure on the inner circle to make that decision, to take the aerial fight to Tripoli and start looking for targets where the inner circle operate out of and to put pressure on them militarily? Is that within our capability to do if we chose to do that?

General HAM. Senator, it is and we have been from the very start attacking targets of regime command and control in Tripoli.

Senator GRAHAM. Is that still going on today?

General HAM. Sir, I believe it is. I know of no prohibition to that. Specifically to the 32nd Brigade, which is, if you will, the regime's inner protective force, was a very specific target for us in AFRICOM and I know that it continues to be so for NATO.

Senator GRAHAM. That's curious because he's still on TV. Is there any effort to knock him off the radio or TV?

General HAM. Sir, there is. Again, another one of the unique U.S. military capabilities——

Senator GRAHAM. Would you agree with me that if he were unable to spread his propaganda and fear through radio and television he would be less effective in holding power?

General HAM. Sir, I would agree with that.

Senator GRAHAM. Why hasn't he been knocked off radio or TV as of now?

General HAM. Principally, sir, because of a concern for civilian casualties in the broadcast systems that he uses.

Senator GRAHAM. Thank you.

Finally, when it comes to putting pressure on this regime, I know we have a variety of strategies, but the idea that the Tripoli targets are being robustly pursued, I think, would be news to me, because I don't hear any reporting on the ground of targets in Tripoli being pursued in an aggressive manner. Am I wrong there?

General HAM. Sir, again, I don't have the day-to-day tracking of the battle, but again, I'm not aware of any prohibition to attacking command and control facilities or others in Tripoli.

Senator GRAHAM. Is there a prohibition of going after Qadhafi, the individual?

General HAM. In the U.S. mission, I expended no effort in tracking him personally or devoting assets to attack him. But there was also no prohibition if he happened to be at a command and control site or some other site.

Senator GRAHAM. Would you agree with me that if he were neutralized or taken out of the fight through kinetic activity it would end this whole conflict rather quickly?

General HAM. Sir, his removal by any means would end this relatively quickly.

Senator GRAHAM. Thank you.

Chairman LEVIN. Thank you very much, Senator Graham.

Senator Manchin.

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

Thank you both. General McNabb, the 167th Air Guard Wing in Martinsburg has handled multiple missions with the C–5 assets, including logistics support to Libya and Afghanistan. The Air Guard gives us the best military value in terms of personnel efficiencies and professionalism. On that base and all that's been invested in that base, I know they're looking at maybe either upgrading or improving those assets. Do you know if that is part of the rotation that you have planned?

General MCNABB. Sir, they're going through which bases they'll do. First, they have to have permission for us to be allowed to retire the C–5As. We've been allowed to retire some of them, and so the two bases that have been chosen—there's one at Stewart Air Force Base and the other one is Wright-Patterson Air Force Base. They're two C–5A bases, one Reserve, one Guard. They're looking to say, "okay, if we're allowed to retire some more, where will they go?" I know they've been in discussions in Martinsburg, but I know that you have been very happy with the C–5s and you've done a great job of taking care of them.

Senator MANCHIN. I thought logistically where they are located right now proved very effective for our operations.

General MCNABB. Yes, sir. So we're still going to have some C–5As under the plan that they have right now, and so they'll look and say, "where's the best place to have those C–5As?" Obviously, Martinsburg is one of those.

Senator MANCHIN. Do you know if Martinsburg has an opportunity for the C–5Ms?

General MCNABB. Sir, right now it does not. Right now the C–5Ms are going to be at Travis, at Dover, and at Westover.

Senator MANCHIN. How about the C–130s at Yeager, the Air Force Base that we have flying the C–130s?

General MCNABB. Sir, I believe that stays the same. I don't know what the Air Force is planning on that, but I haven't heard of any changes.

Senator MANCHIN. General Ham, thank you again for your service. I know there was talk about Charleston, SC, I believe, as your

AFRICOM base, or they would like to entertain that. Why wouldn't the command be in Africa?

General HAM. Sir, we will look at some locations in Africa. But there are some significant hurdles in terms of transportation in and around the continent. There are not great air links. Frankly, cost to establish a wholly new base would be pretty expensive.

Senator MANCHIN. Do we have any other of our operations in other parts of the world where we operate out of the United States?

General HAM. Yes, sir. CENTCOM is headquartered at MacDill Air Force Base in Tampa, FL, and U.S. Southern Command is headquartered in Miami, FL.

Senator MANCHIN. General Ham, Secretary Gates told me last week, I believe—and I told him I was giving him my overview of basically what happened in the First Gulf War, when Saddam attacked Kuwait and when we went in and were very successful in that mission, and the Kuwaitis and the Saudis paid. I guess they paid the bill. We as Americans felt good we were asked to help and the American people weren't burdened with the cost.

I understand now as of April 4, $608 million has been spent in Libya. It was $550 million. There's been an additional $58 million since then. With that being said, if we've been asked to come in by the people, the neighbors of Libya, why won't they pay? Why do we have to, as the American people, burden this financial obligation?

General HAM. Sir, again, out of my area of expertise. But I know there are efforts to seek to defray those costs. But I'm not cognizant of the status of those efforts.

Senator MANCHIN. Secretary Gates said that he did not expect to get any money at all from the other ones because they don't see it's of imminent interest or an imminent threat. I'm thinking, if you have a bad neighbor, a thug in the neighborhood, you want to get rid of that thug. But if they don't think, and they're living there, why should we interject ourselves? Because I applaud basically getting the agreement from NATO and the other, Arab League, before we did go in, because we tried going alone and we see where that's ended up and we've been in the longest war in the history of the United States.

But with that, I just can't believe that we would continue to interject ourselves in all these challenging areas when the people there really don't care, and they certainly have the resources to pay their own way to clean up their neighborhood.

General HAM. Sir, I can't disagree with you, but in this particular circumstance I think the urgency to conduct military operations to prevent the slaughter of civilians had to—in my view, appropriately superseded the concerns about cost. But I think now that we did intercept at least that effort in the east for the regime to attack its civilians, it seems wholly appropriate that we would seek efforts that defray costs.

Senator MANCHIN. General McNabb, on the alternative fuels, I know you have used very effectively, I understand, the coal-to-liquids process. If we were able to produce the fuel, would you be willing to purchase it?

General MCNABB. Sir, obviously the price goes into that, but——

Senator MANCHIN. The price right now, as I understand, is much more competitive than the imported oil that we're using right now to refine the fuel you need. (start)

General MCNABB. Sir, we are absolutely trying to make sure we have all the options. That's why we've made sure all of our airplanes can do that, because we know that——

Senator MANCHIN. You have used successfully the coal-to-liquids process and it worked very well?

General MCNABB. Yes, sir.

Senator MANCHIN. So you'd be happy with the fuel as far as performance?

General MCNABB. Yes, sir, no problems with that.

Senator MANCHIN. Also, General Ham, I just can't believe that we had to have a northern route because our ally, Pakistan, was shaking us down for 30 percent of all the products being moved through there. Don't you find that to be extremely offensive?

General HAM. Sir, it's a tough way to do business.

Senator MANCHIN. I'm done.

Chairman LEVIN. Thank you, Senator Manchin.

Senator Ayotte.

Senator AYOTTE. Thank you, Mr. Chairman.

Thank you, General McNabb and General Ham, for your distinguished service, and please express my gratitude to all that serve below you for the sacrifices that they're making.

I wanted to follow up on a question that Senator Hagan asked. General Ham, about the Libyan rebels, you said that there was an intent of AQIM to attempt to partner with the Libyan rebels. Can you tell me more about what we know about that, and how did they attempt to partner, so that we can assess that aspect of what we do know about the rebels?

General HAM. Senator, we should probably have a more detailed discussion in a classified setting. But it is clear to me that there is at least that stated intent. It has been very difficult to ascertain whether that intent to support the opposition with AQIM personnel has actually materialized anything on the ground, and we're watching that for indications of that very clearly.

But in my view, just the stated intent is one that ought to be concerning to us, it certainly is to me as the commander responsible for that region in the long term.

Senator AYOTTE. I would agree with you, General Ham. As a follow-up, the stated intent is—to what extent do we believe—and if you think this is more appropriate for a classified briefing, please let me know. But to what extent do we think that al Qaeda in the Islamic Maghreb would be in a position to also provide weapons to the rebels?

General HAM. My sense would be that they probably could do so, but not on a large scale. I think it would be probably fighters. But again, we're talking about an organization where small numbers of people can make a pretty significant difference and pose a pretty significant threat. So it is an area I think we have to approach with a great deal of precision and caution.

Senator AYOTTE. I would agree, and I appreciate that you're doing that, because obviously if we're making decisions about how we're going to treat the rebels in Libya we have to know who we're

dealing with, and we certainly don't want to encourage them to partner with al Qaeda or other groups that want to do us harm.

I wanted to follow up also in regard to terrorist activity in Africa. Do you believe that the activity and recruitment of Al-Shabaab and other groups that are affiliated with al Qaeda, is that growing or diminishing in Africa?

General HAM. Senator, unfortunately, I believe it to be growing.

Senator AYOTTE. If that activity is growing, what are the factors that you think are driving that growth, and do you have any thoughts about how we could help you better address to make sure that we nip this in the bud before it again becomes the site of attacks against our own country and our allies?

General HAM. Senator, the factors that encourage particularly young people to be attracted to the violent extremist organization way of life, I think, are as common in East Africa as they are in other parts of the world. It's lack of good governance, it's lack of education, it's lack of stability, security, economic opportunity, that makes many young people susceptible to this violent extremist message. I think the challenge is how do you get to those underlying causes, which do, in fact, require a whole-of-government approach, not simply a military approach.

Of particular concern to me with Al-Shabaab has been at least an expressed interest to recruit Somali Americans, U.S. passportholders, to that effort, which I think poses probably the single greatest threat to us.

Senator AYOTTE. With regard to the activities that we have in Africa, if we were to detain a member of Al-Shabaab or al Qaeda—obviously, they're partnering there in Africa—where would we detain them for purposes of intelligence-gathering?

General HAM. Senator, that's probably a question we ought to answer in closed session. I would need some lawyerly help on answering that one. [Laughter.]

Senator AYOTTE. I appreciate that. Just others have testified before this committee, including Secretary Gates, that hypothetically if we were to catch, to capture a member of al Qaeda or a significant member of the leadership in an area that we're not in a current armed conflict, for example an Afghanistan type scenario, that it's unclear that, with the administration not putting additional detainees in Guantanamo, that it is unclear what we would do with those types of individuals.

So I would just raise that, but obviously would love to hear from you more in an appropriate setting.

Finally, I want to ask you a question about the coordination between DOD and DOS. As I understand, in Africa the way that you align jurisdiction in Africa is different and so you're actually dealing with two different agencies of DOS, because DOD and DOS don't have the same alignment.

Could you describe that for us?

General HAM. Yes, ma'am, that is true. Sub-Saharan Africa is managed at DOS by the African Bureau and North Africa by Mideast-North Africa. So it does cause us to have interaction with two entities of DOS. But frankly, that's not been an impediment.

One of the reasons it's not is the interagency construct of the AFRICOM headquarters. In fact, seated behind me is the deputy

to the commander for civil-military affairs, who is a long career foreign service officer, Ambassador Tony Holmes, who helps the command understand how we most effectively interact not only with the two bureaus in DOS, but with the whole of the U.S. Government.

Senator AYOTTE. General, as a follow-up—and, ambassador, I appreciate your being here—wouldn't it make more sense, though, if we coordinated the boundaries, because then you would be dealing with the same area? I very much appreciate that, with the activities, the war for example that we are prosecuting in Afghanistan, there's a significant and important relationship between DOS activities and DOD activities, and that coordination in a counterinsurgency strategy is critical.

Given what you just told me about recruitment and the issues that drive young people to, unfortunately, join terrorist organizations, I would think that that alignment would be important, and I wanted to get your thoughts on if you were to realign and have the same jurisdiction whether we would gain a better ability to communicate.

General HAM. Senator, I think this is a subject of some long debate. There are pros and cons both ways. To have DOS and DOD looking at the same countries, in our case the 52 or 53 nations of Africa depending on how Egypt would fall out, there is some goodness in that. But what you lose in that, in such an alignment, is the view outside of the AOR and how activities on the continent of Africa might affect, for example, southern Europe or into the Mideast.

I think in that regard Egypt is a good example. Though it's obviously on the continent of Africa, it is in CENTCOM's AOR, but there is—for matters of African security, we have that discussion with Egypt.

Similarly, across the Gulf of Aden in Yemen, obvious concerns there. It's in CENTCOM's AOR, but we have sufficient ties and dialogue to maintain effective operations.

So I think it's worthy of discussion, but I'm not so sure that necessarily equal alignment is the best way ahead.

Senator AYOTTE. Thank you very much, General Ham. I appreciate what you've said about that. The only issue I think that we need to also make sure that we're focused on is, the more you have—if you have to deal with two areas at DOS, as long as there's good coordination and you don't feel like in one area you're getting good information, in one you're not—that coordination seems key when you don't have aligned boundaries.

So I appreciate your comments on it and thank both of you for your service.

Chairman LEVIN. Thank you, Senator Ayotte, for raising that alignment issue. We are hoping that the Government Accountability Office is going to get back to us on that issue, and that would be great if you could get deeply involved in that. But we are expecting, apparently, a report on that, my staff tells me, very issue. So we'll make sure that that gets to you, so you can get back into that.

Senator AYOTTE. Thank you, Mr. Chairman. I look forward to delving into that and looking at that closely.

Chairman LEVIN. Thank you.

Senator AYOTTE. Thank you.

Chairman LEVIN. Thank you, Senator Ayotte.

Senator Webb.

Senator WEBB. Thank you, Mr. Chairman.

General McNabb, welcome. General Ham.

Let me begin by following on with what my good friend Senator Graham mentioned about the relocation of AFRICOM. I'd like to ask you if you've had the opportunity to visit Norfolk?

General HAM. Senator, I have, but not since arriving at AFRICOM. But clearly that is one of the stateside locations that we'll look at.

Senator WEBB. I hope you'll come down and take a look. The Joint Forces Command has been greatly reduced and we have a facility that you can just turn the lights on and move right in. We hope you'll take a look.

I hope that we can be much more careful in the rhetoric that we're using when we're discussing the situation in Libya. I think the terms of reference we need to be much more precise about when we're having this discussion. Let me begin by pointing out that the goal which this administration has set out is regime change by other than military means, as you have mentioned. But I think there's been a little bit of perhaps maybe public confusion in some of the exchanges that have taken place here.

I think in that respect it's important to remind people that the United States still recognizes the Qadhafi government. This came up in an exchange when I asked Under Secretary Burns during a Senate Foreign Relations Committee hearing a couple of weeks ago. We have never severed our relationships with the Qadhafi government. I had my staff call over to DOS during this hearing to make sure that is still the case.

So we're in an anomalous situation in which we are conducting military operations with the goal of deposing a government or at least the leader of a government which we still recognize. That would lead me to assume that what we are doing in terms of our military operations are indeed limited and the goal is perhaps the implosion of the government in terms of Mr. Qadhafi. So I think we ought to be real careful about another end state; we're talking about another end state for this individual.

I've had concerns about the way that this decision was made by the President. This was an unilateral decision to use military force when it came to the way that the U.S. Government is structured. We were not under attack. We were not under an imminent threat of attack. We were not responding to localized attack on our people, as we did in 1986 when I was in the Pentagon. I fully support what we did in 1986 after the Qadhafi regime had supported the killing of some of our soldiers in Berlin. We were not rescuing Americans, as we have in many periods of our history, including Grenada or in the piracy situation.

If I could offer, you had an exchange earlier about rules of engagement in the piracy situation. I think my view would be shoot the pirates, blow up the boats. That's a pretty good rule of engagement. I would support that.

But in this situation we weren't responding to an attack on a treaty ally. We had a very unclear picture as to who we were supporting. In fact, Secretary Gates and I had an exchange last week when I asked him if this was a civil war, and he said clearly in his view it was not a civil war because the opposition is so disparate that there's no one entity that we could work with if we were supporting forces against this present government.

This has relevance, I think, particularly to your command, more than any of the other commands, because there's so much volatility in the continent that you are responsible for. What specifically is your understanding of the authority under which the President made this decision?

General HAM. Sir, it is my understanding that the President made this decision and issued authority to conduct military operations to protect lives and did so, it is my understanding, with notification to Congress. But, sir, I'd have to defer again to the general counsel and others to give you a more definitive answer than that.

Senator WEBB. So it was probably—I've read the letter of notification. It's a generalized statement of the powers of the Commander in Chief. But as it applies here, this is a humanitarian situation that doesn't involve any of the situations that I just mentioned, correct?

General HAM. Sir, there was no imminent threat to Americans, that's correct.

Senator WEBB. So it would be conceivable that, with this very broad interpretation of presidential power, it could be used in pretty much any manner in which this President decided to use it with respect to other humanitarian situations in Africa, like the Ivory Coast?

General HAM. Sir, I would have to defer to the policy folks and the general counsel.

Senator WEBB. I'd just like to reiterate my concern that if we don't use the War Powers Act here, we need to use something like the War Powers Act for Congress to really examine the future of what we're going to be doing in Libya and other situations. I think it's a proper way for us to exercise the powers that we have here in Congress.

I would assume that planners are considering the prospect that there might be an international force on the ground in Libya in the future? Let's say not boots-on-the-ground in combat, but if Qadhafi leaves is that in the cards?

General HAM. Sir, I think that is certainly one potential outcome of this, an international force of some composition intervening between the regime and the opposition forces.

Senator WEBB. Would it be a consideration for the United States military to be on the ground in that situation?

General HAM. Sir, I suspect there might be some consideration of that. My personal view at this point would be that that's probably not the ideal circumstance, again for the regional reactions that having American boots-on-the-ground would entail.

Senator WEBB. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Webb.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

First of all, I read in Defense News this morning the discussion that has been around this table on where the headquarters should be. General Ham, I was very much involved in dividing out the continent of Africa into one command. It had been parts of three commands and I was involved in that change.

At the time my preference was to have the headquarters in Africa. The place that I, at that time, felt would be more because of the location of the various AFRICOMs or unions would be in Ethiopia. But we also understand—it's interesting. When you talk, as I do, individually to the presidents of the various countries, they agree that it would be better. But the problem is, and we all know it, with this whole idea of the colonialism and all that, they felt nobody wanted the presence in Africa because it would make it look like a takeover thing. So I understand all of that.

But I'd be very much opposed—and I just want to get on record—that if there is a serious look at changing the headquarters—obviously, we have Tinker Air Force Base and all that. But it should stay, in my opinion, in Stuttgart, for this reason: We have our other combatant commands, like the Pacific Command is in theater, in the Pacific. In these areas, if you put it where it's a different time zone you have a problem. I know your predecessors were—they have to come down, and we want them to have relations, be present in the continent as much as possible. It would be very difficult if you were coming from the United States, in my opinion.

Stuttgart works well. It has two commands there, and I would hope that we leave it there until the day comes that we'd be able to move it to, with the acceptance of Africa, some African nation. I just think it would be very awkward, it's really awkward right now, and I've talked to your two predecessors, in terms of getting equipment down there and responding and all that. Even distances between Stuttgart and places on the continent are inconvenient.

If it gets into any kind of a serious talk about changing that, I want in on the discussion, okay?

General HAM. Yes, sir, absolutely.

Senator INHOFE. The other thing, General McNabb, I'm going to bring up something that probably nobody up here is even familiar with, but you are. It has to do with the FAA bill and it has to do with one of our favorite subjects, and that is the Subpart S. The Subpart S—that's the nonscheduled carriers—has always been separate from the crew rest and some of the problems, not problems, but some of the things that people comply with with scheduled airlines.

But we have problems in many cases with bringing things in, let's say, from Stuttgart or from someplace going into theater and then coming back out, which we do. We take equipment in, we take personnel in and out. If you use that 15 hours, you can't do it. I have several examples here that we've actually looked at and mapped out. One would be from Belgium to Bagram to Amsterdam. That's a regular route that is run. They take tents and equipment in there. Another one, from Germany to Kandahar to Hong Kong, a regular route. Another one, from Ramstein to Qatar and return.

The problem is, because of the securities, you can't leave these aircraft in there overnight, so they can't have a crew rest, a rest over night, that others could have, because it's in a war zone. So I'd like to get you on record recognizing that as a problem and any comments that you have to make if you agree with me on this problem. In other words, we want that Subpart S to remain as it has been in the past. I say I do, anyway. What are your thoughts?

General MCNABB. Administrator Babbitt did come and talk to me and said: "Hey, what are your concerns as I look at the U.S.-flag carriers, the Civil Reserve Air Fleet (CRAF)?" I do depend absolutely on the scheduled and the non-scheduled carriers. I mentioned to him then that I do not think one size fits all. Domestic flights where you have numbers of sorties is a little different than the international long-range, and so you have to deal with it differently.

Safety is paramount, there is no question, and you can do a lot of things to enhance safety. They're looking at crew rest facilities on the airplane so that you can get some rest en route. Operational risk management programs, to make sure that we're looking at that.

But from my standpoint, what I want to do is make sure that I keep velocity up and we're taking full advantage of modern airplanes. I really pushed the CRAF, saying I really want to get to the more modern airplanes, which are inherently more safe. As we get these international airplanes, the amount of money that's spent, there's a lot of safety that's built into them, and of course I think—so that's a little bit different——

Senator INHOFE. But as far as maintaining the exemption for Subpart S, would you agree with my statement on that?

General MCNABB. Yes, sir.

Senator INHOFE. All right, that's good.

General Ham, I'm very interested in a lot of things that are going on there. One of the differences between you and me is when a decision is made as a policy decision by this country, whether you personally agree with it or not, you're a soldier, you carry it out. So I disagreed with our attitude toward the government in Côte d'Ivoire, Laurent Gbagbo and his wife, Simone. I know what they've been accused of in the past, but I also know that what happened in that election—and I have documented on the floor of the Senate—certainly brings it into question as to whether or not that was legitimate.

The French then, behind Alassane Ouattara, actually participated in, not just in Abidjan, as they did with their gunships, and we have no idea how many hundreds of people were killed 3 nights ago there. That was something where specifically the French said to the U.N. "We authorize you; we're going to use our troops as necessary to go in there and try to get the Gbagbo administration out."

That's a real hotbed right now. It's going to have huge repercussions in the future. But I hope that when things like that start coming up that you'd be in a position in terms of what our response will be to talk to those of some of us who are pretty familiar with what is going on in Africa.

Now, that same thing would go, as you and I have talked in the past, with the LRA, for example. That's something where we now have Uganda, Central African Republic, the Congo, and Rwanda all in agreement they need to get this guy, and we now have a policy of the United States, because I passed the bill, that we need to do away with Joseph Kony and the LRA.

Do you have any comments to make about that and where that is on your priority list?

General HAM. Sir, it is a high priority, and I think it factors into the lack of security in East Africa as a whole. I think so long as the LRA is able to operate in the horrific manner in which they do, they will continue to contribute to instability in the region. We take very seriously our military responsibility in a supporting role in executing the strategy. In fact, this afternoon, I am headed to DOS to have discussions on this and many other topics.

I think the challenge for us in AFRICOM is, while we may not have access to the full array of forces that we would like to have to support this endeavor, we should do what we can now. I think that would be my approach in the near term, to enable the Ugandans particularly, but others as well, to put as much pressure as possible on the LRA.

Senator INHOFE. I know my time's expired, Mr. Chairman, but I want to make sure I get into the record how serious this is. Joseph Kony, for over 20 years, almost 30 years now, has been going into the villages and stealing these little kids. It's called the children's army. They have to go back after they're trained—I'm talking about 12-, 13-, and 14-year-olds. They have to go back to their village and murder their parents and all that. They have gone through and they've mutilated these kids for all these years.

We now have a position of the United States in this thing. I do say this, that we have some really good presidents over there, like Museveni in Uganda, who's just as interested as we are, Kabila in Congo is just as interested as we are, and certainly in Rwanda they're concerned. So I would like to stay on top of that. Anything that is new in the way of a development, I would personally like to be advised of that.

Then, for the record, if you could put in your thoughts on International Military Education and Training and train-and-equip. I'd like to have that because when we start developing our authorization bill I want to get everyone on record. I'd say the same thing for you, General McNabb, as to the significance of those programs.

Mr. Chairman, thank you.

[The information referred to follows:]

General MCNABB. International Military Education and Training (IMET) is designed to accomplish two primary goals. The first is to help strengthen foreign militaries through the provision of skills (and exposure to values) that are necessary for the proper functioning of a civilian controlled, apolitical, and professional military. Second, IMET is an 'instrument of influence' through which the United States shapes the doctrine, operating procedures, values, choice in weaponry of foreign militaries, and occasionally the policies of the recipient governments. Foreign students—many of whom will occupy the upper echelons of their country's military and political institutions—are taught infantry tactics and operations by American instructors, learn how to operate and maintain American weapons systems, and establish ties with American officers. The resulting doctrinal and operational commonalities, and institutional and individual ties that form between the U.S. Armed Forces and their foreign counterparts, lead to more interaction and stronger relations be-

tween the two militaries. Additionally, more interaction translates into more U.S. access to foreign military facilities and bases, which in turn allows the United States to establish a military presence in more regions and facilitates the use of military force, or the threat of military force, to address regional threats.

For these reasons, I feel IMET is a program which should enjoy the continued support of Congress.

General HAM. The International Military Education and Training (IMET) program and/or Foreign Military Financing (FMF) are integral to meeting many of U.S. Africa Command's (AFRICOM) goals and objectives. While the costs of these programs are low—the impact is immense. It takes one $10,000 to $70,000 investment in IMET to influence an officer for the next 20 to 30 years. Appreciation of American values, the rule of law, civilian control of the military, and the success of our political/economic model are lessons that are never forgotten and assist us in thousands of unanticipated and often unnoticed ways such as an appointment scheduled, a warning passed, a lesson taught, or a coup avoided. Training conducted to professionalize the military in and outside of Africa can lead to stable governments and the hope of a better future. Equipment programs are immensely valuable if they are properly focused. Relative to other commands—AFRICOM does not receive a lot of FMF—but we use what we have to encourage the development of sustainable logistics, mobility, specialization appropriate to the host nation, and the development of capacity that can benefit the goals of AFRICOM and the U.S. Government.

Chairman LEVIN. Thank you, Senator Inhofe.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

I want to join in thanking both of you, General McNabb and General Ham, for your service to the country, and hope that you will convey that thanks to all the brave and distinguished men and women who serve with you.

I want to focus on a number of areas quickly, first on, General Ham, the Joint Surveillance Target Attack Radar System (JSTARS) aircraft. I wonder if you could tell us a little about the role and importance of the JSTARS mission in Libya and other areas?

General HAM. Senator, JSTARS has been an integral and important component of the suite of collection assets which the United States and others have applied to operations in Libya. JSTARS' particular capability in detecting moving forces has been particularly useful and noteworthy. Especially early on in the campaign, where the regime forces were moving, JSTARS was able to identify those and greatly aided the vectoring in of aircraft to interdict some of those efforts.

So it has been and remains a valuable component. It has long on-station time and a great capability.

Senator BLUMENTHAL. So it's been extremely useful in surveillance, reconnaissance, targeting, many of the areas where American aircraft have been so instrumental in the Libyan operation so far?

General HAM. Yes, sir, American and others.

Senator BLUMENTHAL. If you had more of them, would that be of use to you?

General HAM. Sir, I had sufficient for this particular operation, which was, of course, limited in scope. But certainly in a larger-scale operation and the ability to deal with multiple simultaneous contingencies, then that would be the case.

Senator BLUMENTHAL. Do you know whether those aircraft are still available to NATO? Are they still in use in helping to target? Because I understand that one of the challenges in Libya is identifying non-civilian targets.

General HAM. Sir, it is my understanding that JSTARS is still flying and operating. It is difficult again when both opposition and regime forces are operating in the same area with the same type of equipment. That's a tough target set for JSTARS and others to operate against.

Senator BLUMENTHAL. But JSTARS has been useful and instrumental in that effort?

General HAM. It has been, yes, sir.

Senator BLUMENTHAL. General McNabb, I wonder if you could tell us about the planning and perhaps the logistics of withdrawals that are intended for Iraq and potentially for Afghanistan? I recognize they are two very different situations. But is there planning for those purposes and what is its status?

General MCNABB. Yes, sir. It's all going very well. In Iraq we already came down from 130,000 to 50,000, and of course the last 50,000 coming out by December of this year. That whole system has gone very well. We basically bring it down, General Austin and his folks in Iraq determine which equipment they'll phase out and bring down. They use two ports, in Jordan the Gulf of Aqaba, and then they also use Kuwait for the majority. It has to do with wash racks. They'll wash it up, make sure that it's all set. Then we use our U.S.-flag commercial fleet to then move them back to the States or in some cases, to Afghanistan.

Some of the higher priority things like Mine Resistant Ambush Protected (MRAP) All-Terrain Vehicles (ATV) and MRAP vehicles that they have said, "okay, we're going to move these from Iraq to Afghanistan, we will fly directly from Kuwait and take them across."

So I'm very comfortable how well-oiled that is. The Army Materiel Command, General Dunwoody, that whole team has done superbly along with the folks in Iraq and the Services on getting the staff back and then getting it to the depots and fixing it up.

Senator BLUMENTHAL. Fair to say it's all on schedule?

General MCNABB. Sir, that one's going great.

Afghanistan, we are working to make sure that we can get a flow out of Afghanistan. Right now with the NDN, we only have permission for one-way flow. A number of countries have no problem with that, but a couple of countries still have said, "we are okay with taking stuff into Afghanistan, but we're not okay at this time with bringing stuff out of Afghanistan. Plus we can't bring military equipment out."

So we are looking there in Afghanistan. One of the big things is to find some intermodal ports where we can jump out of Afghanistan to an airfield, that then we can put it on surface, clean it up, and put it on the surface and bring it home that way, which again you get the good part of getting it out quickly, but then we get the value of moving it by surface, so the much cheaper cost.

Senator BLUMENTHAL. Regarding Afghanistan, I was interested in your testimony with respect to new air drop or air transportation vehicles, particularly under development at the Nordic Center, again especially the unmanned helicopter. I know the KMAX and other vehicles are in experimental stages. I wonder if you could elaborate a little bit on your testimony in that regard?

General MCNABB. Yes, sir. We went from 2 million pounds of air drop in 2005 to 60 million pounds of air drop last year, and we're headed towards 100 million pounds this year, as I mentioned, using multimodal operations that's freed up military airplanes like C–17s to be able to do more of that, C–130s as well.

We keep working with the folks on the ground in figuring out low-altitude, low-cost, where we use disposable chutes where they don't have to worry about getting the stuff back. We've done precision air drop, which if the weather or the threat demands we still want to make sure we can get the stuff in to them.

Of course, what this does is it frees up either helicopter hours, so they can go do operational missions, or it gets convoys off the road, which saves our lives of our valuable folks.

What we're working on now is looking at high-speed container delivery systems (CDS), which is what the Special Operations Forces do. I was talking to the Commander of the Air Force Special Operations Command and I said: "What would you do if you were me?" He said: "The one thing I would do is try to get to high-speed CDS; that works very well for us." This would be coming in at 250 knots and 200 to 300 feet, very precise. But we have to design chutes that can handle that, that opening shock.

The C–17 and C–130J aircraft as we've been modernizing, their tails are already stressed to handle that, so it's simply to make sure that we can design the chutes that we can do that. Again, that will vastly improve safety as we go in and the precision that we need for those forward operating bases and of course, they appreciate the closer we can put it to where they want it, so they don't have to go chase to get it.

So it's a very exciting time. As you mentioned, unmanned aerial vehicles. We're also looking at airships, and there are some real positives there that it just may be time to be able to be taking advantage of that.

Senator BLUMENTHAL. I want to commend you for that very exciting work. You've used the term exciting. I think it is exciting, very challenging as well, and absolutely critically important, perhaps underappreciated by the American people, the job that you're doing in getting supplies to those forward positions that are very difficult, particularly in Afghanistan, to supply and keep supplied. So I want to thank you for that work.

My time has expired. I have other questions, so with your permission I may follow up with those questions to you in another form.

Just in closing, I want to thank you for your focus on aiding our warriors when they are wounded and a very important part of your testimony dealing with the increased rate of survival and the great work that you're doing in that regard. So I thank you very much, and thank you, General Ham, as well. Thank you.

General MCNABB. Sir, it's absolutely a labor of love.

Senator BLUMENTHAL. Thank you.

Chairman LEVIN. Thank you, Senator Blumenthal.

Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman.

General McNabb and General Ham, thank you so much for being here. I'm sorry to drop in at the 11th hour. I know you thought you

were all ready to go and then I walked in. I apologize for missing your testimony.

General McNabb, you mentioned that the recapitalization of the tanker fleet remains your top acquisition priority, and I think we were all pleased, regardless of where we were on the decision, that the decision has finally been made and we can move forward.

We've been following this very closely in New Hampshire, where we have our Air National Guard based at Pease, and has been working with the 157th Air Refueling Wing, and they've been flying in support of Air Mobility Command operations around the globe. Much of that has been done with the old KC–135 tankers from the Eisenhower era, and I can speak to how loud those used to be because they used to fly over my house.

I know that the acquisition of the new tankers is very important. While I understand that the Air Force is going to be the main decisionmaker on where they're based and that you probably don't want to comment on that process, we're also following that very closely because we would love to have them based at Pease.

Could you talk about what kinds of criteria you think are important as the basing decisions are being made? You talked about looking for ways to optimize air processes and saving money as you're thinking about these missions. What kinds of strategic basing decisions are you looking at as you're thinking about the missions of the future?

General MCNABB. Yes, ma'am. As you said, that's really an organized train-and-equip mission of the Services. The Air Force has a very robust criteria where they will go in and they will look at all the bases, especially given the tanker decision, the 135s, and we know that the first 179 is just the start of the recapitalization of the whole 135 fleet as it ages out.

They have the criteria, and it is things like facilities, it is like air space, it is how close are you to the tracks. Obviously, Pease is close to the northeast tanker task force. We use that a lot, and you helped out for the Libya operation, as you probably know. Very valuable how well that has worked. I will say that as both the Air Mobility Command commander and then as the TRANSCOM commander, I absolutely depended on that.

But it is a process again under the Secretary of the Air Force. They go very clearly and say, "here's the criteria, here's how much everything's worth." They do the visits to all the places, and then they will say: "Okay, well, here's three more." Then they will finally get it down to a preferred location and say, "we'll do the environmental studies." But it's very open and I know their plan is to make sure they do that right in consultation with all of you, in a very open process.

Senator SHAHEEN. Thank you. We appreciate that and appreciate your kind words for the missions that have been done from there to support the Libyan effort.

General Ham, I missed much of the discussion earlier in the committee about al Qaeda's influence in Northern Africa and concerns about that. I certainly share the concerns that have been expressed today. In a hearing yesterday before the Senate Foreign Relations Committee, we heard testimony about the finding of shoulder-fired rockets in Libya by the rebels. We heard this testi-

mony from Human Rights Watch, and the fact that those shoulder-fired rockets then disappeared not too long after they were found in a warehouse.

You mentioned, as I understand, here the possibility that there could be as many as 20,000 of those rockets that exist in Libya. I wonder if you could talk about what the threat is to the operation in Libya and what we're doing in cooperation with our allies to try and recover those shoulder-fired rockets?

General HAM. Senator, it is a very real problem. We do estimate that there were as many as 20,000 of these types of weapons in Libya before the conflict began. It's very difficult now to ascertain how many of them are still accounted for and how many of them may have been taken to other places. It does pose both a regional and an international concern, I believe.

The threat to current operations is relatively easily mitigated by the aircraft operating at an altitude generally above the effective range of those shoulder-fired air defense systems. But the threat longer-term that if these systems were to be controlled by violent extremist organizations and the threat that that would pose is really to me the greater concern than the immediate tactical effect.

Senator SHAHEEN. So can you speak to what kinds of cooperative efforts we're doing with our allies in the region to try and recover those?

General HAM. Yes, ma'am. It starts, of course, with intelligence and trying to track through a variety of means where those systems may have been taken and how they're stored and under whose control. But it gets to the larger issue and the larger, longer range mission of AFRICOM and the U.S. interest there of helping African states establish good governance, good security apparatus, that would have the ability to detect the movement of such weapons into their countries and then be able to take actions themselves to bring those under control.

That's really what we want to get to long-term. In the near-term, it will be intelligence-driven and then in collaboration with the regional partners to try to take action to get those out of extremist hands.

Senator SHAHEEN. As you talk about trying to help the African states on issues like this, one of the most horrible challenges that I think continues to threaten Africa is violence against women in those regions, especially when it's used as a tool of war, as it was in the DRC. I just wondered whether you're looking at any ways in which you can help as you're supporting African nations and helping transform their militaries, if you're thinking about any kind of training or awareness of the challenges of violence against women, particularly sexual violence against women, and how you're dealing with that, if you are.

General HAM. Yes, ma'am, it is a very real threat. The command has previously highlighted that as an important issue and it has incorporated such training when it helped develop military forces in the Democratic Republic of Congo. It's a program, I think, that bears our further and continuing interest. Again, it gets into the notion of what are the characteristics of a military force that is responsive to civilian control, respectful of the citizens that it serves, and sex-based violence, while there is some tradition of that and

history of that, is something that has to be expunged from the ranks of the militaries of those nations. We'll continue to do what we can in modeling by our own behavior, but specifically targeting instruction and leader development in that regard.

Senator SHAHEEN. Thank you very much, General Ham. I really appreciate hearing that. Yesterday the head of the Office of U.N. Women, former Chilean President Michelle Bachelet, was here and she talked about the challenges that they have and the importance of engaging men in African nations in this fight, so that they understand how they're affected by these actions. So I very much appreciate that. If we in the Senate can help in any way in this effort, I'm certainly ready to do that.

Thank you.

Chairman LEVIN. Thank you, Senator Shaheen.

Just a couple more questions on Libya. General Ham, if the military mission were expanded, as some are proposing, to include regime change, what would be required to achieve that military mission?

General HAM. Mr. Chairman, at the outset it would require a very significant increase in the intelligence collection to be able to track that particular individual and his movements. It would be a considerable increase in the current effort against a very difficult target set, and then have available military forces to be able to act on very short notice to that intelligence.

I think it would be a pretty significant increase from the current level of effort.

Chairman LEVIN. Would that probably require boots-on-the-ground, then?

General HAM. Mr. Chairman, that would probably, in some cases, be part of the intelligence collection, again because this is a very practiced individual in terms of concealing movements. So the human intelligence component would probably necessitate some presence, maybe not military, but to contribute to that intelligence picture.

Chairman LEVIN. What about in terms of the removal if the intelligence were obtained? Might that require boots-on-the-ground?

General HAM. Sir, that could be an option, and certainly it would be the most precise and the less likely to have civilian casualties or additional collateral damage, but very difficult to execute.

Chairman LEVIN. If that mission were amended, expanded, to include that goal, does that have an effect or might it have an effect on the coalition and on the resolution?

General HAM. Sir, I believe it would. It is not addressed in the current Security Council resolution and if it were to be included I think we would find it more difficult to find willing partners.

Chairman LEVIN. Could it have an effect on the NATO agreement?

General HAM. I believe it could, Mr. Chairman.

Chairman LEVIN. What about the support of the Arab League?

General HAM. I believe it would have a negative effect.

Chairman LEVIN. Now, if the no-fly zone had been put in place earlier, in your judgment, would the situation be different in Libya from what it is today?

General HAM. Mr. Chairman, it's difficult to assess. I think had the no-fly zone been imposed unilaterally by the United States or perhaps with a small subset of other willing partners, it probably could have had some effect, would have had some effect on the regime's aircraft conducting some attacks which they did in Benghazi, probably could have had some effect there. But I don't think the no-fly zone in and of itself would have had any deterrent effect on the regime's ground forces moving toward Benghazi.

Chairman LEVIN. We're all done. We thank you both.

General McNabb, you've had about as good a partner as you could possibly have today.

We thank you both and thank the men and women with whom you work.

We'll stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTION SUBMITTED BY SENATOR KIRSTIN E. GILLIBRAND

FOOD FOR PEACE

1. Senator GILLIBRAND. General McNabb, it is my understanding that U.S. Transportation Command (TRANSCOM) largely relies on private U.S.-flag merchant marine vessels for its global sealift capability. According to a 2009 study prepared for the Maritime Administration, U.S. food aid cargoes account for a significant percentage of yearly revenue for U.S. private merchant marine companies. Given this, what is your estimation of the impact that significant cuts to the U.S. Food for Peace Program, as proposed in H.R. 1, would have on the cost and ability for TRANSCOM to continue to utilize private U.S.-flag merchant marine vessels for global sealift?

General MCNABB. Maintaining sealift readiness is a priority for TRANSCOM. Sealift is the primary means for delivering ground forces and sustainment during major combat operations, and has been responsible for delivering over 90 percent of all cargo to Afghanistan and Iraq. TRANSCOM's partnership with the U.S. commercial sealift industry is a vital component of meeting the Nation's strategic sealift requirements.

Through programs like the Maritime Security Program and cargo preference laws, the Department of Defense (DOD) gains access to U.S. commercial capabilities and transportation networks while ensuring the continued viability of both the U.S. flag fleet and the pool of citizen mariners who man those vessels. While no quantitative analysis has been undertaken with regard to recent proposals to reduce international food aid, it is apparent that any reduction in preference cargo volume will have a corresponding impact on the revenue that helps to support this key element of our sealift readiness.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

SOMALIA

2. Senator MCCAIN. General Ham, I am very concerned by the statement from your prepared testimony that al Qaeda's influence in East Africa is experiencing "dramatic increase." Why is that, and how do we counter it?

General HAM. [Deleted.]

3. Senator MCCAIN. General Ham, in your testimony, you accurately diagnose the problem in Somalia, with Al-Shabaab's linkage to al Qaeda, but you do not describe a strategy to counter this threat. Do we have such a strategy, and if so, what is it?

General HAM. [Deleted.]

4. Senator MCCAIN. General Ham, how would you assess the threat to the U.S. Homeland from terrorists who originate from, or who have been trained and based in, Somalia—including Americans of Somali origin?

General HAM. [Deleted.]

PIRACY

5. Senator MCCAIN. General Ham, do you have an estimate of how much revenue Al-Shabaab receives on an annual basis from its taxes on piracy activities?

General HAM. [Deleted.]

6. Senator MCCAIN. General Ham, can the threat of piracy in East Africa be diminished and defeated in a lasting way only by operating at sea—or does it ultimately require us to take the fight ashore in Somalia to attack their bases and networks?

General HAM. I do not believe the threat can be defeated through operating only at sea. The initial roots of piracy were, and for the most part still are ultimately economically driven, but the murder of four U.S. citizens this February demonstrates that piracy is a lethal threat as well. Good governance, capable security forces and a functioning judiciary system, none of which currently exist in Somalia, need to be in place to effectively address piracy. Thus an interagency and international approach with other supporting combatant commands is the best way to address counter piracy operations. A comprehensive approach would include diplomatic and development efforts, supported by defense operations targeting piracy infrastructure and support structures in a way that does not alienate the Somali population.

7. Senator MCCAIN. General McNabb, is the use of contracted security guards on U.S. flag commercial ships deterring pirates?

General MCNABB. Since the Maersk *Alabama* and *Liberty Sun* incidents in early 2009, no U.S. flag commercial ships have been hijacked—a testament to the success of armed contract security.

While many U.S. flag ships have been approached or fired upon during this timeframe, the presence of the security team has repeatedly proven effective, especially when used in concert with the internationally recognized Best Management Practices (BMP).

8. Senator MCCAIN. General McNabb, what are the costs of taking this approach?

General MCNABB. The direct cost for an armed security team on a U.S. flag vessel carrying DOD cargo is on average $122,000. To date, the total cost has been $8.5 million. To support the employment of armed security teams, TRANSCOM worked closely with the Department of State (DOS), the U.S. Coast Guard, and other interagency partners to secure the permissions of the coastal states in the area to allow U.S. flag vessels to enter their ports with weapons and ammunition onboard. Through close communication with industry, we have ensured compliance with International Trafficking in Arms Regulations.

These costs are a small price to pay for the safety of DOD cargo, our U.S. flag ships, and most importantly, our U.S. citizen mariners.

9. Senator MCCAIN. General McNabb, what else can be done to secure U.S. flag vessels from piracy threats in the region?

General MCNABB. U.S. flag vessels are already setting the standard with the use of armed security teams, full implementation of the BMP, and close coordination with both the interagency and international organizations dedicated to counter-piracy efforts. These BMPs include:

- Liaison with naval forces in the region, and ensure high-risk transits are properly registered with local military authorities
- Utilize International Recommended Transit Corridors when available
- Conduct regular Ship Security Assessments and implement Ship Security Plans in accordance with the International Ship and Port Facility Security Code (ISPS)
- U.S. flag vessels make use of periodic Anti-Piracy Assistance Team (APAT) visits
- Prior to entry into the High Risk Area, crews are briefed on preparations and a drill is conducted
- Defining the ship's Automatic Identification System (AIS) policy: The Master has the discretion to switch off the AIS if he believes that its use increases the ship's vulnerability. If the AIS is switched off it should be activated at the time of an attack
- Vigilance. Ensure additional lookouts are briefed and available for each watch. Additional binoculars and night optics should be provided
- Install and use close circuit television cameras to ensure coverage of vulnerable areas

- Install self-protective measures to include reinforcement of ship's bridge, removable plates, and razor wire to prevent accessing accommodation or machinery spaces, lifting or removing external ladders, removal or barrier protection of exposed gas bottles and flammable liquid containers
- Control access to the ship compartments by reinforcing hatches and creating safe muster points/citadels
- Utilize fixed or remotely operated water or foam monitors to deter pirates from boarding and to make it difficult for skiffs to remain alongside
- If attacked, activate alarms and the Ship Security Alert System. Maneuver to create unfavorable wake conditions for pirate skiffs. Increase speed if possible. Activate Emergency Communication Plan and notify naval authorities

TRANSCOM communicates frequently with U.S. flag companies, participating in a robust information-sharing network via forums like the National Defense Transportation Association and its Sealift Committee and the Voluntary Intermodal Sealift Agreement Executive Working Group to ensure close coordination of best practices and lessons learned.

I believe continued open and frank discussion within industry, the interagency, and our international partners is the key to keeping our ships and mariners safe. Finally, I meet periodically with CEOs of our U.S. flag shipping companies to discuss this issue specifically. I most recently met with many of them on March 23, 2011, and intend to hold a dedicated session in Washington, DC, in June, along with the Commandant of the Coast Guard, the Maritime Administration, the 5th Fleet Commander, and the other members of the interagency.

MASTER PLAN FOR CAMP LEMONNIER, DJIBOUTI

10. Senator McCain. General Ham, you mention in your opening statement that "as U.S. Africa Command's (AFRICOM) sole forward operating site on the continent, Camp Lemonnier, Djibouti, serves as a critical operational and sustainment facility (a hub for lift, logistics, intelligence, and command, control, communications, and computers (C4)) in support of DOD activities in the region. It is critical for activities and operations across the area of responsibility (AOR) boundaries in the Red Sea, the Gulf of Aden, and the Arabian Peninsula." The Ike Skelton National Defense Authorization Act (NDAA) for Fiscal Year 2011 contained language expressing concerns with the safety and security of U.S. forces stationed at Camp Lemonnier, Djibouti, due to cramped conditions and the lack of deliberate planning to address vulnerabilities. We asked for a master plan that would include options for expanding the footprint of the base in order to allow for greater separation of functions and a better opportunity to meet anti-terrorism/force protection standards for almost $500 million worth of facilities planned for construction at the base over the next 5 years.

As part of the plan, will you review the roles and missions of Joint Task Force-Horn of Africa and other missions being conducted at Camp Lemonnier to determine their long-term end strength and facility requirements to ensure you have enough room in the existing footprint of the forward operating site?

General Ham. Yes, and we have partnered with our components and the Department of the Navy to assess the roles and missions of the Combined Joint Task Force-Horn of Africa and to understand the requirements of other activities at Camp Lemonnier. The Department of the Navy has developed the Military Construction Master Plan that ensures the long range success of these missions and which meets DOD force protection requirements.

11. Senator McCain. General Ham, do you agree a master plan for the entire base should be developed and approved by you before any further military construction projects are carried out at Camp Lemonnier?

General Ham. As the Executive Agent for Camp Lemonnier, the Department of the Navy has developed this master plan, and it is pending release.

Throughout the Master Plan process, AFRICOM worked with the Navy to develop a systematic way ahead that balances the operational requirements and quality of life needs for the deployed servicemembers.

12. Senator McCain. General Ham, are you comfortable with the degree of security and protection currently provided to the forces deployed to Camp Lemonnier?

General Ham. Although Camp Lemonnier does not currently meet all security and force protection requirements, I am confident that we have identified the specific area that require additional attention and have taken steps to mitigate the risk. I

am also confident that the pending Camp Lemonnier Master Plan spells out a clear path to meet all said requirements.

13. Senator MCCAIN. General Ham, will you review the master plan to ensure adequate measures and planning have been incorporated to provide for the safety and security of U.S. forces deployed to Camp Lemonnier?

General HAM. Yes, we have supported the Navy in the development of the Master Plan with an emphasis being placed on the safety, security, and Anti-Terrorism Force Protection measures for the construction projects. The military construction priorities have recently been established and prioritized for fiscal year 2013–fiscal year 2017 and we will continue to ensure that full compliance with DOD force protection standards are maintained during the full Master Plan implementation by the Navy.

C–17 ACQUISITION PROGRAM

14. Senator MCCAIN. General McNabb, over the last 4 years, the Senate Appropriations Committee added 44 C–17s that we neither needed nor could afford, at a total cost of over $14 billion above DOD's requests—in the form of earmarks. In proposing to cancel the C–17 Globemaster program, Secretary Gates and General Schwartz argued against a congressional earmark last year that intended to buy 10 more of those aircraft for more than $2.5 billion. Secretary Gates stated that the cost of buying and operating those additional aircraft would "invariably result in a reduction in critical warfighting capability somewhere else in the defense program." Do you fully support Secretary Gates' position to terminate the C–17 program?

General MCNABB. Yes. The Mobility Capabilities and Requirements Study 2016 (MCRS–16) analysis identified a peak demand of 32.7 million ton miles/day as sufficient capacity for the Air Force's strategic airlift aircraft inventory. Our planned strategic airlift fleet of approximately 300 aircraft (the current program consists of 222 C–17s, 52 C–5Ms, and 27 C–5As) will achieve this capacity without the addition of more C–17s. In my view, DOD has more pressing modernization requirements, including the new KC–46A tanker, and the current budget reflects those priorities.

15. Senator MCCAIN. General McNabb, what effect would the purchase of yet more C–17s, as some Members might insist on again this year, have on our ability to field critical warfighting capabilities?

General MCNABB. The MCRS–16 analysis identified a peak demand of 32.7 million ton miles/day as sufficient capacity for the Air Force's strategic airlift aircraft inventory. Our planned strategic airlift fleet of approximately 300 aircraft (the current program consists of 222 C–17s, 52 C–5Ms, and 27 C–5As) will achieve this capacity without the addition of more C–17s. In my view, DOD has more pressing modernization requirements, including the new KC–46A tanker, and the current budget reflects those priorities.

16. Senator MCCAIN. General McNabb, isn't it true that the number of C–17s on order, together with the existing fleet of C–5 aircraft, is more than sufficient to meet DOD's mobility needs, even under the most stressing scenarios?

General MCNABB. Yes. The MCRS–16 analysis identified a peak demand of 32.7 million ton miles/day as sufficient capacity for the Air Force's strategic airlift aircraft inventory. Our planned strategic airlift fleet of approximately 300 aircraft (the current program consists of 222 C–17s, 52 C–5Ms, and 27 C–5As) will achieve this capacity without the addition of more C–17s.

CONGRESSIONAL MANDATE FOR LARGE-SIZED CARGO AIRCRAFT

17. Senator MCCAIN. General McNabb, what are your views on the administration's proposal to repeal the statutory requirement imposed by Congress for the Air Force to maintain a large-sized cargo aircraft inventory of 316 aircraft?

General MCNABB. I agree with the administration's proposal. The 316 strategic airlift aircraft requirement was originally established before the MCRS–16 determined the strategic airlift requirement to be 32.7 million ton-miles per day. Our analysis confirms we can meet this requirement with approximately 300 strategic airlift aircraft (current program consists of 222 C–17s, 52 C–5Ms, and 27 C–5As). This fleet is more modern and capable than the one originally anticipated when the target of 316 aircraft was initially established. Also, the new tanker will provide an increased buffer to our airlift requirements because of the airlift capabilities it will bring to the table in addition to its air refueling role.

SUPPLY ROUTES INTO AFGHANISTAN

18. Senator MCCAIN. General McNabb, please tell me about your efforts to support the Northern Distribution Network (NDN) in the region. Is there anything that Congress can do to help you as the combatant commander?

General MCNABB. Congress can assist DOD's efforts to obtain further NDN enhancements, such as approval to transport unarmed armored vehicles and permissions for two-way transit through Central Asia. To do this, we must deepen our bilateral relationships with Central Asian governments through a balanced approach to strategic priorities in the region. Specifically, U.S. legislation enacted in 2007 continues to restrict foreign assistance to Uzbekistan. No Foreign Military Financing (FMF), International Military Education and Training (IMET), 1206, 1207, or other assistance, with the exception of assistance to improve humanitarian conditions and advance human rights, can be provided to Uzbekistan until certain human rights benchmarks are met. Current and proposed legislation also restrict our bilateral relationship with Azerbaijan, a critical node in the NDN. Relief on these restrictions will help support our overall strategic imperatives for enhanced cooperation.

19. Senator MCCAIN. General McNabb, how did TRANSCOM respond when Pakistan closed the border to U.S. resupply efforts to our forces in Afghanistan and what effect did the closure have?

General MCNABB. TRANSCOM and the U.S. Central Command (CENTCOM) responded to the Pakistan border closing by developing additional options to move and sustain our forces in Afghanistan. The plan includes increased CONUS direct support flights, shifting as much cargo as possible to the NDN, working with the interagency to get expanded transit authorities on the NDN, and establishing additional multi-modal operations at Southwest Asia locations. The Pakistan border closures caused minimal delays, with no significant impact due to the short duration. A longer loss of the PAKGLOC would require significant adjustments, but TRANSCOM is postured to sustain ongoing combat operations, continue rotations of personnel, and provide uninterrupted delivery of critical/sensitive unit equipment requirements.

MODERNIZING C–5 CARGO AIRCRAFT VS. BUYING MORE C–17S

20. Senator MCCAIN. General McNabb, we have heard positive things regarding the C–5 Modernization Program (which is comprised of both an avionics modernization and a reengining program). Please provide an update on the C–5 modernization program and how well those jets are performing.

General MCNABB. We have four C–5As left to be modified with the Avionics Modernization Program (AMP). The AMP modification replaces unsupportable flight instruments and all-weather flight control system components. It installs new communications, navigation, surveillance air traffic management systems, as well as Secretary of Defense-mandated safety equipment for terrain awareness and warning and traffic alert and collision avoidance. AMP also provides the digital architecture required for the C–5 Reliability Enhancement and Reengining Program (RERP). We project AMP will complete on schedule by first quarter of calendar year 2012.

In addition to being a reengining program, RERP also replaces 69 other unreliable aircraft components that will lead to more efficient and effective C–5 capabilities. Currently we have five RERP modified aircraft (C–5Ms) in the inventory with a scheduled fleet (52 C–5Ms) completion date of third quarter fiscal year 2016.

C–5Ms successfully completed Operational Test and Evaluation January 5, 2010, and have performed very well in supporting two Afghan Surge Operations, both times exceeding our 75 percent wartime mission capable rate goal. Most recently, C–5Ms supported airlift operations in support of Operation Odyssey Dawn in Libya. The C–5M demonstrates much greater payload and range capability than the legacy C–5s. It can carry 120,000 pounds of cargo about 5,000 miles; while our legacy C–5Bs have to trade fuel for cargo to accomplish that same routing. Additionally, C–5Ms save fuel and time in getting our forces to destination. On average, a C–5M will save over 10 percent fuel on support missions greater than 5 hours. Because of its range, C–5Ms can over-fly normal legacy C–5 enroute stops: therefore, each C–5M mission (out and back) has the potential to save up to 8 hours of flight time. These capabilities were demonstrated in OT&E, Afghan surges in June 2010 and February 2011, and on Libya support airlift missions.

With our modernization programs proceeding on schedule and the very positive results we are seeing in their performance, we are confident that we will reach our fleet goal of a consistent wartime 75 percent MCR by fiscal year 2015, as projected.

21. Senator MCCAIN. General McNabb, do you believe that we have enough large-sized cargo aircraft?

General MCNABB. Yes. The current strategic airlift fleet program (222 C–17s, 52 C–5Ms, and 27 C–5As) provides sufficient strategic airlift capacity to meet MCRS–16 identified capacity of 32.7 million ton miles/day.

22. Senator MCCAIN. General McNabb, does the Air Force have a need for additional C–17s?

General MCNABB. No. The MCRS–16 analysis identified a peak demand of 32.7 million ton miles/day as sufficient capacity for the Air Force's strategic airlift aircraft inventory. Our planned strategic airlift fleet of approximately 300 aircraft (the current program consists of 222 C–17s, 52 C–5Ms, and 27 C–5As) will achieve this capacity without the addition of more C–17s.

SENIOR LEADERSHIP IN-TRANSIT COMFORT CAPSULES

23. Senator MCCAIN. General McNabb, the Senior Leadership In-Transit Comfort Capsule (SLICC) has been described as a transportable "office in the sky" for VIPs, generals, and flag officers with a separate bedroom, lavatory, and mirrors. What precisely is the nature of the requirement that supports this program?

General MCNABB. Sir, let me begin by providing you a more accurate description of the SLICC. The SLICC is essentially two large boxes (a conference capsule and a resting capsule). The conference capsule can seat up to five people. The berthing capsule has two single bunk beds. The conference capsule measures approximately $10' \times 8' \times 8'$. The berthing capsule measures $6.5' \times 8' \times 8'$. These capsules are small enough to fit on C–130 aircraft. These capsules can travel together or separately depending on the requirements of the senior leader. A lavatory is not included in either capsule.

The requirement for SLICCs is documented in an Air Mobility Command Capabilities Based Assessment (CBA) performed in 2010 on DV Roll-On/Roll-Off requirements. Based on analysis of mission data, the CBA recommended purchasing four SLICCs in addition to the one SLICC currently operational to bring the total number of SLICCs to five.

The need for the SLICC capability originates with the need to provide Senior Leaders an office-like setting to conduct day-to-day operations while in-transit on our cargo aircraft, typically C–17 and C–130 aircraft. The SLICC provides the user with the ability to have sensitive conversations with staff in a controlled area. SLICC is environmentally controlled for sound and temperature and has sufficient workspace (table and seating for up to five personnel) to permit both Senior Leader and staff to continue performing their duties while on the aircraft. Additionally, the SLICC is wired to support selected external communications kits, allowing the senior leader to participate in teleconferences while enroute, and to continue to work in an office-like setting much like their own offices. The DOD has recognized the need for our Senior Leaders to stay connected during travel in order to maintain up-to-the-minute situational awareness and exercise control over forces under their command in DOD Directive 4500.56 and various joint requirements documents, including the SLC3S–A Initial Capabilities Document.

Finally, the SLICC enables us to take advantage of our current airlift system and effectively augment our Very Important Person Special Airlift Mission (VIPSAM) fleet when threat or capacity requires. C–17 and C–130 aircraft have more capable defensive systems than VIPSAM aircraft and are better equipped to counter the threat of hostile action. Arrival on a tactical aircraft is also very discreet, enabling the distinguished visitor to conduct his or her business while maintaining a low public profile. For these reasons, the SLICC is ideal for stationing at a forward, tactical location. SLICC has been stationed forward for the last 2 years in support of the ISAF Commander and both General Petraeus and General McChrystal have used SLICC on numerous missions. They have been very appreciative of the conferencing and situational awareness capabilities that SLICC gives them while allowing them to travel into higher threat or more tactical airfields.

24. Senator MCCAIN. General McNabb, what is the cost of these capsules?

General MCNABB. The contract for additional SLICC hasn't been awarded yet, but the estimated cost is $2.5 million per SLICC and each SLICC costs approximately $266,000 per year to operate and maintain.

25. Senator MCCAIN. General McNabb, how many capsules has the Air Force or TRANSCOM bought?

General MCNABB. The Air Force purchased one SLICC in November 2008 and will purchase two more in fiscal year 2012 with congressional approval of the fiscal year 2012 President's budget.

Our plan is to forward station these capsules overseas to reduce positioning and depositioning costs and augment our existing VIPSAM fleet without the requirement to acquire, man, and sustain additional aircraft.

26. Senator MCCAIN. General McNabb, in lean budget times—such as the times we are in—considering Secretary Gates' efficiency initiatives to cut waste and unnecessary spending within DOD, would you suggest that the extravagance of SLICCs may be something that should be cut from the defense budget?

General MCNABB. We don't view SLICC as a luxury or extravagance, but as a mission enabler. A Senior Leader travelling overseas should be able to make effective use of time working enroute, arriving at destination fully informed, situationally aware, and ready to work effectively. Providing a controlled, connected, secure workspace like SLICC is the way we achieve that goal on our cargo aircraft.

Senior Leader travel on tactical aircraft is necessary for several reasons. C–17 and C–130 aircraft have more capable defensive systems than the VIPSAM aircraft and are better equipped to counter the threat of hostile action. Arrival on a tactical aircraft is also very discreet, enabling the distinguished visitor to conduct his or her business while maintaining a low public profile. For these reasons, the SLICC is ideal for stationing at a forward, tactical location. SLICC has been stationed forward for the last 2 years in support of the ISAF Commander and both General Petraeus and General McChrystal have used SLICC on numerous missions. They both have been very appreciative of the conferencing and situational awareness capabilities that SLICC gives them while allowing them to travel into higher threat or more tactical airfields.

The SLICC program supports the Secretary's efficiency initiatives by reducing costly prepositioning and depositioning missions in support of Senior Leader travel in theater. Stationing SLICCs at regional airlift hubs in the theater reduces operating costs by enabling Senior Leaders to use available theater assets and regularly scheduled cargo airlift already flying in theater. Air Mobility Command conducted a SLICC's business case and concluded this program will reduce operating costs substantially. The business case estimates this strategy will save approximately $1.5 million annually in positioning costs in the PACOM theater alone, meaning that payback time for a SLICC could be less than 2 years after acquisition.

QUESTIONS SUBMITTED BY SENATOR JAMES M. INHOFE

DELETION OF SUBPART S IN THE FEDERAL AVIATION ADMINISTRATION BILL

27. Senator INHOFE. General McNabb, the supplemental carriers forecast $3.7 billion in additional costs over 10 years due to Deletion of Subpart S in the Federal Aviation Administration (FAA) Bill and a recent Air Mobility Command-sponsored Air Force Institute of Technology (AFIT) study shows that a very large percentage of segments would be considered completely infeasible if the regulation proceeded. The AFIT study indicates a projected requirement for thousands of DOD flights each year for which carriers would need exemptions and exceptions through Fatigue Risk Management Systems. Four percent of the 2,264 missions studied were infeasible under current rules with current rest facilities. It is believed that around 40 to 50 percent of the missions would be infeasible under new rules, given rest facilities presently in the aircraft in the study. It is unrealistic to believe the FAA can handle this workload on a timely basis in view of anticipated demand by scheduled carriers for similar exemptions/exceptions, and projected reduced budgets. Undoubtedly these additional costs will be passed on to DOD and, in turn, American taxpayers. At a time when we are facing a shrinking defense budget, I do not believe the FAA should be considering new regulations that would unnecessarily drive up costs for carriers or DOD and inhibit DOD's ability to ferry much-needed troops and supplies around the world. What are your thoughts on the FAA's elimination of Subpart S and do you think it will negatively impact TRANSCOM operations?

General MCNABB. TRANSCOM is evaluating the impact the proposed Flightcrew Member Duty and Rest Requirements Notice of Proposed Rule Making (NPRM) may have on DOD transportation operations utilizing commercial passenger and cargo carriers. We are engaged with the FAA to refine our understanding of the proposed new rules and to clarify how the exception process and Fatigue Risk Management Systems will be employed.

We have shared with the FAA that our experience shows different operations involve different levels of risk. The FAA's goal of "one level of safety" and a proposed rule which attempts to achieve this through a "one-size-fits-all" approach seems at odds. Fatigue will affect everybody. However, there is a big difference flying four to six sorties in the United States versus flying a one-hop to the other side of the world. They both will fatigue the crews but will require different safety programs to mitigate.

Safety is always paramount. The operators can do a lot of things to enhance safety. They are looking at better operational risk management, better aircraft safety modifications, and better crew rest facilities on the airplane.

A critical concern is this rule's impact on the velocity to our strategic airlift system affecting our ability to close the force and support the American warfighter. Every added stop will add time to mission completion and increases the risk of an aircraft breaking at an intermediate location. Additionally, the shorter Flight Duty Periods (FDP) proposed will limit options for keeping missions on time when they encounter unanticipated delays. The reduced flexibility to adapt to mission delays and decrease in velocity will be detrimental to the overall flow of our international airlift system, impacting timely support to our forces operating around the world.

In addition to cost increases, this rule would also impede our congressional mandate to incentivize and take advantage of modern fuel efficient aircraft. The prescriptive limitations of the rule limit a carrier's ability to realize the full economic and competitive benefits provided by longer ranges, more fuel efficient engines, modern avionics, and safety features of modern long-range commercial aircraft.

Our goal is to find a set of mutually acceptable guidelines that not only mitigate the impact of crew fatigue, but also afford carriers the flexibility to implement safer aircrew processes. I believe there are better ways to improve safety in the segment of our enterprise, without sacrificing flexibility, velocity, or competiveness.

28. Senator INHOFE. General McNabb, what will be the alternative to higher carrier costs should the Deletion of Subpart S in the FAA Bill be implemented?

General MCNABB. Based on our commercial partners' feedback, TRANSCOM anticipates the proposed NPRM may impact transportation costs because reduced crew FDPs will require carriers to increase their use of augmented crews and/or add additional stops to trade out crews. The costs for the additional crew members or extra stops are allowable charges which can be passed back onto TRANSCOM. These additional costs will translate into increased rates charged to our service customers, which will in turn, impact taxpayer costs for DOD transportation.

Safety is always paramount and we must continue to strive to always enhance safety. That said, a critical concern is this rule's impact on the velocity to our strategic airlift system affecting our ability to close the force and support the American warfighter. Every added stop will add time to mission completion and increases the risk of an aircraft breaking at an intermediate location. Additionally, the shorter FDP proposed will limit options for keeping missions on time when they encounter unanticipated delays. The reduced flexibility to adapt to mission delays and decrease in velocity will be detrimental to the overall flow of our international airlift system, impacting timely support to our forces operating around the world. I believe there are better ways to improve safety in this segment of our enterprise, without sacrificing flexibility, velocity, or competitiveness.

Because of our strong reliance on the Civil Reserve Air Fleet (CRAF) program to augment our organic airlift fleet in times of war, there is no good alternative to covering any higher carrier costs that may result from the rule changes being considered by the FAA. We will continue to employ our U.S. flagged, commercial airline partners to perform DOD airlift in order to incentivize them to remain in the program so as to support our wartime requirements.

29. Senator INHOFE. General McNabb, will we find ourselves in a situation where we will be forced to look to supplemental carriers based overseas to do the work for us?

General MCNABB. Because of our strong reliance on the CRAF program to augment our organic airlift fleet in times of war, we will continue to employ our U.S. flagged, commercial airline partners to perform DOD airlift, in order to incentivize them to remain in the program, so as to support our wartime requirements. Assuming the new FAA rules do not impact U.S. commercial air carriers to the point where they would decide to pull out of the CRAF program, we should not find ourselves in a situation where we would be forced to look for additional overseas supplemental carriers to do the work for us. However, if the new rules make our carriers less internationally competitive and don't allow us to take maximum advan-

tage of modern aircraft, we may see a reduction of our long-range commercial U.S. fleet.

30. Senator INHOFE. General McNabb, will TRANSCOM support language in the NDAA for Fiscal Year 2012 carving out exceptions for carriers supporting military operations?

General MCNABB. TRANSCOM is engaged with the FAA to refine our understanding of the proposed new rules and to clarify how the exception process and Fatigue Risk Management Systems will be employed. Our goal is to find a set of mutually acceptable guidelines that not only mitigate the impact of crew fatigue, but also afford carriers the flexibility to implement safer aircrew processes. However, with only the draft rule set to go by at this time, maintaining the exemption for Subpart S would allow us some flexibility until all the implications of the new rule set are fully understood.

STATE PARTNERSHIP PROGRAM

31. Senator INHOFE. General Ham, the National Guard provides unique capacity-building capabilities in direct support of U.S. national security interests and objectives via its unique State Partnership Program (SPP). SPP specifically supports both combatant commanders' and U.S. ambassadors' strategic objectives by establishing sustainable relationships with critical partner nations around the world. Started back in the early 1990s as part of the U.S. European Command's (EUCOM) engagement plan with former Warsaw Pact nations, SPP has grown and is now engaged with 62 nations around the world, one of those areas is the continent of Africa which currently has only eight active partnership programs. Although the SPP has great potential, cumbersome statutory limits and unsteady funding streams have hamstrung positive efforts. Have you encountered issues adjudicating resources in the SPP?

General HAM. There are a number of critical security capacity requirements that our African partners need that the SPP cannot provide due to statutory limits—including disaster management, civil-military operations, law enforcement, fire-fighting, border control, coastal patrol, and many other relevant topics.

32. Senator INHOFE. General Ham, at your confirmation hearing I asked that you consider AFRICOM's role in SPP and provide feedback to this committee. Do you have any suggestions for improving SPP?

General HAM. The National Guard and AFRICOM need authorities that allow the SPP to have greater flexibility to engage in military-to-civilian activities. Right now, we both have extensive military-to-military authorities, but limited military-to-civilian authorities to conduct engagements such as emergency management and disaster response. The National Guard is ideally suited to facilitate and conduct military-to-civilian engagements but they no longer have the authorities to do so. In AFRICOM, we believe that the newly authorized 1050a authorities could provide the command the authority to expand our military-to-civilian engagements. My staff is reviewing this authority as it relates to expanding our military-to-civilian engagements on the continent. I am discussing with the Chief, National Guard Bureau options for adding more state partnerships, particularly in East Africa.

COMMANDER'S EMERGENCY RESPONSE PROGRAM AND COMBATANT COMMANDER'S INITIATIVE FUND

33. Senator INHOFE. General Ham, our military-to-military (1206), civilian-to-civilian (1207), small-scale special forces (1208), Commander's Emergency Response Program (CERP), and Combatant Commander's Initiative Fund (CCIF) proved to be vital resources in aiding developing countries in the professionalization of their militaries, fighting terrorism, and providing resources for emergency situations. A key to these programs has been that the engagements are worked by both DOS's and DOD's chiefs of mission and combatant commanders working together to increase the capabilities of our partner nations to provide for their own security, increasing stability in their region and around the globe. The worth of these programs was proven during the Egyptian uprising as the Egyptian military protected civilians and showed military professionalism: no looting, victimization, et cetera. Do you agree that the significant investment by DOD in Egypt through years of IMET, FMF, and Foreign Military Sales (FMS) paid dividends this year?

General HAM. Yes, I believe U.S. military support to the Egyptian military was one of many factors that shaped their behavior and actions during the uprising.

However, it is too soon to make a definitive judgment regarding how our programs and activities influence the decisions and motivations of the Egyptian military.

34. Senator INHOFE. General Ham, based on your prior experience, what is your opinion of these programs and their future on the continent of Africa?

General HAM. CCIF has demonstrated great value in the AFRICOM AOR. As one of the bridging funds that DOD can use for limited training of foreign forces, CCIF is tremendously useful for sustainment of capacity building activities during the period between Title 10 type military-to-military activities, and approval for longer term Foreign Military Funding/IMET programs. One major shortfall with CCIF is the limited amount of funds actually available for training ($5 million of $50 million).

The CERP does presently not apply to the AFRICOM AOR. I do think it would be beneficial to have some ability to respond rapidly to emerging initiatives of limited scale.

QUESTIONS SUBMITTED BY SENATOR JEFF SESSIONS

OPERATION UNIFIED PROTECTOR

35. Senator SESSIONS. General Ham, please provide the NATO chain of command for military operations in support of Operation Unified Protector, and AFRICOM's current role in support of Operation Unified Protector.

General HAM. [Deleted.]

TURKEY AND LIBYA

36. Senator SESSIONS. General Ham, a recent article in the Washington Times indicates that the Libyan rebels are placing blame on Turkey for a recent lull in NATO airstrikes. Turkish Prime Minister Arinc has acknowledged that Turkey has yet to designate which Libyan officials and entities with assets it will freeze, as required by the United Nations Security Council resolutions authorizing the allies' Libyan operation. Russia, the European Union, the United States, and Switzerland have published such assets freeze lists. Also, Mr. el-Gamaty, the Transitional Council official in Britain, said Libyan rebels have reliable information that Turkey is selling fuel to the Gadhafi regime. Please provide your assessment of the accuracy of the reports that Turkey is selling fuel to the Gadhafi regime as well as Turkey's compliance with United Nations Security Resolutions 1970 and 1973.

General HAM. [Deleted.]

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

OPERATION ODYSSEY DAWN

37. Senator CHAMBLISS. General Ham, I am interested in hearing your views on what Operation Odyssey Dawn and Operation Unified Protector have revealed about AFRICOM's current structure, organization, and assigned forces. For example, did AFRICOM's modified command structure and headquarters organization pose any challenges as AFRICOM began planning for military operations in Libya? If so, were any changes made?

General HAM. AFRICOM demonstrated that it is capable of responding, when the President directs, to a crisis within our AOR and simultaneously managing a full range of operations and activities. We rapidly responded to the unfolding Libya crisis by conducting operational assessments and crisis action planning, standing up a Joint Task Force and conducting combat operations, all while maintaining our steady focus on security cooperation with our African partners.

AFRICOM's modified staff structure did pose some challenges, so I recently directed the more formal adoption of a traditional J-code staff structure.

38. Senator CHAMBLISS. General Ham, does the Request for Forces (RFF) process present any challenges to the command in carrying out its mission?

General HAM. With no assigned forces, AFRICOM is heavily dependent on the RFF process to conduct activities in Africa. Although we were given considerable focus and RFF priorities for operations in Libya, other activities crucial to the protection of U.S. lives and interests in our AOR must compete for limited assets against other global priorities. We also routinely review available forces with EUCOM, CENTCOM, and U.S. Strategic Command to ensure appropriate relation-

ships can be predetermined and approved by the Secretary of Defense to minimize the RFF challenge.

39. Senator CHAMBLISS. General Ham, how have our partner nations in Africa responded to AFRICOM's role in the military operations in Libya? Specifically, how do you see the recent political developments in North Africa affecting AFRICOM's activities and relationships with the militaries in the sub-region?

General HAM. The African Union and some nations have publically opposed any foreign military intervention in Libya. Some nations have called for a ceasefire and negotiations while others have said that our actions contradict President Obama's statement that there should be African solutions for African problems. That said, our support of United Nations Security Council Resolution 1973 has not negatively impacted any of AFRICOM's military-to-military activities with African partner nations. AFRICOM has placed a high priority on building and maintaining African partnerships through sustained engagement, and we expect those relationships to continue.

40. Senator CHAMBLISS. General Ham, AFRICOM has limited assigned forces and relies on DOD for resources necessary to support its missions. On October 1, 2008, the 17th Air Force was established at Ramstein Air Base, Germany, as the U.S. Air Force component of AFRICOM. In this capacity, 17th Air Force is referred to as U.S. Air Forces Africa. I have heard rumors about the proposed dissolution of the 17th Air Force. Can you comment and how would any dissolution affect AFRICOM's capability to respond on short notice to a situation like Libya?

General HAM. The U.S. Air Force is planning on consolidating manpower by moving the authorities and responsibilities of AFRICOM's Air Force component, 17th Air Force, into U.S. Air Forces Europe. Additionally, 17th Air Force's operations center will be absorbed into EUCOM's Air Force component's (3AF) operations center. Both will fall under U.S. Air Forces Europe. Final details on the plan are still in work, but this is a similar arrangement as for U.S. Naval Forces Europe and U.S. Naval Forces Africa in Naples, Italy.

The dissolution should not have any effect on AFRICOM's capability to respond on short notice to contingency operations.

41. Senator CHAMBLISS. General Ham, have the Libyan operations revealed any resource gaps within the command?

General HAM. Operation Odyssey Dawn validated multiple gaps previously noted, particularly with respect to the lack of allocated resources to monitor potential threats to U.S. lives and interests and conduct required joint operations, particularly intelligence, surveillance, and reconnaissance assets as well as personnel recovery.

42. Senator CHAMBLISS. General Ham, does the command anticipate adding any additional units or forces?

General HAM. There is currently no intent to add additional forces to support NATO or Combined Joint Task Force Unified Protector; however, NATO can exercise a request for capabilities via the Joint Staff at any time to meet operational challenges.

COMBINED JOINT TASK FORCE-HORN OF AFRICA

43. Senator CHAMBLISS. General Ham, in your written statement you note that ... AFRICOM understand[s] and address[es] the continent using a regional framework and the five regions—East Africa, West Africa, Central Africa, North Africa, and Southern Africa—and these roughly correspond to the African Union's five primary Regional Economic Communities. A regional framework seems to imply a series of regional strategies, nested within a larger, continental planning framework, all working together to accomplish the command's stated objectives—building partner capacity and countering violent extremism. While Combined Joint Task Force-Horn of Africa (CJTF–HOA) does not directly engage terrorists, efforts to counter violent extremism nevertheless remain a significant focus for CJTF–HOA's activities. I would note that civil affairs projects represent around 60 percent of CJTF–HOA's activities. Would you describe the Task Force's strategy in East Africa as counterterrorism or civic action?

General HAM. CJTF–HOA supports U.S. counterterrorism objectives throughout the Horn of Africa and the Middle East. However, counterterrorism and civil-military operations are not mutually exclusive missions. Counterterrorism is imperative

to create the necessary security and space for economic development and good governance to grow. Civil-military operations lead to a more stable environment which counters the spread of extremism that supports terrorist networks.

44. Senator CHAMBLISS. General Ham, what is the primary purpose of the task force's civil affairs efforts in the region?

General HAM. CJTF–HOA's civil affairs operations support the task force's efforts to counter terrorism through activities that address economic or social stressors that are conducive for terrorist recruiting and sympathizers. They also enhance U.S. military access to partner nation facilities.

Civil affairs force disposition and engagement efforts are focused in and towards populations particularly vulnerable to extremist's affluence/influence and assist in enhancing the capacity and legitimacy of those population's civilian and military organizations. They also help partner nations develop their own civil affairs capabilities.

These operations are coordinated with and authorized by appropriate U.S. country teams and complement security capacity building efforts.

45. Senator CHAMBLISS. General Ham, how does CJTF–HOA's mission differ from the mission of the Joint Special Operations Task Force-Trans-Sahel?

General HAM. [Deleted.]

46. Senator CHAMBLISS. General Ham, in what ways are AFRICOM's approach to countering terrorism in Northwest Africa and in East Africa similar, and how do they differ?

General HAM. [Deleted.]

AFRICOM HEADQUARTERS

47. Senator CHAMBLISS. General Ham, the decision to establish the permanent headquarters location for AFRICOM has been delayed until early 2012 and in the interim, the headquarters has remained in Stuttgart, Germany. What are your thoughts about the ultimate, permanent location for the AFRICOM headquarters?

General HAM. The ultimate, permanent location must be able to support AFRICOM's ability to conduct its mission of building African security capacity, sustain long-term relationships with our African partners, support crisis response in Africa, and make best and most efficient use of our resources and taxpayers' dollars. Specific criteria will be developed by DOD as part of the study that is planned for completion in spring 2012.

48. Senator CHAMBLISS. General Ham, what are the advantages and disadvantages of locating the headquarters in Africa, in Europe, or at a separate, U.S. location similar to U.S. Southern Command and CENTCOM?

General HAM. From my perspective, there are some advantages and disadvantages that I can address broadly.

Locating the command in Africa may help in terms of relationship building, but it would be very expensive and time consuming to build the needed facilities on the continent. Additionally, the commercial transportation infrastructure in Africa is not sufficiently robust to allow us to travel around the continent as readily as we need. In many cases, travel from one point to another in Africa necessitates routing through Europe.

Being in Europe places us within similar time zones as many African nations which helps us in maintaining relationships. Our current headquarters is close to several major European transportation hubs that facilitate our ability to travel to and from the continent. Being proximate to our EUCOM, European Union, and NATO counterparts has been helpful in the conduct of operations in Libya and elsewhere across the continent.

JOINT SURVEILLANCE TARGET ATTACK RADAR SYSTEM

49. Senator CHAMBLISS. General Ham, press reports have highlighted the Joint Surveillance Target Attack Radar System (JSTARS) use in the AFRICOM theater to support current/ongoing U.S./coalition operations over Libya. JSTARS battle management and very wide area surveillance capabilities make it key for air operations as the airborne forward air controller to develop, detect, and help identify targets on the ground. JSTARS can monitor movement over land and water of 20,000+ square miles from 200 miles away, detecting tanks, trucks, ships, and individuals

walking. As you assessed your intelligence, surveillance, and reconnaissance requirements and the various systems available to you to fulfill these requirements for operations over Libya, how critical was JSTARS? Specifically, how has the wide area surveillance, targeting, and command and control flexibility of this weapons system contributed to your ongoing operation?

General HAM. [Deleted.]

50. Senator CHAMBLISS. General Ham, if more JSTARS aircraft were available in your theater, could our warfighters and tactical intelligence units benefit from its battle management, wide area surveillance, and target attack capability?

General HAM. The current allocation of JSTARS platforms supporting AFRICOM is adequate to support the command's ongoing missions. We continually assess our intelligence collection posture based on enduring and emergent requirements and have found that JSTARS capabilities have been and remain a useful platform for the command.

51. Senator CHAMBLISS. General McNabb, I understand there are now five operational C–5M Super Galaxies in service and the Air Force is using these assets to support combat unit moves to locations in Afghanistan. I have heard good things regarding the performance of the C–5M—in fact, I've heard it described as a game changer. I would be interested in your thoughts on this new aircraft—in your words, how well are the C–5Ms performing and are they meeting expectations set for the C–5 Reliability Enhancement and Re-engining Program?

General MCNABB. As of May 1, 2011, we have five operational C–5Ms. Of those, four are performing Air Force missions and the fifth is currently in scheduled maintenance and should be available for missions as early as May 23, 2011. The C–5Ms most recent accomplishments are actually in support of operations in Libya, where we used all four models of C–5s (models A, B, C, and M) to fly 118 sorties, delivering 499 passengers, and 1,444 short tons of cargo. We had all four available C–5M Super Galaxies involved, delivering 38 percent more cargo for every hour flown than the other C–5 models. This is a significant savings in time and fuel, so yes, the C–5Ms are definitely meeting our high expectations, and their operational capabilities and significantly higher reliability are allowing us to use the C–5 fleet in new ways. During the earlier Rota NAS surge operation the C–5M provided 59 percent of flown sorties and moved 59 percent of the cargo with an 88.7 percent mission capable rate. At this time, I am confident that we will reach our goal of a wartime 75 percent MCR by fiscal year 2015 as projected.

52. Senator CHAMBLISS. General McNabb, the United States has been relying on Russian built IL–76 and AN–124 transport aircraft operated by international commercial cargo operators to move cargo to support our troops. These operations include moving cargo within CENTCOM, transporting Mine Resistant Ambush Protected (MRAP) vehicles and other equipment from the United States, and most recently backfilling C–17 CENTCOM missions when those C–17s were used to support the humanitarian relief effort in Haiti, Chile, and other countries. In fact, I understand that Air Mobility Command spent $2 billion of U.S. taxpayers' dollars to lease foreign aircraft between fiscal years 2004 and 2010. Recently, DOD used the AN–124 heavily to deploy MRAPs to Iraq and Afghanistan because the U.S. strategic airlift fleet was involved in other taskings such as earthquake relief efforts in Haiti and Chile. The use of IL–76 and AN–124 is a unique solution to relieve the pressure on our strategic airlift fleet when it is supporting other contingencies. However, Russia and many of its old satellite nations seldom have policies that align with U.S. foreign policies and national security objectives, and it would be a mistake for the United States to count on these aircraft, particularly in an emergency or in a situation where we're taking action that some countries don't support. With this in mind, I question DOD's desire for Congress to repeal the requirement for DOD to retain 316 strategic airlift aircraft. It seems to me that, while we're relying on the Russians to make ends meet in the strategic airlift arena, that we shouldn't be downsizing our own force. Could you comment on this issue?

General MCNABB. The MCRS–16 analysis identified a peak demand of 32.7 million ton miles/day as sufficient capacity for the Air Force's strategic airlift aircraft inventory. Our planned strategic airlift fleet of approximately 300 aircraft (the current program consists of 222 C–17s, 52 C–5Ms, and 27 C–5As) will achieve this capacity.

There is a distinction between what resources we use for our planned wartime capability and what we use in current operations. Our planned wartime capability does not rely upon any foreign source of airlift. However, when not operating at full wartime capability and utilization rates, without the Guard and Reserves mobilized

and CRAF activated, it makes good business sense to use commercial contracted airlift via our CRAF carriers and their networks. We are always looking to provide the best value, given all our requirements. Periodic use of commercial aircraft, to include B–747, IL–76s, and AN–124s, allow us do so, while providing the additional benefit of freeing up our military aircraft to handle missions for which they are better equipped. Accommodating these short-term surges is more cost-effective to do with use of commercial assets than maintaining additional force structure that is not required full time.

53. Senator CHAMBLISS. General McNabb, is relying on foreign airlift capacity the right option to choose for guaranteed reliable air movement of America's military might and to support U.S. foreign policy?

General MCNABB. There is a distinction between what resources we use for our planned wartime capability and what we use in current operations. Our planned wartime capability does not rely upon any foreign source of airlift. However, when not operating at full wartime capacity and utilization rates (as in current operations today without the Guard and Reserves fully mobilized and CRAF activated) there are a few limited times when certain requirements slightly exceed our oversize/outsize cargo capability. Accommodating these short-term surges is more cost-effective to do with use of commercial assets than maintaining additional force structure that is not required full time.

54. Senator CHAMBLISS. General McNabb, what impact have foreign carriers had on operations security and other security concerns, especially considering they do not have access to secure communications systems and networks?

General MCNABB. A foreign carrier's lack of secure communications systems does not seriously hamper security. The great majority of all airlift missions, military and commercial, take place entirely within an unclassified environment, including identification of the mission requirement, contractual mission assignment, flight following, and the use of unclassified flight plans within the International Civil Aviation Organization flight regime. Foreign carriers are not used for sensitive missions or to carry sensitive or classified cargo.

55. Senator CHAMBLISS. General McNabb, what are the potential threats of allowing foreign aircraft onto U.S. bases and facilities, and how do you mitigate that risk?

General MCNABB. TRANSCOM has instituted a very aggressive safety and audit oversight program as part of our Theater Express and Worldwide Express contracts in the CENTCOM AOR. We require our CRAF prime contractors to screen all aspects of their subcontractors, from hiring practices to flight and maintenance operations, for both safety and security. Beyond this, we shared with our CRAF members certain other non-operational concerns we uncovered with other potential subcontractors, and have therefore attempted to prevent exposure of our operations to foreign air carriers which could reflect badly on our U.S. business practices or pose a safety risk. CENTCOM also has its own safety and security procedures in place to protect its installations from the potential risks posed by allowing access by commercial operators. TRANSCOM requires compliance by its contractors and subcontractors to CENTCOM security requirements.

56. Senator CHAMBLISS. General McNabb, what mitigation plan do you have should that foreign airlift source not be available in the future?

General MCNABB. The primary mitigation is that our wartime planning does not include any reliance on foreign sources of airlift. Instead, we rely upon mobilization of our Reserve and National Guard, flying at our wartime utilization rates and activation of our CRAF.

QUESTIONS SUBMITTED BY SENATOR KELLY AYOTTE

TERRORISM

57. Senator AYOTTE. General Ham, you state that the driving factors of terrorism in Africa are lack of good governance, education, lack of stability, security, and economic opportunity. It is difficult to find an area of greater instability, less education, and poorer governance than the Central African Republic (CAR), yet not many jihadists emanate from the CAR. What explains this fact?

General HAM. Many factors have so far reduced the likelihood of the CAR being a focus of jihadist activity. There is not a significant Muslim population, except in the remote northeast portion of the country. Most CAR citizens strongly identify

with local, traditional, ethnic, and tribal cultures. Additionally, the country does not have widespread access to internet technology or the transport networks which would support the flow of jihadist ideology into the country.

58. Senator AYOTTE. General Ham, what role do the Saudis and the Persian Gulf states play in Islamic radicalization in North and East Africa?

General HAM. [Deleted.]

59. Senator AYOTTE. General Ham, in responding to my question regarding the misalignment of AFRICOM's and DOS Bureau of African Affairs' borders, you said, "I'm not so sure that necessarily equal alignment is the best way ahead." If this is the case, why is there such discontinuity between DOS FMF spending, which is overwhelmingly focused on Near East states like Tunisia (pre-revolution), and AFRICOM priorities in sub-Saharan Africa. As Senator Graham pointed out, the primary AFRICOM tools in Africa are non-military, yet there appears to be a significant mismatch between AFRICOM's priorities and the priorities of DOS. Do the different boundaries exacerbate AFRICOM's efforts to direct U.S. Government funds in support of the command's priorities?

General HAM. My preference would be to increase FMF in Sub-Saharan Africa rather than to reduce funding for important engagements with friends and allies in North Africa. North Africa does benefit from its association with engagement in the neareast but we should consider the issues of sub-Sahara Africa separately. Sub-Sahara Africa FMF has doubled since the establishment of AFRICOM. This is a good start and we hope to build on that. However, we have also benefitted greatly from DOS programs that recognize the unique nature of our engagement on that continent. Programs such as the Trans-Sahara Counterterrorism Program and the Global Peace and Operations Initiative—with its associated Africa Contingency Operations Training and Assistance (ACOTA) program—have provided almost $90 million per year in support of key AFRICOM objectives. I would like to see additional FMF to sustain these and programs such as 1206, but because of these programs the balance between North Africa and Sub-Sahara Africa is somewhat more balanced than FMF figures alone may indicate.

The differing boundaries between AFRICOM and the respective DOS bureaus have not affected our efforts.

60. Senator AYOTTE. General Ham, with Senator Brown, I am cosponsoring the No Contracting with the Enemy Act of 2011. This legislation would allow the U.S. Government to more quickly cut off the flow of contracting funds when it is discovered that a contract benefits enemies of the United States. How much military/paramilitary training sponsored by the U.S. Government in Africa is being done by contractors?

General HAM. We should not be contracting in ways that benefit adversaries of the United States. The majority of the military/paramilitary training conducted by contractors is through the ACOTA program, led by the DOS. DOD sponsored training by contractors in Africa is intermittent and episodic and does not constitute a significant percentage of the AFRICOM effort.

61. Senator AYOTTE. General Ham, how much of this amount does the ACOTA program account for?

General HAM. DOS-led ACOTA training is entirely contractor executed, with the exception of ad hoc military mentor support from the AFRICOM components (U.S. Marine Forces Africa, Combined Joint Task Force-Horn of Africa, and U.S. Army Forces Africa). The ACOTA budget is approximately $50 million annually, with roughly 55 to 60 percent of that going towards contracted training. The rest is for equipment and peacekeeping training center improvements.

62. Senator AYOTTE. General Ham, are you confident that there is sufficient oversight of contracting associated ACOTA?

General HAM. To my knowledge, yes, however it should be noted that the ACOTA program is entirely contractor executed through DOS, whose acquisitions and legal personnel apply rigorous standards to all contracts executed through this mechanism. In planning and conducting activities related to ACOTA, we work closely with DOS to ensure our activities are synchronized and we sometimes lend assistance in policy oversight, subject matter expert assessments, and other military support.

CIVILIAN PARTNERSHIPS

63. Senator AYOTTE. General Ham, in your statement it is clear that the AFRICOM mission, which focuses heavily on long-term development and stability issues, requires your command to work closely with civilian interagency partners—often in a supporting role. What controlling grand strategic guidance do you have from the National Security Council or the White House that guides not only your activities in Africa—but the activities of your civilian partners as well?

General HAM. The National Security Strategy (NSS), the National Defense Strategy, the National Military Strategy, the Unified Command Plan, and the Guidance for the Employment of the Forces serve as foundational documents which guide the command's activities in Africa. In support of national level strategic guidance, DOD and Joint Staff directives, the AFRICOM's theater strategy (2011–2021) provides guidance for synchronizing command activities to improve the overall security and stability in Africa. The theater strategy is informed by the DOS and the U.S. Agency for International Development strategic plans, the priorities of other U.S. Government agencies active in Africa, and the respective priorities of African partner nations and regional organizations.

The NSS and the National Security Presidential Directive-50 are the two controlling grand strategic documents that guide both AFRICOM's and other U.S. Government agencies' partner activities in Africa.

64. Senator AYOTTE. General Ham, do you believe the NSS provides sufficiently clear and detailed guidance for the interagency effort in Africa?

General HAM. Yes, the NSS prescribes a whole-of-government approach to update, balance, and integrate all of the tools of American power and work with our allies and partners to achieve U.S. objectives. The National Military Strategy and the Global Employment of the Force further amplify the strategic guidance of the NSS.

AFRICOM can better achieve these objectives when it weaves interagency efforts in all command activities and leverages and synchronizes the capability of the U.S. Government, effectively ensuring alignment of resources with our NSS. Therefore, the command's strategy is heavily informed by, and carefully coordinated with, the embedded interagency staff and their parent agencies and departments, enabling the command to maintain its coordination with the other departments and agencies of the U.S. Government while continuing to enhance its capacity to defeat asymmetric threats, preserve access to the global commons, and strengthen partners.

AFRICOM HEADQUARTERS

65. Senator AYOTTE. General Ham, what process and criteria is DOD using to determine whether to move the AFRICOM headquarters?

General HAM. The process is underway to pursue a full study by DOD for delivery in spring 2012. Specific criteria to determine whether or not to move the headquarters are under development.

66. Senator AYOTTE. General Ham, is this process underway and what criteria would be used to determine the new AFRICOM headquarters location?

General HAM. The process is underway to pursue a full study by DOD for delivery in spring 2012. Specific criteria to compare different locations are under development.

[Whereupon, at 12:17 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, APRIL 12, 2011

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

U.S. PACIFIC COMMAND AND U.S. FORCES KOREA

The committee met, pursuant to notice, at 10:04 a.m. in room SD–106, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Reed, Akaka, Webb, Hagan, Begich, Manchin, Shaheen, Blumenthal, McCain, Brown, Portman, and Ayotte.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Jessica L. Kingston, research assistant; Gerald J. Leeling, counsel; Jason W. Maroney, counsel; and Russell L. Shaffer, counsel.

Minority staff members present: David M. Morriss, minority staff director; Christian D. Brose, professional staff member; Daniel A. Lerner, professional staff member; Michael J. Sistak, research assistant; and Diana G. Tabler, professional staff member.

Staff assistants present: Jennifer R. Knowles, Christine G. Lang, and Brian F. Sebold.

Committee members' assistants present: Christopher Griffin, assistant to Senator Lieberman; Carolyn Chuhta, assistant to Senator Reed; Nick Ikeda, assistant to Senator Akaka; Gordon Peterson, assistant to Senator Webb; Roger Pena, assistant to Senator Hagan; Lindsay Kavanaugh, assistant to Senator Begich; Joanne McLaughlin, assistant to Senator Manchin; Patrick Day and Chad Kreikemeier, assistants to Senator Shaheen; Jeremy Bratt, assistant to Senator Blumenthal; Lenwood Landrum, assistant to Senator Sessions; Clyde Taylor IV, assistant to Senator Chambliss; Charles Prosch, assistant to Senator Brown; Pam Thiessen, assistant to Senator Portman; and Brad Bowman, assistant to Senator Ayotte.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. Today we will receive testimony on the posture of U.S. forces in the Asia-Pacific re-

gion and hear the views and assessments of our senior U.S. commanders on the many issues and challenges in this important region.

On behalf of the committee, I first would like to welcome back Admiral Bob Willard, Commander of the U.S. Pacific Command (PACOM), and General Skip Sharp, Commander of the United Nations Command/Combined Forces Command and the U.S. Forces-Korea (USFK). The committee appreciates your years of faithful service, gentlemen, and the many, many sacrifices that you and your families make for our Nation. Likewise, we greatly appreciate the service of all of our men and women, military and civilian, who serve with you in your commands. Would you please convey to them our admiration, our appreciation for their selfless dedication.

General Sharp, I understand that your successor has been identified and that this will likely be your last hearing before this committee. I'd like to thank you specially for your service in this very important assignment and for the assistance that you've provided to the committee and to Congress as we've worked through the complexities associated with the security situation in Korea. We wish you and your family the very best in the future.

At the outset, on behalf of the full committee I want to express our continuing solidarity with and our support for the Japanese people as they recover from the devastation caused by the March earthquake and the tsunami. Japan is one of our strongest allies and partners, not only in the Asia-Pacific area, but worldwide. Since the disaster, the U.S. military has been working alongside the Japanese Self-Defense Force (JSDF) to render aid and assistance to the tens of thousands of victims and to help the Japanese people rebuild.

Admiral Willard and his extraordinary team have been leading the military efforts, and we're very interested in your update, Admiral, on the recovery operations and in your expectations of where the humanitarian assistance and disaster relief effort is headed from the standpoint of the U.S. military.

There are many other issues and challenges in the region that also command the committee's attention. This is an important hearing not only because of things that are happening in the region today, but also because of what certain regional trends may portend for the future, and we cannot afford to take the region's current stability for granted.

A significant number of the world's largest economies and democracies reside in the Asia-Pacific region, as do many of our most important allies and partners, and vital lines of commerce stream steadily and constantly and steadily throughout the region. Indeed, the importance of this region to the economic and global security can hardly be overstated.

Adding to the complexity is the dynamic change the region has undergone in just the last 50 years. Some countries in the region have experienced dramatic gains in terms of social progress and economic prosperity, while others have to deal with oppressive regimes, struggling economies, and the scourge of human abuses.

Our posture in the region has not changed much, however, during that same period. The 2010 report of the Quadrennial Defense Review states that the Department of Defense (DOD) needs to

"augment and adapt U.S. forward presence in the Pacific," and the national military strategy for 2011, which has been signed onto by Admiral Mullen in February of this year, articulates the need to "invest new attention and resources in Southeast and South Asia."

To this end, our military and civilian leadership in DOD is considering new arrangements with countries in the southern parts of the region, such as Australia, Singapore, and others, that might offer new opportunities, but that will also likely involve new and to this point largely undetermined U.S. commitments and costs. We'd be interested in hearing from our witnesses about what these initiatives might mean for U.S. force posture in the region and for future year defense budgets.

One ongoing realignment initiative in the Pacific involves the U.S. military on Okinawa and on Guam. The United States' alliance with Japan is longstanding and, as seen from the disaster response effort of the last month, is multifaceted. A perplexing aspect of the relationship in the past couple years, however, has been the realignment of the U.S. military on the island of Okinawa.

Implementation of the realignment roadmap agreement signed in 2006 as a result of the broader U.S.-Japan Defense Posture Review Initiative has bogged down over issues involving the establishment of a new Marine Corps airfield on Okinawa and over concerns on Guam regarding additional requirements to support the relocation of about 8,000 marines and their families from Okinawa to Guam.

This Okinawa-Guam realignment of U.S. forces represents an important strategic adjustment to our overall future posture in the Pacific. The current price tag of the Guam buildup associated with the realignment, however, tops $10 billion, the U.S. share of which is about 40 percent. While the roadmap agreement may have been workable at one time, subsequent delays and political, diplomatic, and fiscal realities continue to encumber progress and may increase costs significantly.

The details of the plans for Okinawa are many and complex, as are the details of the associated military buildup on Guam. That said, because these actions will affect the U.S. military's strategic positioning well into the future, it is important that these issues be discussed and resolved.

Likewise, on the Korean Peninsula the U.S. force posture is undergoing significant change over the next several years, and even as that change takes place, one thing that appears likely to remain the same on the peninsula is the belligerence and the unpredictability of the North Korean regime. While there are prospects for leadership transition in North Korea, its continued and unrelenting pursuit of a nuclear program with ballistic missile technology, and its recent history of deadly unprovoked military attacks on South Korea, there's little reason for optimism for a prompt resolution of the tensions on the peninsula.

In the meantime, our strategic alliance with the Republic of Korea (ROK) is only strengthened by North Korea's behavior. Against that backdrop, the United States is undergoing a significant force transformation and relocation in South Korea and is pursuing plans to grow the number of U.S. military families on the peninsula substantially by moving from 1-year unaccompanied assignments for U.S. troops to 2- and 3-year accompanied assign-

ments. The details of this plan, referred to as Tour Normalization, are still being worked out and the costs associated with it have yet to be built into the defense budget.

Another regional development that bears discussion is China's growth both economically and militarily. It is important to understand and anticipate the consequences of this growth on the regional dynamic. As China's influence and military grow, traditional alliances and partnerships in the region may come under pressure from a perception that the balance of power is shifting and certain countries in the region may find it necessary to grow their militaries as well.

Some experts even warn of the potential for an emerging arms race in the region as countries leery of China's intentions for its burgeoning military seek to shore up their own defenses. Such developments must be studied and understood if informed decision-making is to proceed in a thoughtful, effective way.

To that end, a robust, meaningful, and mutually beneficial military-to-military engagement with China remains a useful goal for the United States.

There are many other challenges in the vast Asia-Pacific region: preventing the proliferation of weapons of mass destruction, countering violent extremism, providing humanitarian assistance and disaster relief, and protecting critical sea lanes of communication.

Admiral and General, it's a pleasure to have you both back with us this morning. We look forward to your testimony on a whole range of challenging topics, and I turn it over to Senator McCain.

STATEMENT OF SENATOR JOHN MCCAIN

Senator MCCAIN. Well, thank you, Mr. Chairman. Let me join you in thanking our distinguished witnesses for their many years of dedicated service, and we join the chairman in extending our deep and abiding gratitude to the men and women in uniform that you lead every day. General Sharp, thank you especially for your many years of brave and dedicated service.

Much of our focus of late has been on the historic events in the Middle East and North Africa, and with good reason. That has not in any way diminished our concentration on the Asia-Pacific region, where a less tumultuous but no less transformational process of change continues to unfold. This massive region is increasingly at the center of U.S. military, diplomatic, and economic policy, and the growing role of the Asia-Pacific region in the global distribution of power will affect the future of the United States as perhaps no other trend in the world.

Amid these historic changes, our bilateral alliances remain the cornerstone of regional security and U.S. policy. Our relations with the ROK has never been better. We aim to encourage Korea's increasing emergence as not just a regional power, but a responsible global leader. We're working closely with the new government in Australia on a host of critical security issues and it is our indivisible bond with Japan that has driven the United States, especially our armed forces, to lead the world's effort to help our ally in their time of greatest need.

Our prayers are with the Japanese Government and people, especially all who have lost loved ones, and we're very concerned by

yesterday's decision by the Japanese Nuclear Safety Commission to reclassify the country's nuclear crisis as a level 7 emergency, on par with the Chernobyl disaster. We would welcome the witnesses' assessment of what this means for the safety and security of people in the exposed areas and beyond, including U.S. servicemembers participating in the relief effort.

In addition to our close cooperation and exercise with our Philippine and Thai allies, the United States is also transforming its military-to-military relations with a number of emerging partners, including Singapore, Indonesia, Vietnam, and India. Our strategic partnership with India in particular holds immense potential for shaping a geopolitical balance within and beyond the region that favors political and economic freedom.

In short, the United States is well positioned in the Asia-Pacific region, both in terms of our expanding partnerships as well as our enduring capabilities, to promote our national interests in the dynamic 21st century.

That's not to say that we and our friends and allies in the PACOM area of responsibility (AOR) don't face significant challenges. We certainly do, especially from the continued uncertainty surrounding China's military modernization and the lack of transparency regarding the ends to which China intends to devote the many sophisticated capabilities it is building. Of particular concern, in this context, is China's development of anti-access/area denial weapons, anti-satellite capabilities, a stealth combat aircraft, a growing arsenal of ballistic missiles, offensive cyber weapons, and now an aircraft carrier. Indeed, just last week the Chinese state news agency revealed that this carrier was nearly completed and would sail this year.

Our concern over China's military capabilities has only grown over the past year in light of a sustained pattern of actions that increase tensions in the region, from expansive claims of Chinese sovereignty in international waters to provocative confrontations at sea with neighboring countries, to threats made against Southeast Asian countries.

This past year also saw a worrying freeze in our bilateral military-to-military engagement with the People's Liberation Army (PLA). The recent visit by the Secretary of Defense to China suggests that our military dialogue is resuming, but we would welcome our witnesses' assessment of China's recent assertiveness. We'd also welcome their thoughts on whether the continued absence of a decision on the sale of F–16s to Taiwan serves U.S. and allied interests in East Asia.

A more immediate concern is the threat posed by the North Korean regime and the prospect of instability or even conflict on the Korean Peninsula. The all too familiar North Korean pattern of behavior, of increased aggression followed by attempted extortion for international assistance and diplomatic concessions, is being exacerbated at present by the regime's internal transition.

Over the past year, the North Korean regime has sunk a South Korean ship, killing 46 sailors; it's shelled South Korean territory, killing Korean marines and civilians, while wounding many others; and it recently revealed a sophisticated and previously unknown uranium enrichment facility. Thus far the United States and our

Korean allies have responded to these increasing and outrageous acts of aggression through a series of unprecedented military exercises, which also featured, I'm happy to say, the presence of JSDFs as observers.

In the event of another attack by the North Korean regime, I would be eager to hear from the witnesses whether South Korea can and should respond with similar restraint. These and other challenges will require further thinking about the U.S. military posture in the Asia-Pacific region. As the chairman pointed out, we currently have an agreement with the Government of Japan to relocate 8,000 U.S. marines and their families from Okinawa to Guam, as well as to close other U.S. bases on Okinawa, and to relocate these forces at Camp Schwab on the north side of Okinawa. These agreements will require the investment by both countries of at least $30 billion, at last estimate, to build new bases for U.S. forces on the two islands.

With the recent tragic events in Japan, combined with tougher budget pressures here in the United States, I have to wonder whether either country has the resources at this point to devote to this move. I welcome new ideas for diversifying and expanding the presence of U.S. forces in the region and I look forward to hearing our witnesses' thinking about what regional presence of U.S. forces would best serve our and our allies' interests.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator McCain.

Admiral Willard, I think we'll begin with you.

STATEMENT OF ADM ROBERT F. WILLARD, USN, COMMANDER, U.S. PACIFIC COMMAND

Admiral WILLARD. Thank you, Chairman Levin. In order to accommodate the committee's questions sooner, I'll keep my remarks brief and ask that my full statement be included for the record.

Chairman LEVIN. It will be made part of the record.

Admiral WILLARD. Chairman Levin, Senator McCain, thank you for this opportunity to appear before you to discuss PACOM and the Asia-Pacific region. I'd like to begin by recognizing my wife Donna, who's been at my side for 37 years. Her brother Mike Yelverton, a senior Defense Intelligence Agency executive, is also with us today. Donna's an outstanding ambassador for our Nation and a tireless advocate for the men and women of our military and their families. She recently accompanied me to Japan, where she met with Service spouses and then traveled to the tsunami-stricken region to visit a shelter for 1,200 displaced Japanese survivors.

On that note, I'd like to begin by offering our deepest sympathy to the people of Japan, who've been affected by an unprecedented confluence of earthquakes, tsunami, and consequent nuclear accidents. In the midst of tragedy, the people of northern Honshu have demonstrated remarkable courage and resolve. Their ability to endure, assist one another through hardship, clean up their communities, and recover their lives should be an inspiration to all of us.

The devastation that Donna and I observed from the 11 March natural disasters was staggering, and the significance of the continuing nuclear crisis adds a level of disaster response complexity and urgency that in my experience is without peer.

PACOM remains fully committed to supporting response efforts by the JSDFs. I established a joint support force in Japan whose mission includes humanitarian assistance and disaster relief, including support to the JSDF who are spearheading the Fukushima nuclear accident's response. At the same time, we're guarding the safety of U.S. Service personnel and their families, whether they're operating in direct support to the relief effort or carrying out their normal duties at their home bases.

A second PACOM joint task force planned and executed the voluntary departure of spouses and dependents and maintains follow-on departure plans should they be required.

The level of cooperation and collaboration between the service men and women of the United States and Japan has been remarkable and the job they're doing together is inspiring. Worthy of special recognition is General Oriki, Japan's Chief of Defense Force, for his exceptional leadership of nearly 100,000 Japanese servicemembers who've been engaged in this effort.

Our ability to quickly and effectively support their work is testimony to the maturity and strength of the U.S.-Japan alliance. No doubt Japan will emerge from this terrible combination of disasters a stronger nation. Our hopes and prayers continue to go out to the Japanese people.

Natural disasters are but one of the many challenges facing PACOM throughout the Asia-Pacific region. This vast region that covers half the Earth is unique both in its size, diversity, and importance to the future of every other nation in the world. Containing great populations, economies, and militaries, along with more than $5 trillion of seaborne commerce per year, this region has been and will continue to be of utmost importance to the United States.

PACOM's role is to oversee its security and to help keep the peace, both in our Nation's interests and in the interests of our five treaty allies and many regional partners. The security environment is never static. Rather, it's characterized by a dynamic range of 36 nations whose varying personalities and influence more or less affect the neighborhood. Each of our four sub-regions—Northeast Asia, Southeast Asia, South Asia, and Oceania—contain unique challenges and challengers that test our collective commitment to security and peace.

Yet, in the face of actors such as North Korea, transnational extremist organizations such as Lashkar-e-Taiba (LeT), Jemaah Islamiyah, and Abu Sayyaf Group, and uncertainties created by a rapidly expanding and assertive Chinese military, multilateral organizations such as Association of Southeast Asian Nations (ASEAN) and East Asian Summit, and the bonds between the United States, its allies, and partners, serve to moderate the challenges, deter the challengers, and provide forums for advancing the collective security of the Asia-Pacific region.

Overall, the prospects for continued peace, economic growth, and advancing security cooperation in the region remain promising, though we're repeatedly reminded that only through the United States' ability and willingness to underwrite that security through its continued presence, enduring extended deterrence, and protec-

tion of the global commons upon which the region's livelihood depends, will regional peace and security endure.

Every day our sailors, soldiers, airmen, marines, and civilians work to advance the security in the Asia-Pacific. Their success has been long enabled by this committee's sustained support. You've provided the service men and women of PACOM with the most technically advanced military system in the world and a quality of life worthy of the contributions of this All-Volunteer Force. On behalf of the more than 330,000 men and women of PACOM, thank you, and thank you for this opportunity to testify on our defense posture in this most vital region of the world.

I look forward to your questions.

[The prepared statement of Admiral Willard follows:]

PREPARED STATEMENT BY ADM ROBERT F. WILLARD, USN

INTRODUCTION

Chairman Levin, Senator McCain, and distinguished members of the committee, thank you for this opportunity to provide an update on U.S. Pacific Command (PACOM). Today is my second testimony as the Commander of PACOM. Since the 2010 hearings, much has happened in this increasingly important region. I have travelled throughout the Asia-Pacific visiting a dozen different countries—some multiple times—and gained valuable insight into the extensive contributions by our regional Allies and partners.

What follows is my assessment of the strategic environment and the role of PACOM forces assigned throughout the region. Included in this testimony is a discussion of the military construction (MILCON) programs that enable these forces to perform their mission effectively while sustaining the quality of life our service men and women deserve.

Strategic Environment in the Asia-Pacific

The PACOM Area of Responsibility (AOR) is vital to U.S. national interests. It spans half the Earth and is home to more than 3 billion people living in three dozen nations—five of which are allied with the United States and many more of which are important economic and security partners. The region contains the world's three largest economies, and almost one-third (over $1 trillion) of U.S. two-way trade in goods and services is with nations in the region. Moreover, much of the world's trade and energy that fuels the world economy moves on Asia's sea and air lines of communication.

The vastness of the region makes permanent and rotational U.S. force presence essential to enabling security and strategic deterrence throughout the region while protecting and defending the homeland. MILCON provides necessary facilities for new weapon systems, supports the Services' evolution to become more efficient and effective, offers warfighters and their families quality-of-life facilities while at home, and renovates existing facilities that are beyond their useful lives. Thus the MILCON projects in this testimony enhance the capabilities of PACOM forces that underpin security in this increasingly important and dynamic region.

While the region remains relatively secure and stable, the strategic environment also includes traditional and asymmetric challenges that drive the need for forward presence and the subsequent MILCON recommendations in this testimony. Sustaining the conditions that have underpinned unprecedented prosperity for over six decades remains challenging for a variety of reasons, including the following:

- The threat to the United States and its allies posed by North Korea's nuclear and missile capabilities, its proliferation of weapons of mass destruction and associated technologies, and its potential for instability
- Transnational violent extremist organizations (VEOs) undermine stability and threaten traditional Allies and emerging partners
- China's significant military modernization associated with its unclear intent
- Territorial disputes, and increasingly assertive actions to resolve them, present the potential for conflict and instability
- Increasingly persistent and sophisticated cyber threats that challenge unencumbered operations.

- Transnational criminal activity—to include piracy and trafficking in narcotics and persons—that rejects the rule of law and challenges international order
- Humanitarian crises such as pandemics and famines, as well as natural disasters such as tsunamis, earthquakes, and volcanoes
- Environmental degradation caused by poor resource management, the pillaging of natural resources, and disputes over resource sovereignty

Despite these many challenges, the region remains one of immense opportunity for peaceful growth, cooperation, and prosperity. Realizing such opportunity relies upon continued U.S. ability and willingness to underwrite security, extend deterrence, and protect the global commons upon which the region's livelihood depends. U.S. military strength, presence, and engagement provide the means to ensure security and peace and avoid confrontation and conflict. Secretary of Defense Gates emphasized this point in Singapore in June 2010: "The strength of the U.S. commitment and deterrent power will be expressed through the continued forward presence of substantial U.S. forces in the region."

PACOM thus embraces a theater strategy that leverages an evolving force posture. In concert with other government agencies, this posture is designed to simultaneously hedge against traditional and asymmetric challenges as well as advance alliance and partner-nation relationships. Extensive analyses clearly indicate a need to build an integrated posture framework that prioritizes adjustments by maximizing strength, balancing and biasing disposition, and sustaining readiness in all subregions (Northeast Asia, Southeast Asia, South Asia, and Oceania).

Regional Force Posture Assessment

Broadly, the U.S. military in the Asia-Pacific enjoys freedom of action, numerous dependable Allies and partners, and ready access to theater forces (e.g., Hawaii, Guam, and Japan) as well as to global and continental (especially west coast and Alaska garrisoned) forces. Other existing posture strengths include the collocation of command elements in Hawaii, pre-positioned stocks, maintenance support, and several distributed, forward sub-commands.

Current force posture throughout the Asia-Pacific remains heavily influenced by post-World War II- and Cold War-era basing and infrastructure. While maintaining access and capabilities in Northeast Asia remains essential, attaining better access to and support from Allied and partner nations in South and Southeast Asia is increasingly important. As Chairman of the Joint Chiefs of Staff Admiral Mullen stated in the 2011 National Military Strategy, "our presence and alliance commitments remain the key to preserving stability in Northeast Asia, [and] we must also invest new attention and resources in Southeast and South Asia."

PACOM strives to continuously optimize its force posture to meet emerging 21st century conventional and asymmetric threats. Nevertheless, forward forces remain potentially vulnerable to cyber attack on networks and logistics systems. Also, growing anti-access and area-denial challenges make joint capabilities and cooperation imperative; further development of the Air-Sea Battle concept will establish a better institutionalized method to address this threat.

Northeast Asia

Northeast Asia is a complex region with distinct challenges and a wealth of opportunities to positively influence the security environment. It contains many of the most significant economies and militaries in the Asia-Pacific and the world, including Japan, the Republic of Korea (ROK), China, and Russia. Strong U.S. presence, basing, access, and support in this important subregion serves to not only protect the homeland but also furthers U.S. interests regarding Allies, partners, extended deterrence, and treaty obligations.

Northeast Asia is home to North Korea, one of the most likely and persistent threats to the U.S. and its Allies. This Nation presents a multifaceted problem set for the U.S.-ROK Alliance, the region, and the international community. In addition to the conventional threat it poses to the ROK, its nuclear program, missile development, proliferation activities, provoke-bargain-cheat cycles, add to North Korea's capacity to disturb peace and stability throughout the region and globally.

Japan and the ROK are strong U.S. Allies that host U.S. forces, enjoy U.S. extended deterrence, and stand with the United States in containing North Korea's aggression and meeting other regional and global security challenges.

Japan

Rapid response in the Asia-Pacific region hinges on flexibility and forward basing of military forces. Despite some recent deliberation related to U.S. basing realignment in Japan, the military relationship and the overall Alliance remain strong. As

the Alliance enters its 51st year, it endures as relevant and as a key component of security in Northeast Asia and the larger Asia-Pacific. The United States and Japan continue to share similar security interests; therefore continued collaboration is vital to address challenges that include DPRK, humanitarian assistance and disaster relief (HA/DR), and support for freedom of action in the maritime domain as well as in space and cyberspace.

Defense Policy Review Initiative (DPRI). To transform and realign U.S. forces in Japan, the Government of Japan (GOJ) and the U.S. Government agreed in 2005 to implement changes that would allow PACOM forces to adapt to the changing regional and global security environment. The DPRI remains a key transformation goal of the U.S.-Japan Alliance and PACOM remains committed to its implementation. Major realignment elements include relocating two U.S. air bases from urbanized to rural areas, co-locating U.S. and Japanese command and control capabilities, deploying U.S. missile defense capabilities to Japan in conjunction with their own deployments, and improving operational coordination between U.S. and Japanese forces.

DPRI implementation, in large measure, is on track due to the significant contributions provided by the GOJ. The issue lacking progress and most familiar to members of Congress is the development of a Futenma Replacement Facility and the subsequent move of approximately 8,000 marines to Guam. While this lack of progress is disappointing, it does not undermine the ability of PACOM to maintain trained and ready forces in the region or to fulfill U.S. treaty obligations to Japan. Meanwhile, U.S. forces will continue to operate from the existing facility at Futenma Marine Corps Air Station while PACOM works with Department of Defense leadership and the Japanese to find a solution acceptable to both nations.

Guam. Like the Okinawa-based marines, Guam-based forces offer the response and deterrence required to enhance security to meet U.S. interests and fulfill commitments to regional U.S. Allies. Per the original agreement, U.S. MILCON funds will also contribute to the facility and infrastructure construction costs on Guam to support the relocating Marines and their dependents. In addition, investments will be needed to improve off-base Guam infrastructure, such as roads and bridges critical to the successful movement of materiel to the planned Marine Corps installation.

The National Defense Authorization Act for Fiscal Year 2011 did not include $320 million for three projects that were submitted in the President's budget that support the move of marines from Okinawa to Guam. The reasons for not funding the three priorities are explained in the Joint Explanatory Statement of the Committee on the Armed Services. Currently, the U.S. and Japanese Governments continue to reaffirm agreements and provide associated funding, including the second Japanese funding increment of $498 million to support the move of marines to Guam.

Also, recent approval of the Programmatic Agreement in the National Historic Preservation Act Section 106 process will enable DPRI-related construction to begin. Therefore, for fiscal year 2012 the Marines are resubmitting requests for North Ramp Utilities improvement and Finegayan Water Utilities & Site Preparation for a total of $156 million to support U.S. contribution to the 2006 Realignment Roadmap. The Finegayan project was reduced by $70 million to include only the water distribution infrastructure. The funding for these projects is critical to the success of the DPRI roadmap and an important signal of U.S. commitment to treaty obligations with Japan.

The Republic of Korea

The U.S.-ROK Alliance remains strong and is critical to U.S. strategy and military force posture in Northeast Asia and the region. This Alliance is also transforming to ensure it matures as an effective contributor to Peninsula and regional security.

Current initiatives are underpinned by the transition of military wartime operational control of the ROK to its own forces during peacetime and war by the end of 2015. Overall, this transformation effort is designed to improve responsiveness to an evolving peninsular, regional, and global security environment. To this end, the transformation must ensure U.S. forces, which are stationed on the Korean Peninsula to deter North Korea's aggression and respond to North Korea's hostility, are also accessible for regional and global employment. Further, the transformation will ultimately support the ROK military's continued development of extra-peninsular capabilities and capacities, and enable additional contributions like those seen recently in the Gulf of Aden combating piracy, providing peacekeeping forces to Haiti and Lebanon, and in Afghanistan leading a Provincial Reconstruction Team.

PACOM posture transformation in the ROK entails multiple efforts. Projects for the Land Partnership Plan and the Yongsan Relocation Plan include relocating U.S.

troops out of downtown Seoul, returning the majority of Yongsan Army Garrison to the ROK Government, and consolidating U.S. forces into two primary hubs south of Seoul. This effort sustains a strong U.S. combat presence on the Peninsula while reducing force presence in major urban centers like Seoul. Of note, this realignment is funded largely by the ROK, but MILCON funds are needed for some facility construction and infrastructure developments. While the Services are not submitting MILCON projects related to transformation in fiscal year 2012, additional, important projects will be submitted in future fiscal years.

Trilateral Cooperation

Trilateral security cooperation between the United States, ROK, and Japan also continues to improve. Building on longstanding efforts to enhance policy coordination and strategic dialogue among the three countries, Secretary Clinton met with Foreign Ministers Maehara and Kim here in Washington on December 6, 2010, to discuss ways to address enduring and emerging challenges. When the devastating earthquake and tsunami hit Japan, the ROK demonstrated unprecedented support by immediately dispatching rescue teams and sending emergency supplies. That said, there are outstanding political, military, and historical impediments to the Japan-ROK relationship that must be overcome. The shared values and common interests, as well as the financial resources, logistical capabilities, and planning potential to address complex contingencies throughout the region, make expanding this trilateral partnership a worthy effort. Encouraging steps are also apparent in the burgeoning trilateral relationships between the United States, Japan, and Australia, and between the United States, Japan, and India.

The People's Republic of China (PRC)

China's rise will largely define the Asia-Pacific environment in the 21st century. As noted in the 2010 National Security Strategy, "We welcome a China that takes on a responsible leadership role in working with the United States and the international community to advance priorities like economic recovery, confronting climate change, and nonproliferation. We will monitor China's military modernization program and prepare accordingly to ensure that U.S. interests and allies, regionally and globally, are not negatively affected. More broadly, we will encourage China to make choices that contribute to peace, security, and prosperity as its influence rises."

In support of this broader national strategy toward China, forward-postured PACOM forces are focused on deterrence and reassurance missions as they apply to China and U.S. allies and security partners in the region. In addition, PACOM's interactions with China assist the administration's broader goals by contributing to an overall military-to-military relationship that is healthy, stable, reliable and continuous. Such a relationship is important to avoid misperception, miscommunication, and miscalculation while it expands opportunities for cooperation where our security interests overlap. However, our military relationship with China continues to suffer from an on-again/off-again cycle of interactions which limits its ability to accomplish the above tasks. China suspended bilateral military relations following our arms sales to Taiwan in January 2010 and restarted them in fall 2010. We look forward to continuing the progress made in recent months which includes Secretary Gates' successful visit in January of this year.

China's Military Modernization Program. Beginning in the mid-1990s, China's peacetime military modernization program has progressed at a rapid rate. While force modernization is understandable in light of China's growing regional and global roles and accompanying requirements, the scope and pace of its modernization without clarity on China's ultimate goals remains troubling. For example, China continues to accelerate its offensive air and missile developments without corresponding public clarification about how these forces will be utilized. Of particular concern is the expanding inventory of ballistic and cruise missiles (which include anti-ship capability) and the development of modern, fourth- and fifth-generation stealthy combat aircraft. In conjunction, China is pursuing counter-space and -cyber capabilities that can be used to not only disrupt U.S. military operations, but also to threaten the space- and cyber-based information infrastructure that enables international communications and commerce.

Absent clarification from China, its military modernization efforts hold significant implications for regional stability. The region is developing its own conclusions about why the People's Liberation Army (PLA) continues to expand its ability to project power outside China's borders, and to range both U.S. forces and U.S. Allies and partners in the region with new anti-access and area-denial weaponry. Of growing concern is China's maritime behavior. China's recent official statements and actions in what Beijing calls its .near seas. represent a direct challenge to accepted

interpretations of international law and established international norms. While China does not make legal claims to this entire body of water, it does seek to restrict or exclude foreign, in particular, U.S., military maritime and air activities in the "near seas"—an area that roughly corresponds to the maritime area from the Chinese mainland out to the "first island chain" (described, generally, as a line through Japan, Taiwan, Philippines, and Indonesia) and including the Bohai Gulf, Yellow Sea, East China Sea, and South China Sea. Chinese naval and maritime law enforcement vessels have been assertive in recent years in trying to advance China's territorial claims in the South China and East China Seas which has resulted U.S. partners and allies in East Asia seeking additional support and reassurance to balance and curb the Chinese behavior. Many of China's maritime policy statements and claims stand in contrast to the United Nations Convention on the Law of the Sea (UNCLOS). The United States has consistently sought the appropriate balance between the interests of countries in controlling activities off their coasts with the interests of all countries in protecting freedom of navigation. China has questioned whether a non-party may assert such rights under UNCLOS, a baseless argument but one that would be removed if the United States was a party to UNCLOS.

The current situation in the Taiwan Strait remains stable as tensions have declined in recent years; however, the Taiwan issue remains a challenge to long-term regional stability. China refuses to renounce the use of force to resolve the Taiwan question. As China's military modernization proceeds, the cross-Strait military balance continues to shift in the mainland's favor. U.S. policy in support of a peaceful resolution remains consistent and clear. We are committed to our one-China policy, based on the three U.S.-China communiquès and the Taiwan Relations Act. We do not support Taiwan independence, and would oppose unilateral changes, by either side, to the status quo.

Russia

Russia's Pacific armed forces have not re-emerged from their post-Cold War decline. Moscow is nonetheless attempting to reassert influence in the region through increased naval and strategic air force operations, cyberspace activities, and arms sales to the region's emerging and rising nations. That said, PACOM enjoys a relatively positive military-to-military relationship with Russia, especially between each country's Pacific Fleets.

Mongolia

Mongolia endures as a small but strong partner in Northeast Asia. It continues to demonstrate support for U.S. regional and global policy objectives—especially those linked to the Global Peacekeeping Operations Initiative and security operations in Afghanistan—while managing positive relations with neighbors China and Russia.

Northeast Asia Force Posture Assessment

Strategic deterrence in the PACOM AOR is concentrated in Northeast Asia where the great majority of U.S. force posture is based. Although the overall combined strength in this subregion is formidable, there remain areas of concern such as ballistic missile defense and regional contingency support. While both the United States and its Northeast Asian Allies and partners have invested in the technical capabilities required to mount effective defenses against ballistic missile attack, the broader missile defense of the region remains problematic, especially in response to a large-scale attack. Further, while Taiwan's military strength is currently sufficient to deter full-scale amphibious or air assault by China, Taiwan's ability to maintain that capability will hinge, in large measure, on whether Taiwan continuously invests in upgraded systems. Lastly, while U.S. military posture in the Asia-Pacific has traditionally focused on the sea, undersea, air, and land domains, the modern realities of warfare demand that it defend against challenges to operate freely in the space and cyberspace.

Southeast Asia

Southeast Asia is a diverse subregion, rich in natural resources, and strategically located at the crossroads of the Pacific and Indian Oceans. It is host to a mix of democratic and authoritarian governments, prosperity and poverty, disparate military capabilities, and significant human capital potential. Prospects for continued development, increased security, and regional integration are promising, but the subregion presents significant security challenges. China's increasing engagement in this subregion—which, in many cases, is aimed at supplanting U.S. influence—as well as its expansive claims to, and growing assertiveness in, the South China Sea are two notable challenges. Southeast Asia is also home to transnational challenges and threats that include violent extremism, piracy, refugee migrations, and

transnational crime such as narcotics and human trafficking. Additionally, this subregion is particularly susceptible to natural disasters such as typhoons, earthquakes, volcanic eruptions, floods, and tsunamis.

The myriad of challenges faced by U.S. Allies and partners in Southeast Asia converge with U.S. interests; therefore strengthening defense partnerships is important to regional security. To further military interoperability and build regional capacity to respond to these challenges, the establishment of foundational information, logistics, and technology exchange agreements with these Allies and partners is important.

In response to the growing threat posed by VEOs, PACOM supports improving the CT capabilities with security assistance programs, executed in partnership with the Department of State and embassy country teams, designed to build host-nation capacity and capability. Foreign Military Financing—the program for funding the acquisition of U.S. military materiel, services, and training that support regional stability goals—has been particularly important to supporting partners engaged in combating violent extremism, especially the Philippines and Indonesia. Additionally, International Military Education and Training funding has been very valuable to establishing the network of relationships that underpin cooperative success and access to leadership in Southeast Asia.

Philippines

The United States and the Philippines share democratic values, a long and unique history, and a desire to contribute to regional security. Underpinned by the 1951 Mutual Defense Treaty, the U.S.-Philippines Alliance remains important to U.S. strategy in the Asia-Pacific. A significant effort in the Philippines is conducted by Joint Special Operations Task Force-Philippines (JSOTF–P). This task force operates in support of the Armed Forces of the Philippines (AFP) against the VEO threat posed mainly by the Abu Sayyaf Group and Jemaah Islamaiya in Southern Mindanao and the Sulu Archipelago Region. The task force has enjoyed significant success advising, training, exercising with, and informing the AFP, and contributed to the killing or capture of a significant portion of VEO leadership, the denial of safe havens to extremists, and the enhancement of quality of life for local populations. PACOM engages in many other ways with the Philippines—to include the Joint Staff-sponsored Exercise Balikatan—to help shape the AFP into a force capable of responding to various natural disasters as well as border and self-defense (particularly important regarding maritime security and sea lines of communications).

Thailand

Thailand is an important Southeast Asian Ally and engagement partner, with whom PACOM intends to further strengthen and broaden the Alliance. The United States and Thailand have worked together to bolster regional stability and security through cooperation on humanitarian and disaster relief, peacekeeping training, and counter-proliferation. This past year, the United States and Thailand partnered to deploy two Thai naval vessels, with U.S. Navy personnel aboard, to join Combined Task Force-151 combating piracy off the Horn of Africa. The Royal Thai Army, working with the United States, also deployed a full battalion of peacekeepers to Darfur to assist with U.N. humanitarian relief operations. Our relationship has even broken new ground in the field of public health, where U.S. and Thai military medical professionals have worked to combat infectious diseases from malaria to HIV. Further, U.S. forces benefit from our mutually beneficial relationship with Thailand, which allows access and engagement in an important geo-strategic location. Further the broad access granted to U.S. Forces to logistical facilities, ports, airfields, and training areas is crucial to enabling regional force projection and contingency response. The premier Exercise Cobra Gold is a Thailand-hosted PACOM multilateral exercise that includes seven participating nations (United States, Thailand, Japan, South Korea, Singapore, Indonesia, and Malaysia) and observers from over 15 additional nations. Cobra Gold is just one of many military exercises that we co-host with the Thais, each of which bolsters unique capabilities within our forces and develops key areas of interoperability with our Thai allies and other partners.

Singapore

The U.S.-Singapore relationship has matured significantly in the past 6 years and contributes in many ways to enhanced regional security. In 2005, Singapore and the U.S. advanced the relationship with the signing the Strategic Framework Agreement that identifies the two nations as "Major Security Cooperation Partners." Singapore hosts transiting U.S. Navy ships and deployed personnel, works with U.S.

forces in Afghanistan, and plays a leading role in the multi-national, counter-piracy, Combined Task Force in the Gulf of Aden.

Indonesia

The relationship between PACOM and Indonesia—the world's fourth most populous nation, third largest democracy, and largest Muslim-majority country—continues to mature. Following a decade of political and economic reform, Indonesia has emerged as a vibrant democracy, increasingly confident about its leadership role in Southeast Asia and the developing world, particularly in disaster risk reduction, HA/DR, and peacekeeping operations. Indonesia, along with Japan, recently demonstrated its leadership role in building regional capacity for humanitarian assistance by co-hosting the Association of Southeast Asian Nations (ASEAN) Regional Forum Disaster Relief Exercise.

After years of limited engagement with the Indonesian Armed Forces, an increase in transparency and pace of institutional reforms have recently provided impetus to renew, advance, and broaden the U.S.-Indonesia military-to-military relationship. In recognition of Indonesia's pledges to protect human rights and advance military accountability, in July 2010, Secretary Gates noted that after a 12-year hiatus, the United States intends to begin a measured and gradual program of security cooperation activities with Indonesian Army Special Forces within the limits of U.S. law.

Malaysia, Vietnam, Cambodia, Laos, Brunei, and Timor-Leste

The United States has extensive interests across the rest of Southeast Asia, and PACOM seeks to continue maturing military relations with Malaysia, Vietnam, Cambodia, Brunei, and Timor-Leste. Malaysia maintains a strong leadership role in the region especially combating terrorism and enhancing maritime security. Military relations with Vietnam continue to grow in areas such as disaster management, conflict resolution, personnel recovery, medical capability, and trafficking in persons. Cambodia is emerging as a strong supporter of U.S. policy in the region, and activities with Laos, Brunei, and Timor-Leste have expanded over the past year.

Association of Southeast Asian Nations

Focused efforts by the President and Secretaries Clinton and Gates have set the conditions for increased security cooperation with ASEAN. Accordingly, PACOM now actively seeks opportunities to support ASEAN initiatives that complement developing coordinated, multilateral approaches to maintaining regional security. ASEAN and PACOM have several convergent interests that include humanitarian assistance/disaster relief, maritime security, terrorism, and peacekeeping. With an evolved scope and influence, ASEAN and its offshoots (ASEAN Regional Forum, ASEAN Defense Ministers Meeting Plus, and the East Asia Summit) offer a framework to guide regional efforts to secure the commons and underpin cooperation across governmental institutions.

Burma

Burma presents a number of challenges to regional security, including violence between Burmese military forces and various domestic ethnic armies which sparks significant, refugee flows into Thailand; a maritime border dispute with Bangladesh, narcotics and human trafficking, and the potential for rapid spread of pandemic disease. Of increasing concern is Burma's role in regional weapons proliferation, evidenced by increasing defense cooperation and procurement from the North Korea, in violation of several UNSCRs. In addition, Burma's government continues to rule without respect for democracy or basic human rights The U.S.-Burma military-to-military relationship remains suspended as a matter of U.S. policy and public law.

Engagement Programs

Two significant engagement programs PACOM employs are Pacific Partnership and Pacific Angel. They are designed to enhance regional stability by building partner-nation resiliency; focus on growing multilateral capacities and capabilities in the areas of consequence management, civic assistance, and HA/DR. In 2010, U.S. Naval Ship *Mercy,* with personnel from 10 nations, successfully accomplished this mission during a 5-month deployment to Vietnam, Cambodia, Timor-Leste, and Indonesia. The mission treated over 110,000 patients, conducted scores of community relations projects, and completed many engineering and infrastructure projects. In 2011 Pacific Partnership will return to Oceania aboard USS *Cleveland.* Pacific Angel, meanwhile, utilizing C–17 aircraft, cared for tens of thousands of patients and completed several medical and civic action projects in the Philippines, Vietnam, Bangladesh, and Sri Lanka.

Southeast Asia Force Posture Assessment

U.S. force posture in Southeast Asia is achieved almost entirely with deployed U.S. forces, which is a costly and inefficient way to achieve presence and conduct the requisite security and influence activities. Singapore, which allows a modest mix of U.S. Service capabilities, is the only exception in the region.

Expanding U.S. military presence in Southeast Asia is a mid- to long-term prospect. In general, the Philippines remains restrictive regarding U.S. military access, except for JSOTF–P CT support which operates at the invitation of the Philippine Government. Thailand has permitted consistent access to its military facilities for transient and exercise-related operations, but any additional force presence would require thorough discussions with our Thai allies.

South Asia

The South Asian subregion is dominated by India, an emerging U.S. strategic partner, and also includes Bangladesh, Maldives, Nepal, Sri Lanka, and Bhutan. While there are prospects for enduring peace and prosperity, this subregion is challenged by historical animosity between India and Pakistan, contested borders between India and China, and transnational threats that include terrorism, WMD proliferation, piracy, and narcotics trafficking. The subregion is also prone to a wide array of natural disasters and lacks the resources and capabilities to effectively respond. This is exacerbated by the absence of a strong multilateral security structure.

The encroachment of piracy emanating from Somalia into the PACOM AOR in South Asia is a growing concern. This issue poses a particular threat to the vast sea lines of communication that span the Indian Ocean. As a result of this expanding problem, PACOM seeks to partner with India to counter this threat.

India

In July 2010 at the Asia Society, Under Secretary of Defense for Policy Flournoy characterized the U.S.-India relationship as follows: "This bond is grounded in common democratic values and converging interests that make India and U.S. natural partners. The United States and India have an overarching shared interest in promoting global stability and security." Given the numerous areas where U.S. and Indian interests converge, plus many shared national values, a strong India-U.S. partnership is important to future South Asian security.

Cooperation is especially noteworthy in the areas of counterterrorism, humanitarian assistance and disaster relief, and maritime security. The recent removal of Indian defense- and space-related industries from the U.S. Entity List not only recognizes India's record of responsible stewardship of sensitive technologies but further enables bilateral cooperation in areas of mutual interests.

Nevertheless, India's historic leadership of the non-alignment movement and desire to maintain strategic autonomy somewhat constrain cooperation at a level PACOM desires. The U.S.-India relationship remains challenged by a degree of suspicion fueled by Cold War-influenced perceptions, complicated Indian political and bureaucratic processes, and the U.S.-Pakistan relationship.

Relations with both India and Pakistan are vital to U.S. national interests and cannot be addressed in isolation. To that end, the leadership and staffs of U.S. Central Command and PACOM continue to engage in order to ensure a coordinated strategic approach that best meets U.S. interests.

Maldives, Nepal, Bangladesh, and Sri Lanka

The United States has extensive interests throughout the rest of South Asia. PACOM is working to advance relations with Maldives, Nepal, Bangladesh, and Sri Lanka. Collectively, these countries are important collaborators with the United States for combating terrorism and transnational criminal activity. South Asia is susceptible to natural disasters, but these nations lack the national resources and capacity to respond and therefore require significant assistance from the international community to respond to such contingencies. Toward that end, PACOM is working with South Asian militaries to build capacity so that they may better address the challenges in their subregion.

PACOM is helping the Maldives address the growing threat from Somali piracy and transnational crime. In Nepal, PACOM's focus is humanitarian assistance and efforts to support the peaceful integration of members of the Maoist People's Liberation Army into the Nepalese security forces. Bangladesh continues to partner with the United States to enhance regional security, and PACOM has initiated multiple programs to improve Bangladesh's civil-military trust, transparency, and cooperation. Engagement with Sri Lanka is limited to humanitarian assistance until allegations of human rights abuses are resolved.

Violent Extremism

Violent extremism is among the most pervasive and urgent challenges in South Asia. VEOs are associated with a wide-range of activities, which include supporting insurgencies that seek political autonomy and fomenting conflict between nuclear-armed India and Pakistan as a means of spreading radical Islamic ideology. Consequently, PACOM continues to expand its relationships with host-nation militaries and CT agencies to increase regional capacities to counter this threat.

Responding to VEOs requires a comprehensive and cooperative CT strategy focused on developing CT capacity with India and other South Asian partners, particularly regarding the threat posed by Pakistan-based Lashkar-e-Tayyiba (LeT). LeT involvement in the November 2008 attacks on Mumbai, India, validates India's concerns regarding terrorist threats originating from outside India. Significantly, LeT deliberately targets westerners and specifically engages coalition forces in Afghanistan. PACOM is keenly aware of the threat posed by this terrorist organization and continues to develop a coordinated multi-national and U.S. interagency approach to address this global threat.

South Asia Force Posture Assessment

PACOM force posture in South Asia is relatively limited, even though this subregion is significant and faces various challenges. The only continuous U.S. force presence in the region is at Diego Garcia. These forces are primarily prepositioned ships used for rapid response but are not typically used for routine training or engagement. For the most part, U.S. military engagement in South Asia is achieved with transient and deployed forces and PACOM Augmentation Teams (PATs); however, plans are underway to expand these teams to assist host nations in their counterterrorism efforts.

Oceania

U.S. Ally Australia and, to a lesser extent New Zealand, are the most prominent forces in Oceania. The subregion's challenges are generally associated with numerous Pacific island countries spread across the South Pacific. In concert with other U.S. Government agencies, allies, and partners, PACOM seeks an Oceania subregion that cooperates and collaborates to solve regional and international security challenges, maintains capable security or defense forces that abide by international norms, and effectively manages resources. PACOM strives to maximize Maritime Domain Awareness and information sharing, assists with the development of responsive decisionmaking architectures, contributes to improved maritime interdiction capabilities, and cooperates to ensure the existence of, and adherence to, appropriate legal authorities.

Oceania's economies are largely reliant on fishing and other natural resources, and tourism. These Pacific island countries are also vulnerable to illegal activities such as illicit drug trade, human and weapons trafficking, smuggling of goods, illegal fishing, and other transnational crimes related to undergoverned spaces within the maritime domain. Subregion national capacity to conduct surveillance and police respective exclusive economic zones is uniformly limited.

A coordinated effort to assist with subregional challenges is the Oceania Maritime Security Initiative. Under this program, U.S. Navy vessels already transiting the region embark U.S. Coast Guard shipriders to support maritime domain awareness and information sharing between the Coast Guard and five Pacific island countries (Republic of the Marshall Islands, Federated States of Micronesia, Palau, Tonga, and Kiribati). PACOM and the Coast Guard are currently reviewing the possibility of embarking law enforcement representatives from these five Pacific island countries.

Natural disasters are frequent and challenge domestic and regional HA/DR capacities and require coordinated international response assistance. In that vein, the 2011 Pacific Partnership mission will deliver assistance to the people of the Micronesia, Tonga, Vanuatu, Papua New Guinea, and Timor-Leste.

Australia

The U.S.-Australia alliance, which marks its 60th anniversary this year, comprises the most significant partnership in the Oceania subregion, and indeed one of the most significant in the entire Asia-Pacific. Australia remains a resolute, capable Ally that is firmly committed to enhancing global and regional security—it is the largest non-NATO contributor of forces to the coalition efforts in Afghanistan—and to providing assistance throughout the Pacific. Australia is significant to the entire AOR; its stature throughout the region is expanding in multiple ways. An especially promising relationship is developing between Australia, Japan, and the United States, which will advance multilateral security efforts throughout the region.

Australia values advancing defense cooperation with the United States, particularly through training events and acquisition programs. This year, Talisman Sabre—a large-scale, biennial, combined-arms exercise that focuses on strengthening U.S.-Australia military-to-military capability—will occur with the participation of over 20,000 U.S. and Australian military personnel. U.S. and Australian militaries also collaborate extensively in areas such as information sharing; intelligence, surveillance, and reconnaissance; HA/DR; and most recently space and cyber security.

New Zealand

New Zealand is also a recognized leader in Oceania. Our two nations share many security concerns such as terrorism, maritime security, transnational crime, and proliferation of WMD. While New Zealand's nuclear policies preclude a formal resumption of our alliance, we have close defense cooperation and information sharing with New Zealand, and value New Zealand's contribution of its forces to security operations throughout the Asia-Pacific as well as Afghanistan. New Zealand remains active in security initiatives, from stabilization efforts in Timor-Leste and the Solomon Islands, to operations in Korea, Sudan, and throughout the Middle East. New Zealand has also contributed its multi-role maritime patrol vessel to regional, multilateral HA/DR operations. Additionally, the New Zealand Defense Force supports National Science Foundation efforts in Antarctica by serving as the primary staging area for the multinational Operation Deep Freeze.

Compact Nations

PACOM partners with three Compact Nations: the Federated States of Micronesia, The Republic of the Marshall Islands, and the Republic of Palau. U.S. obligations to these nations under the Compacts of Free Association are met through implementation of Homeland Defense planning and preparation. The Compacts provide these nations with critical economic assistance. In return, the U.S. gains strategically important access. Within this framework of authority and responsibility, the United States is entitled to significant access privileges in these nations and retains the right to deny access to the military forces of other nations.

Oceania Force Posture Assessment

Current U.S. military force posture in Oceania is limited, but it includes facilities in the Marshall Islands, joint facilities in Australia, and operations by occasional transiting or deployed forces. Due to the subregion's geography, U.S. force presence is largely limited to maritime forces and occasional HA/DR efforts. Australia is supportive of extensive visitation and engagement by U.S. forces and has recently indicated an interest in doing more to facilitate PACOM regional posture. The U.S. and Australia are considering forms of access, supply support, joint training, and rotational presence.

Exercise and Engagement Programs

In order to maintain ready forces and to plan, train, and exercise to accomplish the full range of military contingencies, PACOM requires annual congressional support for its Joint Training and Exercise Program (JTEP). This essential program is comprised of 18 major exercises and involves joint military forces, interagency activities, and 27 of 36 PACOM partner nations. JTEP is funded by the Combatant Command Exercise and Engagement Program Fund, more commonly known as CE2, which directly influences PACOM's ability to conduct directed and opportunity-based Joint training exercises and theater security engagement events in the Pacific region. Thus, congressional support for the CE2 program plays a vital role in maintaining security not only in the PACOM AOR, but in combatant commands worldwide. PACOM also supports improving and enabling realistic joint training through the Pacific Joint Training Strategy. The Joint Pacific Alaska Range Complex (JPARC) is used to conduct training and to support joint exercises and mission rehearsals.

A new interagency program is the Global Security Contingency Fund, which will provide an integrated State and Defense capacity-building tool for Allies and partners. By joining resources of both Departments, the United States can more effectively and efficiently align priorities and integrate planning to enhance U.S. Ally and partner capabilities.

Military Construction Sustainment

MILCON is another important enabler of ready forces in the Pacific. Because of the MILCON Subcommittee's support in the past, the PACOM MILCON program continues to meet transformation, operational readiness, and quality-of-life requirements. MILCON projects for readiness and quality of life are discussed below. The

two other significant MILCON programs—DPRI and ROK transformation—are included in the previous Japan and ROK sections, respectively.

Readiness

In addition to the MILCON required to implement transformation initiatives in the Pacific, PACOM Service components continue efforts to sustain readiness at their major installations (i.e., those facilities with a military-civilian population of more than 2,500 personnel). For fiscal year 2012, the Service components in the Pacific seek a total of $1.6 billion to sustain the readiness capabilities of their installations. The items included below are the significant MILCON requests for fiscal year 2012.

U.S. Army Pacific (USARPAC). USARPAC maintains 10 major installations throughout the Pacific, including those in Alaska, Hawaii, ROK, and Japan. MILCON funds will help ensure USARPAC soldiers are trained and equipped to enable full spectrum operations. Thus USARPAC seeks $297 million for fiscal year 2012 readiness-related MILCON programs, of which $114 million is requested for an aviation task force hangar at Fort Wainwright, AK. Joint Base Elmendorf-Richardson, AK, requires $78 million for phase two of an engineer brigade complex and for tactical vehicle parking. Wheeler Army Airfield in Hawaii requires $73 million to complete the first phase of a combat aviation brigade complex. Schofield Barracks in Hawaii requires a $32 million military vehicle wash facility.

U.S. Pacific Fleet (PACFLT). PACFLT manages five major naval facilities throughout the AOR and has operational forces at several installations on the West coast of the U.S. mainland. PACFLT installations provide vital forward presence for the world's largest fleet, including the homeport of the only forward-deployed aircraft carrier (in Japan). Readiness MILCON requirements total $229 million in fiscal year 2012. Two naval bases in Washington State require $160 million in support of the strategic weapons facility. California's requirement totals $77 million at the naval bases in Coronado and Ventura County for an aircraft maintenance facility and aircrew training facility, respectively. Finally, a $10 million electrical upgrade and a $7 million electronics shop conversion in Hawaii are essential for PACFLT's readiness requirements in fiscal year 2012.

U.S. Pacific Air Forces (PACAF). Nine major PACAF installations are located in the region, stretching from Alaska through Hawaii and Guam to Japan and Korea. This web of air bases provides PACOM integrated expeditionary Air Force capabilities to conduct their many peacetime and wartime missions. The Air Force continues its plan to make Guam the hub for strike and refueling assets in the Asia-Pacific and requests $212 million for fiscal year 2012. Guam has also been building projects to establish the Pacific Regional Training Center and seeks $29 million to continue this effort.

U.S. Marine Forces Pacific (MARFORPAC). MARFORPAC manages nine major installations located in Arizona, California, Hawaii, and Japan. MARFORPAC installations in the Asia-Pacific provide the launching point for forward deployed combat ready Marine forces both ashore and afloat. MILCON projects supporting MARFORPAC readiness is expected to cost $788 million. Vehicle Maintenance, a Mountain Warfare Training Center and Land Expansion will cost $44 million in Twentynine Palms, CA. Marine Corps Air Station Yuma, AZ, requires $162 million for two aircraft maintenance hangars and infrastructure improvements. A total of $287 million for construction at Camp Pendleton Marine Corps Base, CA, is requested to include projects to support the arrival of the MV–22 and a $29 million Infantry Squad battle Course Defense Range. Finally, $57 million will be used to construct an airfield operations complex at Marine Corps Base Hawaii.

Defense Logistics Agency (DLA). The vastness of the Pacific AOR increases the importance of providing and sustaining sufficient forward-based logistics infrastructure. The services and materiel that DLA provides to the Pacific is a critical enabler. DLA requests $105 million for readiness related projects. Joint Base Pearl Harbor-Hickam in Hawaii requests $14 million to upgrade refueling truck parking and to reconfigure a warehouse to operate more effectively, which will result in long-term cost savings. Eielson Air Force Base, AK, requests $17 million to upgrade a rail line to improve refueling capabilities. Naval Base Coronado, CA, needs $22 million to replace fuel storage tanks and pipelines. The fourth increment of funding to replace a fuel storage facility at Naval Base Point Loma, CA, requires $27 million.

Quality of Life

Quality of Life for active duty soldiers, sailors, airmen, marines, and their dependents continues to be a key enabler and retention factor for these Americans serving overseas—often thousands of miles and many time zones away from family and loved ones. In fiscal year 2012, $620 million will ensure adequate housing, medical,

education, family support, and recreation opportunities are provided to these men, women, and their families. The following include the significant projects:

Bachelor Housing. In fiscal year 2012, PACOM requests $254 million for five barracks projects. Specifically, the Air Force plans to construct barracks in Osan, Korea, and Eileson Air Force Base and Joint Base Elmendorf-Richardson, AK, worth $165 million. The Army requests $89 million for new barracks at Camp Henry and Camp Carroll in Korea.

Family Housing. PACOM Service components have made tremendous strides using MILCON and the Military Family Housing Privatization Initiative (MHPI) to renovate and replace antiquated housing throughout PACOM. While MHPI has accelerated the pace of modernization, MILCON is still required overseas in Japan and Korea since privatization is not authorized in these foreign countries.

In fiscal year 2012, PACOM requests $113 million for family housing. Specifics for each Component are as follows: PACAF seeks $45 million to improve over 1,300 homes at Misawa and Kadena Air Bases in Japan. The Navy requests $45 million to improve 219 homes at Yokosuka, Atsugi, and Sasebo Naval Bases in Japan. MARFORPAC requests $23 million to completely renovate 76 homes at Iwakuni Air Station in Japan.

Medical. Providing outstanding medical care in high-quality facilities continues to be an important priority. Although no medical projects are being submitted in the PACOM AOR due to more pressing needs in other areas, several non-MILCON-level projects will be executed in fiscal year 2012. Additionally, a comprehensive medical needs assessment for all services in Hawaii is currently being conducted to better enable joint planning of future projects.

Family Support and Recreation. The Army requests $26 million in Hawaii to expand an existing fitness center and build a new pool and $18 million for a new Child Development Center for elementary school children. The Marine Corps seeks $19 million for a multi-use recreational field and $24 million for a child development center at Twentynine Palms, CA. The Navy asks for $47 million to build a new fitness center at Naval Base Coronado, CA.

PACOM Organizations

The following units uniquely contribute to the PACOM mission:

Joint Intelligence Operations Center (JIOC)

The PACOM JIOC is the central hub for intelligence across the theater, responsible for managing intelligence requirements at the strategic level and providing operational support to Components and Subordinate Commands. The size and complexity of the Asia-Pacific demand a federated intelligence approach, leveraging the intelligence, surveillance, and reconnaissance contributions of all PACOM intelligence enterprises. The JIOC also partners with the offices of the Director of National Intelligence, the Under Secretary of Defense for Intelligence, and national and allied intelligence agencies and centers. In addition to traditional sources and methods, open source Intelligence is an area that can provide critical insights and understanding with modest, targeted resources.

Asia-Pacific Center for Security Studies (APCSS)

APCSS supports PACOM multi-national security cooperation and capacity-building efforts through international executive education and tailored assistance programs that educate and connect key regional security practitioners. APCSS brings together military and interagency civilian representatives to identify cooperative solutions to security challenges. These communities of interest include vice presidents, ministers of defense and foreign affairs, chiefs of defense, and ambassadors.

Joint POW/MIA Accounting Command (JPAC)

JPAC's mission is to achieve the fullest possible accounting of all Americans missing as a result of past conflicts. JPAC successfully accomplished 75 investigation and recovery operations globally last year and is projected to execute 75 investigation and recovery operations in 2011. Expanded operations will begin in fiscal year 2012 as JPAC begins the path to the congressionally-mandated 200 annual identifications. Discussions between JPAC and the Governments of India and the Philippines continue in an effort to resume investigation and recovery operations in those countries. Meanwhile, operations in North Korea and Burma remain suspended.

Joint Interagency Task Force West (JIATF-West)

JIATF-West is the PACOM Executive Agent for countering drug-related transnational crimes in the Asia-Pacific. This unique mission provides intelligence support and partner-nation capacity building. JIATF-West currently supports U.S.

law enforcement agencies through Task Force initiatives focused on Iranian, Eurasian, and South Asian drug trafficking organizations that pose a regional and national security threat.

CONCLUSION

The preceding testimony outlines the Asia-Pacific strategic environment, addresses the optimal force posture in each of the four subregions, and outlines MILCON recommendations necessary to properly support PACOM forces and their families. Among the many notable challenges are a belligerent DPRK and dangerous VEOs, which remain dangerous concerns for which the U.S. must be prepared. China's rapid military expansion coupled with its unclear intent poses a concern to the United States and many regional nations; however, opportunities for collaboration between the U.S. and China are also apparent. Overall the region remains ripe for peaceful growth, cooperation, and prosperity, due in large measure to mutual interests shared by our five regional U.S. treaty Allies and many more security partners. Longstanding support from the American people and Congress for the first-rate resources in use by the 330,000 men and women of U.S. Pacific Command enable these forces to protect and defend the homeland while advancing U.S. interests throughout the Asia-Pacific.

Chairman LEVIN. Thank you very much, Admiral.

General Sharp.

STATEMENT OF GEN WALTER L. SHARP, USA, COMMANDER, UNITED NATIONS COMMAND/COMBINED FORCES COMMAND/ U.S. FORCES KOREA

General SHARP. Chairman Levin, Senator McCain, and distinguished members of this committee, I welcome this opportunity today to discuss the current state of United Nations (U.N.) Command, Combined Forces Command, and USFK and to answer your questions. I also want to thank the committee for your support of our servicemembers, DOD civilians, and families living and working in the ROK.

The ROK-U.S. alliance ensures security and stability in Northeast Asia. The ROK is also a great global security partner, with a Provincial Reconstruction Team (PRT) in Afghanistan, anti-piracy operations off the coast of Somalia, the participation in several U.N. peacekeeping operations around the world, and in their assistance in tackling proliferation.

Most importantly, the ROK and U.S. alliance continues to deter a North Korea that threatens both regional and global peace and security. Last year, the ROK was the victim of two unprovoked attacks by North Korea. On 26 March 2010, a North Korean submarine attacked the ROK naval ship *Cheonan*; and on 23 November 2010, a North Korean artillery barrage on the island of Yeonpyeong. These brutal attacks resulted in the death of 48 South Korean servicemembers and 2 civilians.

The command's mission is to deter North Korean provocations and aggression and, if deterrence fails, to fight and win. The alliance stands ready to address the full spectrum of conflict that could emerge on the Korean Peninsula. Maintaining this preparedness is accomplished through the development and the refinement of our bilateral plans to deter and defeat provocations, attacks like we saw last year, and all-out aggression, while maintaining the ability to respond to other destabilizing conditions that could affect the Korean Peninsula.

Successful execution of these bilateral plans requires a well-trained force. Three annual joint combined and interagency exer-

cises—Freedom Guardian, Key Resolve, and Foal Eagle—serve as key enablers for maintaining the combined command's fight tonight readiness while also preparing for the future transition of wartime operational control (OPCON).

Our second priority is strengthening the ROK-U.S. alliance. This better deters North Korean provocative actions and promotes a peaceful, secure, and prosperous future for the Korean Peninsula, the Asia-Pacific region, and the world as a whole.

Last year, President Obama agreed with the ROK President Lee Myung-bak's request to adjust the timing of the transition of wartime OPCON from April 2012 to December 2015. They also agreed to develop a plan to better synchronize all of the ongoing transformation initiatives, of which OPCON transition is just one. Called Strategic Alliance 2015, this plan was affirmed and signed by Secretary Gates and then Minister of Defense Kim Tae-young at the 42nd security consultative meeting last October.

Key elements of Strategic Alliance 2015 include: the refining and improving of the combined defense plans; defining and developing new organizational structures and capabilities required by the ROK to lead the warfight; implementing more realistic exercises based upon the North Korean threat of today and tomorrow; preparing for the transition of wartime OPCON to the ROK joint chiefs of staff in December 2015; and finally, by consolidating U.S. military forces in the ROK onto two enduring hubs under the Yongsan Relocation and Land Partnership Plan. This repositioning of U.S. forces in the ROK improves force readiness and quality of life, which is our third priority. It realizes stationing efficiencies and signals a continued American commitment to the defense of Korea and the engagement within the broader region. Restationing also enhances force protection and survivability.

Normalizing tours in Korea was reinforced in October 2010 when the Secretary of Defense directed the USFK and the Services to proceed with full tour normalization as affordable. A force multiplier, tour normalization keeps trained and ready military personnel in place for longer periods of time. It improves readiness, combat capability, lowers turbulence in units, and reduces the stress placed on our troops, units, and families.

In closing, the men and women assigned to U.N. Command, Combined Forces Command, and USFK remain committed and stand ready. Our ongoing efforts to implement Strategic Alliance 2015, the Yongsan Relocation and Land Partnership Plans, and tour normalization demonstrate a long-term U.S. commitment to not only the security of the ROK, but to the broader region of Northeast Asia as well.

I am extremely proud of the soldiers, sailors, airmen, marines, DOD civilians, and their families serving our great Nation in the ROK and your support for them which is greatly appreciated.

This concludes my remarks and I look forward to your questions.

[The prepared statement of General Sharp follows:]

PREPARED STATEMENT BY GEN WALTER L. SHARP, USA

I. INTRODUCTION

Mr. Chairman and distinguished members of the committee, I am honored to provide my statement to you. As the Commander, United Nations Command (UNC);

Commander, U.S.-Republic of Korea Combined Forces Command (CFC); and Commander, U.S. Forces Korea (USFK), it is a privilege to represent the soldiers, sailors, airmen, marines, Department of Defense (DOD) civilians, and their families, who serve our great Nation in the Republic of Korea (ROK). On behalf of these outstanding men and women, I want to thank the committee for support it has provided to American forces stationed in the ROK and the ongoing commitment it has made to improve the quality of life for command personnel and their families. Sustained support from Congress has allowed us to deter aggression against the ROK and promote peace and stability on the Korean Peninsula. Peace and stability on the Korean Peninsula, in turn, has promoted peace and stability in the broader region of Northeast Asia. I greatly appreciate this opportunity to report on the state of affairs in Korea. Specifically, this statement will address the security situation on the Korean Peninsula, priorities of the commands that I lead, recent developments at UNC, and how programs and initiatives currently being implemented will strengthen the U.S.-ROK Alliance and America's presence in Asia.

The Korean Peninsula sits at the heart of Northeast Asia—a dynamic region whose global influence is growing and has significant national interests for the United States.[1] The growing influence of Northeast Asia can be seen in diplomatic, military, and economic terms. In diplomatic terms, the ROK successfully hosted the Seoul G–20 Summit last year, the first time a G–20 Summit was conducted outside the west and in an Asian nation. The ROK will also host the 2012 Nuclear Security Summit. From a broader perspective, states in the region have assumed a more prominent role at a variety of international organizations and institutions. Northeast Asia is home to four of the world's six largest militaries when measured in terms of personnel as well as two nuclear powers (China and Russia).[2] The region contains 23 percent of the world's population and is an economic powerhouse.[3] In 2010, Northeast Asia housed 5 of the world's 19 largest economies, where the region collectively accounted for 25.6 percent of global gross domestic product during that year.[4] Countries in Northeast Asia accounted for 26.7 percent of U.S. trade in goods during 2010.[5]

While Northeast Asia's international influence is growing and it has become a major economic region, it is also a region characterized by uncertainty, fast-paced change, lingering historical animosities between states and peoples, territorial disputes, competition over access to resources, and in some cases struggles for regional hegemony. These characteristics have combined to pose difficult and long-term security challenges not only for states in the region but for the international community as well. The ongoing security challenges posed by events in Northeast Asia can be exemplified by North Korea's unprovoked attacks on the ROK naval ship *Cheonan* in March 2010 and on Yeonpyeong Island in November 2010 as well as Pyongyang's continued pursuit of nuclear programs. By maintaining U.S. military forces in the ROK, a stabilizing presence is maintained that allows for the implementation of strategies that promotes peace and stability on the Korean Peninsula and in Northeast Asia, contributing toward the de-escalation of security crises when they do occur. U.S. military forces in Korea are a long-term investment in regional peace and stability. The role played by these forces in Northeast Asia are particularly important because, unlike the case in Europe with the North Atlantic Treaty Organization and European Union, there are no regional-based security institutions designed to prevent and resolve interstate conflict.

U.S. force presence in Korea is also a vital part of maintaining security commitments to the ROK established under the Mutual Defense Treaty.[6] An ongoing American military presence in the ROK helps set the conditions for the verifiable denuclearization of the Korean Peninsula in a peaceful manner as well as peaceful reunification of the two Koreas. By having U.S. military forces forward-stationed in Korea, engagement is enhanced not only with this key alliance partner, but with

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[1] The region of Northeast Asia is defined to include the following countries and special administrative regions: China, Hong Kong, Japan, Macau, Mongolia, North Korea, ROK, Russia, and Taiwan.

[2] In terms of number of personnel in the armed forces, the world's six largest militaries during 2010 were: China (2.28 million personnel); United States (1.58 million); India (1.32 million); North Korea (1.1 million); Russia (1.02 million); and the ROK (633,000). Personnel data obtained from The Military Balance 2010, produced by the International Institute for Strategic Studies.

[3] Population percentage calculated with data obtained from the CIA World Factbook. Percentage is as of July 2010.

[4] Country rankings based on gross domestic product measured at purchasing power parity and obtained from the CIA World Factbook.

[5] Trade percentage was calculated with data obtained from the U.S. Census Bureau.

[6] The May 2010 U.S. National Security Strategy identifies the security of allies as an enduring American interest.

other states and actors throughout Northeast Asia as well. A meaningful U.S. force presence on the Korean Peninsula is essential to meet treaty requirements with the ROK and to address security challenges posed by the dynamic, developing—but potentially unstable—region of Northeast Asia.

II. SECURITY SITUATION ON THE KOREAN PENINSULA

ROK

The ROK was the victim of two unprovoked attacks by North Korea in 2010. The first attack occurred on 26 March and resulted in the sinking of a ROK naval ship (*Cheonan*) and the death of 46 sailors while the ship was patrolling off the west coast of Korea in the vicinity of Paengnyong Island. In the aftermath of the *Cheonan* tragedy, the ROK led a joint civilian-military investigation group to determine the cause of the *Cheonan*'s sinking that included the participation of experts from foreign governments. The group concluded that the *Cheonan* was sunk due to a torpedo launched by a North Korean submarine. This conclusion was assessed by a special investigative team from the United Nations Command Military Armistice Commission (UNCMAC), which determined that North Korea's action constituted serious violations of the Armistice Agreement.[7] UNCMAC's determination was endorsed by the Neutral Nations Supervisory Commission.[8]

The second unprovoked attack occurred on 23 November 2010 when North Korea unleashed an artillery barrage on the island of Yeonpyeong. Firing approximately 170 rounds in total with about 80 shells hitting the island, this attack was particularly brutal because it struck not only military facilities but civilian areas as well. Two South Korean marines and 2 civilians were killed during the barrage while 16 marines and 52 civilians were wounded. An investigation into the attack conducted by an UNCMAC special investigation team, which was composed of representatives from nine countries and whose work was observed by representatives from the Neutral Nations Supervisory Commission, reached the following key findings:

- North Korea's attack was a hostile act and an act of armed force against the ROK;
- The attack was a deliberate and premeditated action; and
- North Korea's failure to enforce a complete cessation of hostilities in Korea, execution of an armed attack against areas legitimately under military control of the Commander United Nations Command, and execution of an attack that caused considerable damage to military facilities and the destruction of civilian homes and property, constituted serious violations of the Armistice Agreement.[9]

In response to these unprovoked attacks by North Korea, the United States, and ROK engaged in a series of combined military exercises designed to send Pyongyang a clear message that its irresponsible and belligerent behavior must stop and that both countries remain committed to enhancing their combined defense capabilities. The first exercise held in this series, a combined maritime and air readiness event held from 25–28 July 2010, was called Invincible Spirit and occurred in the seas east of the Korean Peninsula. The exercise conducted extensive training in the areas of anti-submarine warfare, battle group air defense, surface warfare training to include live-fire exercises, and included a robust component of aircraft that flew a variety of missions in the skies over and around the ROK.

Invincible Spirit was followed by the Ulchi Freedom Guardian exercise held from 16–26 August 2010. This annual exercise, like all other training events conducted by the CFC, was designed to improve the U.S.-ROK Alliance's ability to defend the ROK. The exercise was focused on ensuring readiness to prepare for, prevent, and prevail against a full range of provocations that could occur on the Korean Peninsula both now and in the future. It helped teach, coach, and mentor Command personnel on staff and leadership decisionmaking processes.

Following Ulchi Freedom Guardian was a U.S.-ROK anti-submarine warfare exercise conducted from 27 September to 1 October 2010. Focused on practicing anti-

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[7] Members of the UNCMAC special investigation team came from the countries of Australia, Canada, Denmark, France, New Zealand, ROK, Turkey, United Kingdom, and the United States.

[8] Established by the Armistice Agreement, the Neutral Nations Supervisory Commission (NNSC) acts as a neutral and impartial body between all parties to observe and report on compliance with the Armistice Agreement. Observers from the NNSC came from Poland, Sweden, and Switzerland.

[9] Members of the UNCMAC special investigation team came from the countries of Australia, Canada, Denmark, France, New Zealand, the Philippines, Thailand, United Kingdom, and the United States. Observers from the Neutral Nations Supervisory Commission came from Poland, Sweden, and Switzerland.

submarine warfare tactics, techniques, and procedures, the exercise occurred in the waters west of the Korean Peninsula. This anti-submarine warfare exercise was followed by a U.S.-ROK naval and air training event from 28 November to 1 December 2010. Held in waters west of the Korean Peninsula, the exercise provided training in the areas of fleet protection, alerts/intercepts and defensive counter air/combat air patrols, air defense, surface warfare readiness, basic seamanship maneuvers, logistics sustainment, and communications. When viewed in their totality, the set of combined exercises conducted since North Korea's unprovoked attack on the *Cheonan* have been designed to demonstrate U.S. and ROK resolve to enhance their defense capabilities and readiness, improve force interoperability, and show U.S. commitment to regional security. It should be noted that our Korean partners and friends greatly appreciated the resolutions passed by the House of Representatives and the Senate expressing condolences to those killed and their families following North Korea's attacks on the *Cheonan* and Yeonpyeong Island.[10]

North Korea

North Korea continues to threaten both regional and global peace and security. Over the past year, Pyongyang continued its two-pronged strategy of provocation and charm to achieve regime objectives with the ROK, the United States, and the international community. This strategy included the *Cheonan* sinking, the attempted assassination of a high-profile defector, and the artillery attack against Yeonpyeong Island. Simultaneously, North Korea continued to develop its nuclear and long-range missile delivery capabilities, initiated construction of a light water reactor, and revealed the existence of a uranium enrichment program at the Yongbyon Nuclear Research Center. Pyongyang continues its "military first" policy and maintains a massive, forward-deployed conventional force. Plans for succession of Kim Jong-il's third son appear to be accelerating. Absent a commitment to institute fundamental, systematic reform—which appears unlikely in the near term—North Korea will remain a serious security threat in the region and a significant concern for the United States and the international community.

Strategy, Goals, and Internal Dynamics

Kim Jong-il's ultimate strategic goal is the survival of his regime. To achieve this end, the Kim Regime must maintain control over the population and prevent external powers from threatening its interests. As part of its "self-reliance" philosophy, Pyongyang's foreign policy attempts to divide regional alliances and minimize external influence over its affairs. North Korea balances a reliance on Chinese support and patronage with a desire for maintaining independence. Concurrently, North Korea engages the United States with the likely goal of garnering financial, food, and energy assistance, as well as security guarantees. Internally, the regime maintains the facade of a significant external threat, primarily from the United States, to maintain control and justify sacrifices associated with its "military first" policy.

A key component of this multi-dimensional strategy is North Korea's nuclear program. This program serves as a diplomatic tool, a means to capture international attention, a deterrent against regional interference, a point of domestic prestige, and a potential source of hard currency. This was exemplified by last year's light water reactor and uranium enrichment program announcements and public proclamations regarding plutonium reprocessing and weaponization. These efforts, along with development of a complementary missile delivery system, are paramount to regime survival. North Korea, which is assessed to have enough plutonium for several nuclear weapons, ultimately seeks international recognition as a de facto nuclear weapons state.

Another key element of North Korean strategy is to maintain a large conventional military force. Although aging and technologically inferior, North Korea's massive army and vast artillery forces continue to threaten the ROK. North Korea continues to focus on its asymmetric capabilities by sustaining and improving Special Operating Forces and their insertion methods. Whether directed toward regional neighbors and U.S. sovereign territory, or as an export item, Pyongyang's missile capabilities remain a regional and global threat. Like its nuclear program, North Korea views its theater ballistic missile program as a source of international power and prestige, a strategic deterrent focused on the United States, a means of exerting regional influence, and a source of hard currency. For these reasons, despite chronic

[10] In addition to the exercises discussed above, USFK sent a 19-person liaison officer team to observe the 20 December 2010 ROK live-fire exercise at Yeonpyeong Island. The task of the liaison team was to advise and assist. The UNC/UNCMAC also sent an observation team to the 20 December live-fire exercise to ensure that the event was defensive in nature and did not violate terms in the Armistice Agreement. The UNC/UNCMAC team was composed of members from Australia, New Zealand, the Philippines, United Kingdom, and the United States.

and severe fiscal difficulties, North Korea continues to spend millions of dollars annually to develop and produce ballistic missiles, although missile sales have been hampered due to enhanced international sanctions. North Korea's inventory of ballistic missiles currently exceeds 800 airframes, which are capable of ranging targets from the ROK and Japan to Guam and the Aleutian Islands. The regime continues to invest in research and development of an intercontinental ballistic missile capability that could threaten the continental United States.

Domestically, Kim Jong-il remains in control despite reports of lingering heath issues. Over the past year, there are indications that he has focused on setting the stage for his third and youngest son, Kim Jong-un, as his successor. In September 2010, Kim Jong-un was publically promoted to four-star general in the North Korean People's Army and appointed as Vice Chairman of the Korean Workers Party Central Military Commission. Since then, the younger Kim has made several civil, military, and economic public appearances with his father. North Korea's ruling elite, whose position depends upon the status quo, appears unwavering in its loyalty to the Kim Regime and will likely support the succession process.

For most North Koreans outside major cities, life remains focused on survival in a poverty-stricken state. North Korea's annual domestic food production remains insufficient, with the country dependent upon Chinese and outside assistance to meet basic subsistence requirements. Despite this shortfall, Pyongyang continues to divert precious national resources from the civil sector to conventional and asymmetric military forces in support of the regime's military first policy.

Provocations and Posturing

The past year served as another unfortunate example of North Korea's strategy of alternating provocation with gestures of reconciliation. Early in the year, Pyongyang signaled renewed interest in reaching a peace agreement and returning to Six-Party Talks. During ensuing dialogue, the North sought to restart Kumgang Mountain and Kaesong City tours; however, subsequent bilateral working-level talks made little progress.

When these negotiations failed, the North shifted to belligerence. In March, North Korea threatened to attack ROK and U.S. forces participating in the annual Key Resolve exercise, closely followed by the sinking of the ROK ship *Cheonan* on 26 March. Following this attack, Pyongyang announced plans to build a light water reactor on 30 March. While North Korea claims this reactor is for power production, experts believe the North's true motive is to produce highly enriched uranium for its nuclear weapons program.

April witnessed yet another spate of provocative acts. On the 21st, ROK authorities detained three North Korean assassins on a mission to assassinate North Korea's most senior defector, Hwang Jang-yop. Then, on 23 April, North Korea announced it would seize and freeze ROK Government and private assets at the Kumgang Mountain resort.

Over the summer, North Korea's multiple attempts at dialogue failed due to the Kim Regime's refusal to acknowledge the *Cheonan* attack. The North turned to provocation once again, with threats made against U.S.-ROK military exercises, ROK loudspeakers along the Demilitarized Zone, and vessels and aircraft operating in waters and airspace along the Northern Limit Line. These threats were followed by a Korean Workers' Party meeting in October and official installment of Kim Jong-un to key high-level positions of leadership for future succession. There was a brief pause in tensions for family reunions at the Kumgang Mountain Resort from late October to early November; however, North Korea tried unsuccessfully to tie these reunions to increased aid and assistance to which the ROK Government would not agree. The provocation cycle continued in November with the North Korean announcement of a uranium enrichment program and the attack on Yeongpyeong Island.

Since the Yeongpyeong Island attack, North Korea has resumed its "charm campaign" in an attempt to obtain economic aid. Pyongyang has proposed Red Cross talks, engagement with major ROK political parties, military-to-military talks, and an appeal to many countries and nongovernmental organizations for food aid. Inter-Korean military talks have not progressed beyond the colonel level as the North Korean People's Army delegation walked out of negotiations.

North Korean Threat Outlook

I have two main concerns regarding the future of North Korea. My first concern is the potential for instability. The country's disastrous centralized economy, dilapidated industrial sector, insufficient agricultural base, and malnourished populace could lead to a destabilizing situation that could unfold rapidly and unpredictably. My second concern is Pyongyang's focus on developing its nuclear and missile capa-

bilities. If left unchecked, North Korea will likely develop an intercontinental ballistic missile capability, which could threaten the United States and its allies. North Korea's proliferation record exacerbates the threat that these programs pose to the international community.

Pyongyang will likely continue its attempts to entice and/or coerce the community of nations into providing aid and concessions. North Korea will also likely continue a strategy of heightening tensions to capture the world spotlight, re-establish its negotiating baseline, and gauge regional resolve. We must never be complacent about the danger that Pyongyang might make a major miscalculation and launch an attack on the ROK. To address this threat, UNC/CFC/USFK maintains a high level of readiness through the rigorous pursuit of three command priorities, as discussed in Section III below.

III. COMMAND PRIORITIES

The Command mission is to deter North Korean provocations and aggression and—if deterrence fails—to fight and win. This mission is accomplished through the employment of forward-stationed, agile, and well-trained forces that are located on the Korean Peninsula and operate together with our ROK ally. My Command vision is to maintain trained, ready, and disciplined combined and joint commands that are ready to fight and win. These commands lead, integrate, and direct all available forces during times of Armistice, crisis, and war.

In support of this mission and vision are three Command priorities. These priorities have remained constant over time and serve as the guiding principles for all key initiatives pursued. The three priorities are: (1) be prepared to fight and win; (2) strengthen the U.S.-ROK Alliance; and (3) improve the quality of life for servicemembers, Department of Defense (DOD) civilians, and their families. As Command initiatives are developed and implemented, they are executed in accordance with and in support of these three priorities. I will next address each of these priorities in order and discuss some key initiatives that are being pursued within them.

Prepared to Fight and Win

My first priority as Commander of UNC, CFC, and USFK is to maintain trained, ready, and disciplined combined and joint commands that are prepared to fight and win. This has been the focus of U.S. forces stationed in Korea for more than 50 years and for the CFC since it was established in 1978. Maintaining "fight tonight" readiness is a key reason U.S. forces are stationed in the ROK, supporting the alliance between the American and Korean people in defense of the ROK. The Alliance stands ready to address the full spectrum of conflict that could emerge with little warning on the Korean Peninsula. This spectrum of conflict ranges from major combat operations under conditions of general war or provocation, to multiple possibilities of destabilizing conditions on the Peninsula, to humanitarian assistance operations, and even the elimination of weapons of mass destruction. Given these varied potential security challenges, it is imperative that our forces maintain the highest possible level of training and readiness.

In order to address the full spectrum of conflict that could emerge on the Korean Peninsula, the Command has developed and constantly refines plans to deter provocations and aggression against the ROK, defeat aggression should deterrence fail, and respond to other destabilizing conditions that could affect the Korean Peninsula. Successful execution of these plans requires a well trained force that can execute tasks across the spectrum. Thus, warfighting skills are developed and maintained through the conduct of tough, realistic, combined, and interagency exercises.

In the past, the CFC and ROK military have almost exclusively focused training on defense against an all-out high intensity attack by North Korea. However, as the CFC has broadened the scope of its planning, it is also doing the same with respect to training and exercises. The CFC and ROK military now exercise one North Korean attack scenario and one limited attack/provocation/instability scenario per year. The CFC has also added considerable weapons of mass destruction elimination training into its exercise scenarios to fortify plans in support of combined policy objectives. In addition, the CFC is increasing counter-provocation training with the ROK military, both in the regularly scheduled major theater exercises and in other training events throughout the year as well.

Three annual joint and combined exercises warrant special mention: Ulchi Freedom Guardian, Key Resolve, and Foal Eagle. Ulchi Freedom Guardian and Key Resolve are computer-simulated theater command post exercises conducted by CFC that focuses on ensuring "fight tonight" readiness to prepare for, prevent, and prevail against the full range of current and future provocations, attacks, and instability on the Korean Peninsula. In the future the Ulchi Freedom Guardian exercise

will be used to support transition from a CFC-led command and control warfighting structure to one where the ROK Joint Chiefs of Staff (JCS) becomes the supported headquarters. Foal Eagle consists of a series of joint and combined unit level field training events that exercise ground maneuver, air, naval, expeditionary, and special operations capabilities. These events are conducted throughout the Korean Peninsula. Ulchi Freedom Guardian, Key Resolve, and Foal Eagle are supplemented throughout the year by a host of other challenging training activities that are designed to sustain Command readiness.

The ROK military's capabilities and posture is a key component of our fight and win preparedness. Numbering 633,000 Active Duty personnel, it is a modern, mobile network centric warfare capable force that fields an array of advanced weapon systems. The ROK military is led by a professional officer corps and the force as a whole has gained operational experience through deployments to places such as Iraq, Afghanistan, the Gulf of Aden, Lebanon, and participation in a host of United Nations peacekeeping and humanitarian assistance operations. This battle tested force and its leaders understand the requirements for military readiness in addition to accomplishing tasks under adverse conditions.

Real world operational experience is continually supplemented by the conduct of a realistic and tough exercise program. In addition to participation in the Ulchi Freedom Guardian/Key Resolve/Foal Eagle exercises discussed above, other key training events include the annual Taegeuk, Hoguk, and Hwarang exercises as well as a series of events that have been conducted in response to North Korea's recent attacks.[11] The ROK military's capabilities will only get better over time as it refines and implements its defense reform initiative. Designed to address the future security environment, it will develop an information and technology-intensive military force that can better address a comprehensive set of security threats to include North Korea's asymmetric capabilities and enhanced participation in operations sponsored by the international community.

Strengthen the U.S.-Rok Alliance

My second priority is to strengthen the U.S.-ROK Alliance. As stated in the May 2010 U.S. National Security Strategy, American alliances with key regional partners to include the ROK are the bedrock of security in Asia and a foundation for prosperity in the Asia-Pacific area.[12] This priority supports the June 2009 U.S.-ROK Joint Vision statement that commits both nations to build an Alliance that ensures a peaceful, secure, and prosperous future for the Korean Peninsula, the Asia-Pacific region, and the world as a whole. A key feature of Alliance evolution is the transition of wartime operational control.

At the request of ROK President Lee Myung-bak President Obama agreed at the G20 Summit in June 2010 to adjust timing of the transition of wartime operational control (OPCON) from CFC to the ROK Joint Chiefs of Staff. The transition will now occur in December 2015. Under OPCON transition, the United States and ROK will disestablish CFC and stand up separate but complementary national commands consistent with the Mutual Defense Treaty to focus on combined defense of the ROK. Once OPCON transition is completed, the ROK Joint Chiefs of Staff (JCS) will become the supported—or lead—command and the newly created U.S. Korea Command (KORCOM) will be the supporting command. The ROK JCS will retain full control of ROK military forces while the KORCOM commander will have control over U.S. forces.

Although the United States and ROK were on track militarily for OPCON transition in 2012, the adjusted timeframe will provide the Alliance additional time to synchronize a variety of ongoing transformation initiatives of which OPCON transition is just one. As stated last June by President Obama during a joint press conference with ROK President Lee Myung-bak, the revised December 2015 transition date provides appropriate time to—within the existing security context—better manage OPCON transition because the U.S.-ROK Alliance is the lynchpin of security not only for the two countries but for the Pacific region as a whole. During this ex-

[11] Taeguek is a command post exercise that reinforces operational capabilities of the ROK Joint Chiefs of Staff and derives requirements for joint forces and unit structure development. Hoguk focuses on improving interoperability between the military branches and is a live-maneuver joint event. Finally, Hwarang is an integrated defense headquarters-led rear area training exercise that includes civilian, government, and military elements as participants.

[12] The document also notes that American national security depends on vibrant alliances and that these alliances are force multipliers (the effects of cooperation and coordination are greater than if states act alone). Secretary of State Clinton added during a 28 October 2010 speech on American engagement in the Asia-Pacific that U.S. bonds with regional allies to include the ROK remains the foundation for American strategic engagement in the region, describing the U.S.-ROK Alliance as a lynchpin of stability and security in the Asia-Pacific and beyond.

tended period of time the ROK will strengthen and reinforce its intelligence, operations planning and execution, and joint battlefield management capabilities. Indeed, the ROK is already in the process of procuring the equipment, conducting the training, and making the organizational changes needed to lead the warfight. Until all these actions are completed, however, the United States will provide agreed upon bridging and enduring capabilities. By adjusting the date of OPCON transition to late 2015 the ROK has more time to field many of the critical systems that are part of its ongoing defense reform initiative.

At the U.S.-ROK Foreign and Defense Minister's Meeting in July 2010 agreement was reached to develop a comprehensive Alliance transformation plan that includes and goes beyond merely OPCON transition. Called Strategic Alliance 2015, the plan was affirmed and signed by U.S. Secretary of Defense Robert Gates and then ROK Defense Minister Kim Tae-young at the 42nd Security Consultative Meeting in October 2010. The Strategic Alliance 2015 plan will synchronize multiple U.S. and ROK transformation efforts that are designed to build adaptive and flexible capabilities to deter aggression against the ROK and to defeat aggression should it occur. Key elements of the comprehensive plan include: refining and improving combined defense plans; defining and developing the new organizational structures required for ROK lead of the war effort; implementing more realistic exercises based on the North Korean threat of today and tomorrow; preparing for the transition of wartime OPCON to the ROK Joint Chiefs of Staff in December 2015; and consolidating U.S. military forces in the ROK onto two enduring hubs under the Yongsan Relocation Plan and Land Partnership Plan.[13]

The goal of all initiatives under the Strategic Alliance 2015 construct is to build adaptive force capabilities that deter and defeat future provocations against the ROK and fight and win on the Korean Peninsula should deterrence fail. While Alliance evolution will occur under Strategic Alliance 2015, one thing that will not change and remain constant is U.S. commitment to ROK security and the maintenance of peace and stability on the Korean Peninsula. The Strategic Alliance 2015 plan as a whole synchronizes ongoing transformation efforts to ensure they are aligned and mutually supporting. It reaffirms U.S. commitment to ROK and regional security and better postures both nations to deter, counter, and defeat North Korean provocations and aggression. The Strategic Alliance 2015 plan moves the United States and ROK toward building an Alliance that ensures a peaceful, secure, and prosperous future for the Korean Peninsula, the Asia-Pacific region, and the world, as called for in the June 2009 Presidential Joint Vision for the U.S.-ROK Alliance.

The military aspect of Alliance development will continue through the Guidelines for U.S.-ROK Defense Cooperation that were agreed to by the U.S. Secretary of Defense and ROK Minister of Defense in October 2010. Established to direct the future course of the U.S.-ROK defense relationship, they are based on and serve to advance the June 2009 Joint Vision Statement and the U.S.-ROK Mutual Defense Treaty. The guidelines are rooted in a bilateral commitment to provide mutual security and to build a comprehensive strategic Alliance of bilateral, regional, and global scope, founded on common values and mutual trust. Under the guidelines the United States upholds a firm commitment to ROK defense by maintaining an American military presence on the Korean Peninsula that works with ROK forces to deter North Korean aggression. American commitment is demonstrated by an enduring force presence, the tour normalization initiative (discussed later), provision of bridging and enduring capabilities, the supply of augmentation forces in contingencies, and the continued provision of extended deterrence.[14]

In order to meet the broad strategic vision of the Alliance, the defense guidelines specify that the United States and ROK will implement a set of enabling measures needed for an effective combined defense posture. These enabling measures are: to enhance intelligence and information sharing; strengthen operational planning; further develop capabilities to address the ballistic missile threat from North Korea; institutionalize an extended deterrence policy committee; enhance interoperability; enhance the combined exercise program; and to collaborate on lessons learned. The defense guidelines also recognize the importance of close bilateral cooperation to promote regional and global peace and stability. With this recognition in mind, the guidelines list measures that will be taken to strengthen the Alliance's role in en-

[13] Annexes contained in the plan include: plans; organizations; capabilities and systems; exercises; force management and tour normalization; U.S. force relocation; strategic documents; strategic communications; milestones; and governance.

[14] As stated in the Defense Guidelines, the United States remains committed to providing extended deterrence for the ROK using the full range of its military capabilities to include the nuclear umbrella, conventional strike, and missile defense capabilities.

hancing regional and global security. These measures are: strengthening capabilities to contribute to regional and global peace and stability; supporting the non-proliferation of weapons of mass destruction, related materials, technologies, and their means of delivery; enhancing bilateral, trilateral, and multilateral defense relationships; strengthening cooperation for international security and peacekeeping efforts; and cooperating closely on other transnational and non-traditional security challenges.[15] The defense guidelines recognize the importance of close policy and strategic consultation between the United States and ROK for the enhancement of common interests and further development of the Alliance.

The ROK continues to provide financial and in-kind support to help offset the cost of stationing U.S. military forces on its territory. Known formally as burden sharing contributions, the annual value of these contributions is dictated by terms established in a 5-year (2009–2013) Special Measures Agreement currently in effect. During calendar year 2011 the ROK will provide USFK with 812.5 billion won ($743 million) of burden sharing support.[16] This support will be distributed between three categories: labor (338.6 billion won; pays salaries and benefits of USFK's Korean national employees); logistics (140.6 billion won; covers logistic equipment, supplies, and services); and ROK Funded Construction (333.3 billion won; used for USFK's military construction and military construction-like requirements). Burden sharing contributions helps ensure that the Command maintains its fight tonight readiness and builds the infrastructure needed for a transformed and long-term U.S. military force presence in the ROK. Burden sharing expenditures also stimulate the ROK economy through the payment of wages to Korean national employees, Korean service contracts, and Korean construction contracts, serving as a source of economic growth for communities that host USFK facilities. Future increases in the ROK burden sharing contribution through 2013 are tied to changes in the ROK consumer price index.

The Command's Good Neighbor Program continues to make great progress in strengthening the U.S.-ROK Alliance. The purpose of the program is to conduct community outreach events that engage and connect the Command with the local Korean community, government, media, business, and educational institutions in order to create understanding and appreciation for the mission of USFK. Good Neighbor Program events educate, inform, and familiarize Koreans with the role USFK plays on the Korean Peninsula. This direct engagement allows Americans and Koreans to develop mutual understanding of one another's cultures, customs, and lifestyles, often leading to the formation of lifelong friendships between members of the two communities.

Examples of events conducted by the Good Neighbor Program include English-language camps, speaking engagements by U.S. military personnel, and security education programs which include tours of the Joint Security Area/Demilitarized Zone and USFK installations. The program promotes two-way exchange between USFK personnel and people of our host country. It also helps foster exchange, understanding, and cooperation between members of USFK and the Korean communities that exist alongside USFK facilities. Some 2,595 events were conducted during 2010 with the participation of 146,543 local nationals. It is also noteworthy that the ROK Ministry of National Defense operates a similar program called Friends Forever. Having a purpose of strengthening the U.S.-ROK Alliance and nurturing friendships between Americans and Koreans, the program gives USFK personnel the opportunity to experience Korean culture by participating in various host-nation sponsored events and tours. Both the Good Neighbor Program and Friends Forever strengthen the Alliance at the professional and personal levels. While it is hard to empirically identify effects of the Good Neighbor Program, opinion surveys done by the Department of State show that since the program was established in 2003, the

[15] It should be noted that the ROK is already participating in about eight international peacekeeping operations and supporting disaster relief and recovery operations in Haiti, anti-piracy efforts in the Gulf of Aden, and operates a Provincial Reconstruction Team in Afghanistan. The ROK established a 1,000 person International Peace Support Force military unit in 2010 that is capable of deploying to international peacekeeping operations within 1 month of being ordered to do so. The ROK has also become an active participant in the Proliferation Security Initiative (PSI). After endorsing the PSI principles in May 2009, the ROK organized the Eastern Endeavor PSI maritime interdiction exercise in October 2010, hosted the PSI Asia-Pacific Regional Workshop from 28–29 October 2010, and joined the PSI's Operational Experts Group in November 2010. ROK President Lee Myung-bak stated during a Korean War anniversary speech on 28 September 2010 that Korean armed forces must "become one that contributes to the betterment of mankind, to global peace and stability, and prosperity."

[16] U.S. dollar figure calculated by using a forecasted average 2011 Korean Won/$U.S. exchange rate of 1,094. This forecasted exchange rate was obtained from the December 2010 monthly economic report published by the Korea Development Institute.

percentage of Koreans that have a favorable opinion of the United States has increased from 47 percent to 74 percent. Additionally, the percentage of Koreans that believe USFK is important grew from 75 percent to 87 percent.

Finally, although not under the purview of USFK, the United States maintains a robust Foreign Military Sales (FMS) program and a Defense Armaments Cooperation Program with the ROK that helps strengthen the Alliance. These programs promote interoperability between U.S. and ROK forces and thus create a more capable combined force. As of March 2011, the ROK has 587 active FMS cases that were valued in total at $13.5 billion. During fiscal year 2010 the ROK purchased $966.9 million in FMS, making it the 11th largest FMS buyer in that year. The ROK registered $7.1 billion in FMS agreements over the 2002–2010 time period. FMS sales were augmented by a robust military training program. In 2009, the ROK paid to send 648 students to the United States for training in a variety of courses. Total expenditures by the ROK for FMS training were valued at $60.7 million during the 2002–2009 timeframe.

Improve Quality Of Life

Improving the quality of life for servicemembers, DOD civilians, and their families is my third priority. My overall objective is to establish the infrastructure and operational climate that makes Korea the assignment of choice for DOD personnel. In order to achieve this objective and support this priority, the Command is currently implementing two key initiatives: the repositioning of U.S. forces stationed in the ROK and tour normalization.

Repositioning of U.S. Forces in the ROK

The U.S. and ROK Governments have agreed to consolidate and relocate American forces stationed in South Korea onto two enduring hubs south of the capital city Seoul. The relocation decision was prompted by two key factors. First, prior to 2005, the Command had 107 installations of various sizes in locations more or less where they had been when the 1953 Korean War Armistice Agreement went into effect. Second, the headquarters installation of U.S. Army Garrison (USAG) Yongsan is located in the center of Seoul, a city of some 10 million people that is highly congested. Over the years this basing arrangement created a host of problems for USFK. These problems included civilian encroachment, declining quality of life for Command personnel due to aging and deteriorating facilities, and base locations that were no longer optimally located for the conduct of military operations today. All of these problems made it harder for the Command to train and maintain readiness.

The U.S.-ROK Alliance addressed these problems by developing two separate relocation plans for USFK. The first plan, called the Yongsan Relocation Plan (YRP), will move most forces currently stationed in and around Seoul and Headquarters United Nations Command activities to USAG Humphreys (about 40 miles south of Seoul). The majority of costs associated with this relocation plan will be paid by the ROK. Under the YRP, however, a residual Command element remains in Seoul to facilitate communications and maintain relationships with the ROK government and other organizations and actors in the capital area. The second relocation plan, named the Land Partnership Plan (LPP), consolidates U.S. forces in locations north of Seoul to areas south of this capital city and expands infrastructure at Osan Air Base and Camp Mujuk as well. Costs associated with the LPP will be shared between the ROK and United States. Provisions in the LPP help ensure continued readiness by providing U.S. forces dedicated time on ROK training areas and ranges.

Forces being repositioned under the YRP and LPP will be moved onto two enduring hubs south of Seoul: a southwest hub and a southeast hub. The southwest hub is centered on Osan Air Base and USAG Humphreys. It will be the future centerpiece of U.S. military force structure in Korea. This hub is already home to the headquarters of 7th Air Force and over time, as the repositioning plans are executed, will also house the future KORCOM, 8th Army Headquarters, and 2nd Infantry Division. The southeast hub will include USFK installations located in the cities of Daegu, Chinhae, and Busan. This hub will serve as the logistics distribution center and storage location for wartime and contingency prepositioned stocks. When completed, the two enduring hubs will be world-class installations that create a host of operational efficiencies and quality of life improvements for Command personnel. The hubs also increase force protection and survivability by moving a majority of personnel and equipment outside the tactical effective range of North Korean artillery.

The repositioning of U.S. forces in Korea will occur in two distinct phases: consolidation and relocation. Phase I—consolidation—is currently underway. The Com-

mand has returned 36 installations to the ROK so far, in the process giving over 12,000 acres of land back to the Korean people. In turn, the ROK has acquired about 2,300 acres of land around USAG Humphreys in order to support development and expansion of that hub. The ROK has so far granted 1,017 acres of this acquired land to the United States for garrison development. This initial land grant allows the U.S.-ROK Alliance to begin planning, designing, and coordinating for the necessary construction. The remaining 1,300 acres of land will be granted as needed to support repositioning under the YRP and LPP. At the end of 2010, there were 24 projects under construction at USAG Humphreys, which had a combined value of $1.3 billion. Facilities under construction included barracks, vehicle maintenance, family housing, an airfield hanger and operation building, fire stations, and upgrades to utility infrastructure. An additional $3.5 billion worth of facilities and infrastructure were under planning and design. Phase I consolidation should not be viewed in any way as a lessening in U.S. commitment to ROK security—the current U.S. troop level in Korea (28,500) will be maintained, as affirmed in the October 2010 U.S.-ROK Security Consultative Meeting Joint Communiquè.

Phase II of repositioning will involve the movement of forces onto one of the two enduring hubs discussed above. Once this phase is completed, U.S. forces will utilize 48 separate sites (many of which are training ranges and ammunition depots), well below the 107 facilities maintained prior to 2005. Movement under the repositioning initiative will not reduce the Command's "fight tonight" readiness. Moves in the relocation plan will be packaged and executed in manageable components that will allow units to maintain their full spectrum of operational and support capabilities. Completion of the repositioning initiative will be of great benefit for the U.S.-ROK Alliance because it improves readiness and soldier quality of life, realizes stationing efficiencies, signals continued American regional commitment, improves the combined capability to deter and defend against aggression directed at the ROK, improves command and control, optimizes use of land in Korea, and enhances force protection and survivability.

Tour Normalization

The U.S. DOD approved an increase in the tour lengths for servicemembers permanently assigned to the ROK in December 2008. As noted in the 2010 Quadrennial Defense Review, DOD's long-term goal is to phase out all unaccompanied tours in Korea and change the status of U.S. forces in the ROK from being one of forward-deployed to one of being forward-stationed with family members. The decision to "normalize" tours in Korea was supplemented in October 2010 when the Secretary of Defense directed that USFK and the Services proceed with full tour normalization as affordable but not according to any specific timeline. Once completed, tour normalization will create an environment where most USFK servicemembers are either on a 3-year accompanied (with family members, also known as command sponsored) or a 2-year unaccompanied tour (including those without dependents), a significant change from the current operational environment where the majority of Command military personnel serve on 1-year unaccompanied assignments. This policy change better aligns USFK tour rotations with those practiced at other forward-stationed locations such as Europe and Japan.[17]

Initial implementation of the tour normalization initiative is currently under way. Since 2008, the number of families in Korea has increased from 1,600 to over 4,000 at the end of 2010, with an expectation that this figure will grow to 4,636 by the end of fiscal year 2011. Once tour normalization is completed all military personnel with dependents (about 14,000) assigned to the ROK will able to be accompanied by their families. In order to effectively and fairly manage the distribution of command sponsored positions amongst Command personnel, a three-category position-based prioritized allocation system was established in November 2010, where the difference between categories is based upon factors such as the importance of a given position to mission accomplishment and continuity. The position-based allocation system improves force readiness by giving priority to those occupying key leadership billets or performing jobs that require critical and special skills and training. Expansion in the number of command sponsored families in Korea is directly tied to growth in the necessary infrastructure to support these families. Necessary infrastructure includes housing, medical facilities, and—in particular—schools.

Tour normalization provides a host of benefits. First and foremost, it improves force readiness and combat capability by keeping trained military personnel in place for longer periods of time, decreasing the annual turnover of Command personnel

[17] It should be noted that in August 2009 the standard length of tour for USFK civilian personnel was also normalized. Civilians now serve an initial tour of 3 years in length, as opposed to the 2-year tour that previously existed.

and thus lowering turbulence in the organizational environment and permanent change of station costs. About 85 percent of USFK servicemembers currently rotate each year. By normalizing tours, force stability and continuity will be improved, allowing for the retention of trained and ready personnel and reducing the stress placed on troops, units, and military families that emanates from frequent rotations. Normalized tours promote the operation of sustainable personnel rotation rates that protect the force's long-term health and provide military families with greater clarity and predictability regarding servicemember deployments as called for in the 2010 Quadrennial Defense Review. It will create a training and stationing environment in Korea similar to that faced by units located in Europe and Japan. In the process, the interoperability of U.S. and ROK forces will be improved and the cultural awareness of American military personnel serving in South Korea will be enhanced, thus strengthening the U.S.-ROK Alliance.

Tour normalization also improves the quality of life for Command personnel. By eliminating needless family separations (currently about 10,000 per year) and providing servicemembers with facilities that meet modern DOD standards, readiness and troop morale will be improved. The initiative also signals a long-term U.S. commitment not only to security of the ROK—a key Alliance partner—but to the broader region of Northeast Asia as well. Although it will take time to build the appropriate infrastructure needed to support a larger number of family members in the ROK, the Command is dedicated to making full tour normalization a reality in South Korea. Now is the right time to effectuate tour normalization because of the ability to leverage off other Command transformation initiatives underway such as infrastructure being constructed under the YRP and LPP programs.

Although defense of the ROK is our number one priority and will never be compromised, given the lengthened time of tours under tour normalization, U.S. forces stationed in the ROK will become available to support regional exercises and global operations. Prior to tour normalization, providing this type of support was limited due to dwell time requirements and considerations related to repeated unaccompanied deployments. This aspect of tour normalization supports the Army Force Generation Model, reduces uncertainty for servicemembers and their families, enables a more adaptive and flexible U.S. force posture on the Korean Peninsula, and provides a defense capability with long-term capacity for regional and global defense and security cooperation.[18] It needs to be emphasized, however, that a more regionally and globally flexible U.S. force in South Korea will in no way jeopardize or lessen U.S. commitment to defend the ROK. In its totality, tour normalization will enhance force readiness, provide greater stability for military personnel and their families, improve quality of life, and demonstrate in no uncertain terms U.S. commitment to an enduring force presence in the ROK.

IV. UNITED NATIONS COMMAND

The United Nations Command (UNC) continues to exercise its responsibilities for implementing and enforcing compliance with the Armistice Agreement. In this regard, the UNC component of the Military Armistice Commission conducted two key special investigations over the last year, one related to the March 2010 sinking of the ROK naval ship *Cheonan* and the other related to North Korea's artillery attack on Yeonpyeong Island in November 2010. As discussed earlier, in both cases the UNC Military Armistice Commission found that North Korea's unprovoked attacks constituted serious violations of the Armistice Agreement. The Commission's investigative work showed that until the Armistice Agreement is superseded by a peace agreement, the UNC will continue to faithfully execute its Armistice Agreement implementation mission and endeavor to resolve through negotiations violations of the Armistice Agreement.

The number of countries actively participating in UNC expanded during 2010. On 23 November of that year, the Republic of South Africa officially rejoined UNC, becoming the command's 16th active participating nation.[19] The Republic of South Africa fought in defense of the ROK during the Korean War and its decision to become an active participant in UNC once again was most welcomed by the Command. Joining a ready-made coalition of now 16 countries, South Africa stands firm with the other UNC nations to defend the ROK from aggression. The nations of UNC sym-

[18] This year 7th Air Force and 8th U.S. Army forces will participate in the exercises Cobra Gold (Thailand) and Balikitan (Philippines). This is the first time that forces from 8th U.S. Army will participate in these two annual exercises.

[19] The 16 UNC member countries are Australia, Belgium, Canada, Colombia, Denmark, France, Greece, The Netherlands, New Zealand, Norway, Philippines, South Africa, Thailand, Turkey, United Kingdom, and the United States.

bolize an international commitment to deter aggression against the ROK and the respect held for this nation as a key member of the international community.

The UNC continues to maintain a rear headquarters in Japan. Unique to that presence is a status of forces agreement that allows the UNC Commander to use seven UNC-flagged bases in Japan for the transit of UNC aircraft, vessels, equipment, and forces upon notification to the government of Japan. During 2010, four naval vessels and four aircraft called on ports in Japan under the auspices of the UNC. Almost 1,000 military personnel participated in these visits. The multi-national nature of the UNC rear headquarters is reflected in its leadership. Last year for the first time, a senior officer from Australia assumed command of the headquarters, while the deputy is an officer from Turkey.

V. SUMMARY

The Korean Peninsula sits at the heart of Northeast Asia, a dynamic region whose global influence is growing and has significant national interests for the U.S. North Korea's unprovoked attacks on the *Cheonan* and Yeonpyeong Island last year and its nuclear programs show the ongoing security challenge posed by events in Northeast Asia and the threat North Korea remains to regional peace and stability. By maintaining a U.S. military force presence in the ROK, a stabilizing presence is maintained that allows for the implementation of strategies to de-escalate crises should they occur and thus promote peace and stability on the Korean Peninsula and in Northeast Asia as a whole. Forward-stationed U.S. military forces in the ROK also create opportunities for enhanced American engagement with a key alliance partner as well as with other states and key actors throughout the region.

My three command priorities of being prepared to fight and win, strengthening the U.S.-ROK Alliance, and improving the quality of life for Command personnel are enduring and serve as guiding principles for all key initiatives pursued. The Strategic Alliance 2015 plan—as a comprehensive plan for evolution of the military component of the U.S.-ROK Alliance—synchronizes American and Korean transformation efforts designed to build adaptive and flexible force capabilities to deter provocations and aggression against the ROK and to defeat aggression should it occur. The repositioning of U.S. forces in the ROK improves force readiness and soldier quality of life, realizes stationing efficiencies, signals continued American commitment to defense of the ROK and engagement with the broader region, and enhances force protection and survivability. Tour normalization keeps trained and ready military personnel in place for longer periods of time, improving combat capability, lowering turbulence in the organizational environment, and reducing the stress placed on troops, units, and families.

I am extremely proud of the soldiers, sailors, airmen, marines, DOD civilians, and their families serving our great Nation in the ROK. Their selfless service promotes peace and stability on the Korean Peninsula as well as in the broader region of Northeast Asia. Your support for them and the U.S.-ROK Alliance is greatly appreciated. I am certain you will agree that our men and women in uniform deserve the very best working, living, and training environment that can be provided, and that we should do everything in our power to provide it. Thank you.

Chairman LEVIN. Thank you very much, General.

Let's have a 7-minute round of questions for our first round.

General, you just made reference to the full tour normalization for our troops and their families in South Korea as subject to being feasible and affordable. As I understand the plan, about 12,000 American families would be living in South Korea when it's fully implemented and full tour normalization is brought about. That would be an increase from about 1,700 families, that's a huge increase in the number of families.

The timing of this seems to me to be questionable, given the belligerence of North Korea and the fact that we have, for instance, delayed the transfer of OPCON of troops from ourselves to the South Koreans. We've delayed that shift again, this time by 2 or 3 years. I do have concerns about the timing of this increase of families to South Korea and the cost.

Putting aside the timing just for a minute in terms of North Korea behavior, let's focus on the cost for a moment. What would

be the estimate for the cost of completing all phases of tour normalization, including the amount of money that would have to be paid for the additional housing? It's my understanding, for instance, that the overseas housing allowance would need to be set at about $4,200 a month at Camp Humphreys, which is a significant increase over the rate of housing that we pay in Seoul, where it's $3,200 a month, and way above what we pay at other camps, comparing to other barracks and housing facilities such as the ones at Camp Casey, it's $1,600 a month, Osan it's $1,400 a month.

It looks like our housing cost with the influx of these 10,000 or so additional families will go way up. There's also moving costs involved. Can you tell us, General, what your estimate is of the additional costs from the full implementation of tour normalization?

General SHARP. Thank you, Senator Levin. First off, at full tour normalization you are correct, it would be about 12,000 families there. But today we have 4,400 families that are there in command-sponsored tours. The number 1,700 families is the number we had back in 2008. With the infrastructure that is currently there, we will be able to support 4,400 families there.

It's also important to note that we also have, in Korea, about 1,600 non-command-sponsored families, those families who have said, "I'm not going to spend another year separated from my servicemember, I'm going to come to Korea because I want to be with my servicemember, and because of the quality of life that we have there."

Everyone is aware of the importance of tour normalization with the increase of the readiness that it brings to our units that are there, with the fact that it shows our commitment, which I think is a great deterrent value to North Korea, and because of the fact that it reduces stress on our families.

Secretary Gates has directed that the Services and I bring to him a plan that is affordable to get to full tour normalization. We are looking at many different options in order to be able to reduce the costs and looking at many different options as far as how long it will take.

For example, there are cost drivers whether we build military construction (MILCON) houses or whether we use public-private ventures in order to be able to fund what we need for the housing in the ROK. The same thing applies to schools, which are the other major cost factor there.

Secretary Gates is getting the report and our estimates this week. He will look at those and make his decisions and recommendations over the spring and into early summer and then direct the Services to include that in the budget that will be submitted to Congress next February.

Chairman LEVIN. Are there any budget impacts for the 2012 budget?

General SHARP. There are not.

Chairman LEVIN. There are no additional families, no additional MILCON, no additional costs at all.

General SHARP. Included for 2012? For 2012 itself, no, there will not.

Chairman LEVIN. The advantages are clear, and you've outlined them very clearly. But there's also some very heavy costs that are

involved here, as well as the question of the security issues when you have a lot more families that are there in this tense time.

There's also a cost issue, Admiral, relative to the move of marines from Okinawa to Guam, and I want to ask you about that as well. As I mentioned in my opening statement, there are two major costs. One is the establishment of a new Marine airfield on Okinawa, and there's also the relocation of about 8,000 marines and their families from Okinawa to Guam.

I used a figure of $10 billion and said the U.S. share was about 40 percent of that. I said that that would be growing because of all the uncertainties and the delays. Senator McCain used a figure that was very different from mine and may indeed be right. I'm not at all challenging the number that he used, but I'm curious about what will the cost be for these major changes to build an airfield and relocate about 8,000 marines? What would be the cost to the Japanese Government, assuming that they're still in a position to make these expenditures, given their present economic challenges? What would be the cost to our taxpayers?

Admiral WILLARD. Senator, the agreed-to amount when we established the framework in 2006 was as you suggested in your opening remarks. It was about $10.3 billion, of which $4.2 billion was United States commitment and $6.1 billion was the commitment of the Government of Japan.

As a consequence of the delays that we experienced last year and the discussions regarding training requirements for the marines that would lay down in Guam, and for the various infrastructure needs of the island of Guam outside the fence line of any relocation, there is a level of uncertainty regarding the end game resource consequence to that that lies outside the framework of the Defence Policy Review Initiative (DPRI). So DPRI, about $10.3 billion, and other uncertainties, depending on the investments made in Guam funding, training ranges, and so on.

As you suggest, there's some uncertainty in all of this and continued delay as a consequence of the Futenma replacement facility and other negotiations ongoing with Japan. The likelihood of the amount being precisely what was agreed to in 2006, is not great. There are definitely uncertainties that will drive that figure higher.

Chairman LEVIN. I am concerned, given our budget situation, about both these situations and their costs. We have to take a very, very close look at both the Korean situation as well as the Okinawa-Guam situation because of the costs involved. If you can give us an update for the record of the best estimate you have of these costs, including anything that's in the 2012 budget request, that would be appreciated.

Thank you both.

[The information referred to follows:]

The 2012 budget request includes two Guam projects to support the Marine relocation from Okinawa to Guam. The first is $79 million for Phase II Andersen Air Force Base North Ramp Utilities. The first phase was funded in the fiscal year 2010 budget and this project is the second and final phase. The second project is $77 million for Finegayan Water Utilities, which will install the water distribution infrastructure at the Marine Corps Main Cantonment Site. Regarding the overall costs to relocate marines to Guam in accordance with the 2006 bilateral agreement, the Department of Defense (DOD) is in the process of conducting an analysis to provide an updated cost estimate incorporating new data and associated costs factors now available since the original estimate was developed for the 2006 agreement. The re-

cent completion of the Environmental Impact Statement provides more fidelity on costs, such as environmental mitigation requirements, impacts to civilian infrastructure directly associated with the Marine Corps relocation, and additional land acquisition to execute preferred alternatives for family housing and live-fire training ranges. This new data is being incorporated into an updated cost estimate to be provided by DOD to Congress.

Chairman LEVIN. Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman. Just to follow up on your questioning, we've gotten a lot of different information and I'm sure that our military is doing the best they can. Perhaps we need to have a hearing on this whole issue and try and sort a lot of it out here. It's a lot of uncertainty. As you pointed out, the budget pressures are far more intense than they've been in the past.

General Sharp, again thank you for your service. You have the benefit of some years of experience with dealing with the issues regarding North Korea. It seems to me that we've been through this cycle for many years now of confrontation, acts of aggression, heightened tensions, then outreach, negotiations, on and on, and we always seem to end up where we were, but unfortunately, it's been coupled with North Korean increased capabilities of both acquisition of nuclear weapons and the means to deliver them.

Has that been your experience, and what would you say to American policymakers if you agree with that cycle that's been going on for many years? How do we break that cycle?

General SHARP. Sir, first off, I do agree with it, that is the cycle that has been going on over the last several years. Unfortunately, we see no signs of that cycle changing. We're in a cycle right now where North Korea is asking for concessions in food, and you put that on top of what they did last year, it does not paint a good future for where North Korea is going, especially for their people.

Then put on top of that the issues that they're working through with succession. I do worry that there could be continued provocations in the future, based upon the cycles that we've seen in the past.

Having said that, both ROK and the United States are working very hard to take the lessons that we have learned from the previous provocations, especially those of last year, and working to make sure that we have a solid plan that will hopefully deter, but if not deter be prepared to very strongly respond to future North Korean provocations.

The attack on November 23 that killed ROK civilians and servicemembers as well as the attack on the *Cheonan* in March 2010 truly changed our relationship with the ROK to say that we have to work together to better deter and respond very strongly to North Korean attacks. That will hopefully change their calculus in the future that they will not do these attacks on ROK.

The last thing I'll say is, North Korea does have an opportunity to change. The world has made that very clear. If they denuclearize, if they promise to not do the attacks in the future and apologize for their previous acts, the world will come to their assistance. But they have to show and demonstrate that commitment before the world is willing to do anything in the future because of the cycle that we've seen so many times in the past.

Senator MCCAIN. Can you envision a scenario in which the North Korean regime is willing to give up its nuclear weapons capability?

General SHARP. Sir, not without a whole bunch of pressure from everyone around the globe. North Korea has clearly said that they are developing this nuclear capability. It is clear that Kim Jong Il believes he has to have it for regime survival. I don't believe that to be true, but it will take people convincing him that the regime is not at risk.

To answer your question directly, no, I do not see that he will give up his nuclear capability.

Senator MCCAIN. Finally on this issue, earlier this year Secretary Gates on a trip there, said that the intercontinental ballistic missile (ICBM) program of North Korea is "becoming a direct threat to the United States" and forecasted that North Korea would develop an ICBM within 5 years. Is that your assessment?

General SHARP. Sir, we see the continuing development of their ballistic missile capability. The second Taepodong launch in 2009 was much more successful than the one before. We continue to see their continued growth and development, and that's where they're putting their money, instead of supporting the people in North Korea. They're putting their money in their military and developing nuclear capabilities, ballistic missile capabilities, and Special Operating Forces.

The timeline that Secretary Gates gave is reasonable and feasible. Again, we tell North Korea that there are better ways to be able to spend their money in North Korea in order to be able to help their people.

Senator MCCAIN. Admiral Willard, how would the successful deployment of a Chinese aircraft carrier change the perception of balance of power in the Pacific?

Admiral WILLARD. Based on the feedback that we receive from our partners and allies in the Pacific, the change in perception by the region will be significant. We recognize that when their rebuilt aircraft carrier begins its sea trial period and test and evaluation period, as early as this summer, that there will be a long period of training and development and eventual exercising preceding any operational capability that it could demonstrate. As a symbol the feedback that we receive in our dialogue throughout the region is that the regional partners regard this step by the Chinese in the midst of what has otherwise been remarkable growth in their military capability as significant.

Senator MCCAIN. It's advertised they have increased their defense spending by some 12.5 percent. Isn't it pretty clear that that masks a lot of the spending that they're making on defense?

Admiral WILLARD. We don't know what their overall defense expenditures are, Senator McCain.

Senator MCCAIN. Isn't it your estimate that it's more than the 12.5 percent that's advertised?

Admiral WILLARD. Definitely.

Senator MCCAIN. Is there any truth to speculation that the stealth technology that went into the J–20 could have been acquired or stolen from the United States?

Admiral WILLARD. I read an account that indicated that perhaps there was an exchange of information as a consequence of the 1999

Kosovo campaign and the loss of a F–117 that occurred there. I don't know that that's the case. We're viewing the outline of that aircraft and attempting to ascertain its low observable characteristics. But to answer your question directly, Senator, we don't know.

Senator MCCAIN. Wouldn't you welcome our involvement in this whole issue of Guam, Okinawa, all this issue? Sometimes it may appear that you're operating under some parameters that perhaps have been overtaken by time and events.

Admiral WILLARD. There are many complexities involved in that particular aspect of the DPRI. Recalling that DPRI has 19 different parts to it, some of which are being executed today, so much of the realignment within Japan is occurring. This particular aspect of it has been particularly complex, and I would welcome overview of it.

Senator MCCAIN. Thank you.

Thank you, Mr. Chairman. I thank the witnesses again.

Chairman LEVIN. Thank you, Senator McCain.

Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Thanks to both of you. General Sharp, I want to come back to the quote by Secretary Gates when he was in China in January that Senator McCain referenced. He said: "With the North Koreans continuing development of nuclear weapons and their development of ICBMs, North Korea is becoming a direct threat to the United States."

I assumed when I read that that he was saying to his hosts in Beijing that the North Korean threat to the United States is not just growing, but it's changing in nature, and that Beijing should not expect that the United States would have limitless patience with North Korea's behavior. I wanted to ask you, and then I'll ask Admiral Willard if you want to add, whether, one, you believe that North Korea is becoming a direct threat to the United States; and second, whether you think that China gets the message that, and this is where I'll invite you in, Admiral Willard, whether our patience with regard to the Six Party Talks and the rest is limited?

General SHARP. Sir, I do agree that North Korea is becoming a direct threat to the United States, and it's continuing to develop capabilities that are also a threat against the alliance and our servicemembers, not only in ROK but in the whole region.

Admiral Willard I think could better answer the question on China.

Senator LIEBERMAN. Admiral?

Admiral WILLARD. Thank you, Senator. You summarize it very well. We have both a threat that has emanated from the Korean Peninsula, that began as a peninsular threat, later to range its neighbors, and now to the extent that they're attempting to weaponize an ICBM becomes an international threat, and for sure a potential future threat to the United States.

It's important to note that the People's Republic of China are treaty allies to North Korea. It's appropriate that they understand the United States' impatience and recognition that what is occurring on the Korean Peninsula is not static or stable, but rather we have seen an advancing nuclear capability being developed in the midst of what are very traditional conventional provocations and the cycle that was described earlier.

We have a significant challenge on the Korean Peninsula, one that we cannot allow to fester longer. From the standpoint of a reflection of impatience, that's a fair statement.

Senator LIEBERMAN. I appreciate the answers from both of you. Of course, I agree that North Korea is becoming, by its developments, technological, nuclear weapons, ICBMs, a direct threat to the United States. Of course the leadership of the country is unpredictable and hostile toward us.

Incidentally, I just want to share with you something that you may have seen that I was shown. It was a recent report in North Korea's central news agency that said that western military action in Libya demonstrates that Qadhafi was mistaken to disarm nuclearly, in terms of his nuclear program, and that North Korea therefore will maintain its deterrent.

I know there's always a lot of rhetoric spewing out of there, and we always come back, when we're dealing with North Korea, to the Chinese who have the most influence on them. As this threat comes together and more directly threatens the United States, what more can we do to convince the People's Republic of China that they too have an interest in curtailing this belligerent behavior by the North Korean Government?

Admiral WILLARD. Senator, that dialogue is occurring. As you suggest, it is directed at Beijing. China is the closest partner that North Korea has. China is North Korea's only treaty ally. Unquestionably, given the services that China has performed on behalf of North Korea in the past, China has influence in Pyongyang. How much influence is a subject of debate and often discussion between China and its international partners.

The focus of the dialogue and making it clear in Beijing that the situation on the Korean Peninsula has changed both in South Korea and their willingness to tolerate the continued provocations that have become deadly and compressed a timeline, as well as the impatience of the international community over the nuclearization piece, that China's understanding of the acuteness of both those things is an important factor in generating what influence they can exert over Pyongyang in order to change this calculus.

Senator LIEBERMAN. I agree. Obviously, we're all concerned about U.S. overreach and pressures on our budget now, and it bears saying that in our reaction and our concerns about North Korea's growing capabilities, we are joined with even more intensity because of their geographic location by our two, I would say, two closest allies in the region, South Korea and Japan. I'm right, I assume you'd agree?

Admiral WILLARD. Yes.

Senator LIEBERMAN. I know in response to the *Cheonan* and the Yeonpyeong Island incidents the leadership of South Korea has made it clear that it's not going to tolerate that kind of behavior again and that we've strengthened our combined response capabilities.

I wanted to ask you, General Sharp, in the event of another such attack by North Korea do you believe that South Korea and the United States are prepared to deliver an effective response?

General SHARP. Sir, I do. Since November 23 we have been working on a whole range of possible provocations from North Korea

with General Han, the ROK Chairman of the Joint Chiefs of Staff, and the Minister of Defense, on plans that in self-defense, ROK will immediately strike back in a proportionate manner, and then looking at what bilateral responses we would need and potentially do to deter future provocations.

I do believe we are prepared, yes, sir.

Senator LIEBERMAN. I appreciate that. I thank you for it, and I hope that the leadership in North Korea understands that.

Thank you both very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Ayotte is next, and then after her would be Senator Reed. Senator Reed is able to stay for a while. I must leave now and I very much appreciate Senator Reed taking over for that period of time.

Senator Ayotte.

Senator AYOTTE. Thank you, Mr. Chairman.

Admiral Willard and General Sharp, I want to share the sentiments of others on the committee and thank you for your distinguished service to our country. Please express our gratitude to all that serve underneath both of you.

I wanted to follow up on the questions that Senator McCain and Senator Lieberman asked you with respect to North Korea developing an ICBM capability. Just my follow-up would be, in order to defend the United States, do we have enough ground-based interceptors to be able to? We're obviously dealing with a threat to South Korea. When you hear about them developing an ICBM capability, do we have sufficient resources to protect our country, and Hawaii, who would probably be one of the closet areas?

Admiral WILLARD. Thank you, Senator. The answer is yes from the standpoint of capabilities. From the standpoint of capacities, I think we have to continue to look at those very carefully. Particularly in our sea-based systems, there are a limited number of ballistic missile defense (BMD) missiles in production, and we are accruing them at a fairly modest pace.

The answer is that against the types of threats that we believe North Korea poses our BMD system, to include our ground-based interceptors, is sufficient. In terms of future capacities and future contingencies, we're going to have to continue to study the strategic landscape in the western Pacific, especially in northeast Asia and on the Korean Peninsula, understand it, and adjust those capacities accordingly.

Senator AYOTTE. Thank you very much.

I also wanted to ask you, Admiral, questions about the capabilities of LeT and the growth of LeT, which originally was a terrorist organization focused on Kashmir in India. Based on your written testimony, you've said in your statement that LeT is also now deliberately targeting westerners and engaging coalition forces in Afghanistan, presenting a problem for our troops in Afghanistan.

Can you let us know what your assessment is in terms of LeT becoming a global terrorist organization and what threats they present to us, and in particular what more we should be doing to address those threats?

Admiral WILLARD. Thank you, Senator. Within the confines of an unclassified hearing, I'll attempt to characterize it.

Senator AYOTTE. Of course.

Admiral WILLARD. LeT, as you are aware, is a Pakistani-based terrorist organization that's been in place for many years. It has declared jihad against the west and specifically against the United States in the past.

Also as you suggest, it has historically been focused on the Kashmir region, particularly in order to conduct attacks inside India, and it was responsible for the attack in Mumbai that we're all very familiar with.

We know that LeT is currently laid down throughout South Asia. We're currently working in Nepal, Bangladesh, Sri Lanka, the Maldives, and India in order to build those nations' capacities or assist in building their capacities to attempt to contain LeT in those areas.

But also in your question you allude to my testimony, which states that they are a broader organization than that. They're conducting attacks against our people in Afghanistan today. We have evidence of LeT's presence in Europe, in Asia, the broader Asia-Pacific, and in the past even in Canada and the United States. Unquestionably they have spread their influence internationally and are no longer solely focused in South Asia and India, although that continues to be their main training ground and India continues to be their main target.

Senator AYOTTE. Thank you very much, Admiral. Just as a follow-up, I know it's outside your area of command, however, when you look at LeT and the relationship with the Pakistani Government, that's an important relationship to us in terms of engaging in the war against terrorism and the war in Afghanistan. At the same time, their existential enemy is India.

I'm sure working with your counterpart that has responsibility for Pakistan, but what thoughts do you have in terms of that dynamic and working together between our relationship with India and Pakistan and managing LeT and getting Pakistan to really act to root out terrorism within its own country?

Admiral WILLARD. We have a partnership with both these nations. From a military-to-military relationship standpoint, the U.S. Central Command (CENTCOM) Commander, General Mattis, is my counterpart that covers the military relationship with Pakistan. Our two staffs work very closely and continually reinforce one another's knowledge of the Asia-Pacific, India, and South Asia in particular, as we exchange with CENTCOM and they share their perspectives with regard to our relationship with Pakistan and the rest of CENTCOM's AOR in those exchanges, so that we understand that dividing line that exists between our two respective regions.

That said, the discussion regarding the government of Pakistan's relationship to LeT is a very sensitive one. It continues to be a discussion item between the U.S. Government and the Pakistan Government in Islamabad, and will continue to be. LeT is historically linked in that capacity. The Government of Pakistan has denounced that linkage between LeT. The Indian Government would offer that it still exists.

Given the United States' relationship with both India and Pakistan and the importance that we place on those relationships, it's important that this particular discussion continue to take place and that we continue to work with the Government of Pakistan, as you say, to root out terrorism that exists inside their borders.

Senator AYOTTE. I know that my time is up. Admiral, it obviously is going to be very difficult for us to really root out the actions of LeT without the Pakistan government actually getting the terrorism outside of their own country really acting within their own country, with our assistance.

Admiral WILLARD. The center of gravity exists there, I agree with you.

Senator AYOTTE. Thank you both.

Senator REED [presiding]. Thank you very much, Senator.

Gentlemen, thank you not only for your testimony today, but for your service. Particularly, General Sharp, thank you for your extraordinary service. We've met in several different places, Bosnia and elsewhere. Thank you very much, General.

As a point of departure, we understand that the Chinese are increasing their military capacity, Admiral. Do we have a rough estimate of their budget for defense? I know it's hard to definitively say how much they're spending, but roughly do you have any idea how much they're spending on an annual basis?

Admiral WILLARD. I don't, Senator. I'd prefer to collect the best of the statistics that we think we do have, perhaps at a classified level, and provide that on the record.

Senator REED. Okay, that's fair. It's just that it strikes me that they have over the last decade or more been able to not only expand their economy, but also increase in more sophisticated weapons, while we have been committed to struggles in many different parts of the world, while still in their capacity maintaining trade, sea lanes open, all of which they take great advantage of. They've been able to do things because of our involvement and commitment and resources directed elsewhere. But let me take those numbers for the record.

[The information referred to follows:]

[Deleted.]

Senator REED. Let me turn to another issue. There have been increasing reports, almost daily reports, of computer intrusions in many different guises emanating from China, and no clear indication whether these are individuals, institutions, or sponsored, et cetera. We recognize too, the doctrine of the PLA calls for rather aggressive offensive and defensive cyber operations, which could be akin to these.

Let me just pose a general question on the cyber threat emanating from China, what you and your command are trying to do about it and the seriousness that you see this dimension of conflict or potential conflict?

Admiral WILLARD. The dimension of warfare is perfectly stated. This is a common area that the entire world now is dependent on. There are international protocols, laws, and policies that eventually will have to be put into place in order to enhance the defensibility of cyber space.

From a military standpoint, we rely on it very heavily for our command and control capabilities. To your point, we defend against attacks into our system every day. I personally think the advent of Cyber Command (CYBERCOM) and the linkage that PACOM has with CYBERCOM, which is a very close one, was a great initiative. It has not only focused our attention on cyber space and its defensibility, but it's built the capacities that we require and personnel that are skilled in this particular area, and it's established the command relationships that I require in order to appropriately fight in that particular commons domain.

I have no question, as you suggest, that in any future major conflict that the attacks into information systems and command and control systems are paramount to anyone's campaign strategy and that we must be proficient in dealing with warfare in this particular area. You're spot on. Again, this is something that we're working on and have been for a number of years, and we're becoming more and more aware of what's in this domain and more proficient at dealing with both the defense of the domain and the active defense should it be required.

Senator REED. I presume from what you've said that you have constant exercises among all of your commands to test both offensive and defensive capabilities?

Admiral WILLARD. I have a major exercise occurring within the next 4 weeks, where CYBERCOM is coming in in some strength to Hawaii in order to work a broader contingency plan, but with a cyber dimension, just as you suggest.

Senator REED. Let me take this down to North Korea, General Sharp, because there have been reports that they are persistently using Global Positioning System (GPS) jammers against systems in South Korea and presumably against our forces, too. Can you tell us what kind of an impact that is having and are the South Koreans and allied forces prepared to respond if this jamming is not sporadic and annoying, but persistent and disruptive?

General SHARP. Sir, there have been some GPS jamming incidents up along the North-South Korean border. They have, as you pointed out, been sporadic over the last several months, that have caused some disruption, but not major disruption. South Korea has called on North Korea to stop this GPS jamming, and if we ever went to conflict we are very confident that we could destroy those jammers very quickly so that they would not affect any of our war plans.

Senator REED. A related question, which the Admiral's insight is very persuasive, that electronic, cyber dimension is part of every major country's war planning, including, I presume, the North Koreans. Can we assume that you feel confident that the South Koreans and allied forces are able, at this juncture, to defeat an offensive operation, cyber operation, by the North Koreans?

General SHARP. By the North Koreans, yes, sir. In fact, in our exercises, as Admiral Willard talked about, with CYBERCOM, we are working to make sure that they are part of our exercises. ROK is also standing up their equivalent to CYBERCOM because they understand the importance of being able to defend all of their networks. We are working very closely together in order to be able to counter this growing threat.

Senator REED. Let me ask a question which I raised with Admiral Stavridis. I'm confident of everything you've said, but I presume also that your troops and the South Korean forces are prepared to fight with compasses and maps, not sophisticated GPS devices?

General SHARP. We are, sir. We work very hard to make sure that we have some redundant backup capability. I don't want to minimize the effect that a strong cyber attack, if we're not properly prepared to defend against it, would have. Our capabilities have really enhanced significantly because of our capabilities in the cyber arena. That's why I think it's so important that we really do dedicate all the work that we're doing worldwide in order to be able to defend our networks.

Senator REED. Thank you very much.

My time has expired. Senator Portman.

Senator PORTMAN. Thank you, Senator Reed.

Gentlemen, thank you for being here today and for your service, Admiral, General, and for all the men and women who are serving under you.

We've talked about a lot of interesting things here today. I missed some of the testimony, but I know you got into some of the issues that are directly affecting both of your commands. I want to turn to Japan for a second, if I could, and the continuing devastation to one of our strongest allies in the world and the strong U.S. response by our military, which I know is greatly appreciated.

Specifically, of course, focused on what's going on with the Fukushima site, which continues to concern the Department of Energy and our Nuclear Regulatory Commission, based on testimony last month before the Senate Energy and Natural Resources Committee which I'm also on. Admiral Willard, if you could give us an update on what you're doing in relation to Japan, how you're helping. I'd also like to know what they've asked for and have they asked for things that we have not been able to provide?

Admiral WILLARD. Thank you, Senator. The current state of the Fukushima Daiishi plants has been properly characterized by the Nuclear Regulatory Commission today as static, but not stable. Japan experienced another 6.6 magnitude aftershock last evening, this one on an island and very close to the coastline. As a consequence, it not only shook up the area that has already been devastated by earthquake and tsunami, but took power down in the Fukushima Daiishi plants for about 50 minutes last night until it could be again restored.

It remains a tenuous condition at the plants. There are six located there, three of which were operating plants at the time of the earthquake and are currently the focus of much effort, Plants 1, 2, and 3, 4, 5, and 6 had been defueled for maintenance, but there are spent fuel pools, swimming pools essentially with tons of spent nuclear fuel in them, across all six of these plants.

We're maintaining oversight of the status of all six and very closely watching what is ongoing with the three that were formerly operating and that are now in a damaged and very tenuous state.

I would characterize the progress being made as steady and we're continuing to see incremental improvement day-to-day as not only the decay heat problem is dissipating, but the Japanese are achieving, through their actions, incremental technical advances

and stabilizing the plants. They recently introduced nitrogen to Plant No. 1 containment vessel, which was a major milestone, and they're pursuing the same thing in Plants No. 2 and 3, and that's designed to keep the prospects of a next hydrogen explosion down.

We're supporting the JSDF in their support to Tokyo Electric Power Company (TEPCO), all of the nuclear agencies, and experts that are now devoted to stabilizing these plants. We have offered a number of capabilities to General Oriki. He in turn requested consideration for several that they felt would fulfill gaps.

For example, we've had unmanned aerial vehicles (UAV) flying over the plants and providing thermal imagery, optics imagery, and other sensors as well, every day to the Japanese in support of this. We deployed a UAV that assesses surface contamination and we fly it every day the weather will permit. We're maintaining a continuous mapping of the surface contamination around the plant area, such that we're able to share that with the Japanese and, frankly, with others, so that we all have the same information that we're working from.

Another example, and a more recent one, is General Oriki requested that we execute a prepare-to-deploy order for 150 marines in a special radiological unit, who have now laid down in Japan to support the JSDF in the radiological areas, such as decontamination and radiological monitoring and so forth. They're conducting work together to exchange views, standards, and are prepared to work together as necessary to continue to advance this stabilization work against the plants.

Senator PORTMAN. Admiral, is there anything that the Japanese have asked that we have not been able to provide?

Admiral WILLARD. No, Senator, there hasn't been. There's a barge that handles contaminated water that the Japanese actually built for Russia, that they have asked for support with, and we don't have a capability like that. There are some capabilities they have sought that perhaps weren't U.S. technologies that were readily accessible. We have by and large fulfilled every request they've made, and we have many other capabilities on standby right now in the event that they require more.

Senator PORTMAN. Thank you.

General Sharp, I just have a minute here. I'm not sure. My clock doesn't seem to be working, which is a dangerous thing for a Senator.

Senator REED. You have a minute at least.

Senator PORTMAN. Thank you.

Thank you, Admiral, a number of us are very interested in what's going on in Japan, and you need to focus on your primary mission at the same time. As a great ally, we would hope that we could continue to provide that kind of expertise and resources.

General, what concerns you most right now on the Korean Peninsula? I know we've talked about the ballistic missile capability and Senator Reed's talked about the jamming capability. What is your biggest concern today on the peninsula?

General SHARP. Senator, it is the continuing development in North Korea of a nuclear capability and a ballistic missile capability, and the history that they have had over the past many decades of provocations and attacks. I hope Kim Jong Il sees that

South Korea has changed and that these provocations and attacks stop. Unfortunately, I continue to worry whether they will continue or not.

My major concern is the continued provocation from North Korea.

Senator PORTMAN. My time has now expired, but maybe we'll have a chance to pursue the sentence you started at some future date. Thank you, General.

Thank you, Admiral.

Senator REED. Thank you, Senator Portman.

Senator Akaka.

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

Admiral Willard and General Sharp, I want to say aloha and welcome to the committee.

Admiral WILLARD. Aloha, Senator.

Senator AKAKA. I thank both of you for being here today. I know the men and women you lead have worked hard and sacrificed to keep our region stable.

General Sharp, let me add my congratulations and appreciation as you retire. Your departure will be a significant loss to the Army and our country, and I want to wish you the best in your future endeavors.

Admiral Willard, I want to thank you for going to Japan to see for yourself the destruction caused by the tsunami and the need for assistance. I also want to tell you that I appreciate you and your wife Donna for meeting with the service men and women and their families and helping them through this stressful period that they've been in. That really brought the human touch to our forces in Japan.

Admiral Willard, the Law of the Sea Treaty has been on the table for years. Recently, Admiral Roughead stated that the most important thing regarding activity in the Arctic is for the United States to become party to the U.N. Convention for Law of the Sea (UNCLOS). If the United States becomes a signatory to the treaty, how would that affect our national security policy and influence in the region?

Admiral WILLARD. Thank you, Senator Akaka. It's a great question. As you have stated, we have not yet ratified the UNCLOS. We took receipt of it in about 1984 and we have been adhering to its legal tenets ever since, so on the maritime domain my forces adhere to the legal framework that the UNCLOS represents.

Not having ratified it is both a perception challenge within the region, it is a messaging issue, with our partners and allies within the region that we haven't, and generates uncertainty as to why we haven't. More importantly, it has kept the United States from the table in advancing the Law of the Sea framework over time.

It is undoubtedly the international norm right now for resolving sea space territorial issues, sovereignty issues, economic exclusion zone issues, resource disputes, as well as establishing the legal framework for conducting our business on the maritime domain and in that environment. As Admiral Roughead suggests, it's very important that Congress ratify the UNCLOS. Not only will it then establish the United States as party to the framework agreements that UNCLOS connotes in sorting through the challenges in the

Arctic and other regions of the world, but most importantly it keeps us at the table as the signators determine where the treaty will go in the future.

Senator AKAKA. General Sharp, with almost 37 years of service, the last few as Commander of USFK, this question has been asked, but if you can add to this: What are the most important keys to ensuring stability on the Korean Peninsula?

General SHARP. Sir, thank you for that question. I think the most important is the continued strong alliance between ROK and the United States and the continuing development as an alliance of the capabilities that we have there from a ROK and a U.S. perspective to deter North Korea and then be prepared for the full range of possible actions that North Korea could take in the future.

Over the last 3 years, as has been said, we've made great progress in that line, with the leadership of President Lee, President Bush, and then President Obama, to form and strengthen the alliance to be able to counter what we have seen North Korea do to become more and more provocative. I am very confident that the alliance now is strong and will grow stronger in the future.

We can't stop. We see North Korea continuing to develop capabilities and we must constantly adjust our plans, both in our exercises and our capabilities there. As we move towards OPCON transition, the continued demonstration of commitment of the United States to Northeast Asia is going to be very important to continue to deter North Korea and really to shape Northeast Asia for the foreseeable future.

Senator AKAKA. General Sharp, recent news articles from ROK indicate that there has been an agreement in principle to allow the Korean chairman of the joint chiefs of staff to command U.S. support troops in case of a provocation from North Korea. Can you tell us your thoughts about this agreement, as well as what the Korean chairman would have under his control?

General SHARP. Sir, the press articles are not correct. If the USFK are going to support the ROK chairman as the lead for countering provocations, they would be under my command and we would be in a supporting-supported relationship with the ROK if both governments agreed to that type of response.

Clearly, in a provocation response, the lead for that is the ROK and the ROK chairman. The United States supports those type of responses from a wide variety of different possibilities, but again that would be agreed to by both of our national authorities.

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

Senator REED. Senator Webb.

Senator WEBB. Thank you, Mr. Chairman.

First, Admiral, I'd like to echo other comments up here and particularly those of Senator Akaka in expressing my appreciation and gratitude to you and your wife and other people in your command for the level of assistance and attention that's been paid to the situation in Japan. There's an old saying that the big part of leadership is showing up, and the fact that we showed up so quickly and the fact that your wife actually went among the people who were in these shelters is an enormous signal from our country to such a vital friend and ally as Japan.

I'd like to also express my admiration for the leadership that you have shown in overseeing the security threats of our country in this region that is so vital to our national interest. You've been a breath of fresh air in my view, a clear head, calm style, and a steady hand on the rudder. That's what we need out there in this part of the world that can become so volatile if things aren't handled in that fashion.

Senator McCain mentioned that he thought we should perhaps have a hearing on the issues of base realignments and the realignment within ROK. Rather than asking a lot of questions on those issues today, I worked as a defense planner in the region looking at these exact issues many years ago, in the 1970s. I was able to revisit Okinawa, Guam, Tinian, and Saipan last February. When I returned, I asked for a full committee hearing, at that time.

I will restate my view that it's extremely important that we get this up at a higher level on the Senate's radar screen. We need to get some solutions in this area for the clarity of our relationships, particularly with Japan, but with all players out there in the region.

I have a concern that we are, at this point, allowing the process to be determined in many ways simply by the momentum of defense planners at a time when a lot of these pieces are in question. I hope we can have a hearing. I'm going to be traveling to ROK, Guam again, and Okinawa in the coming weeks, and Chairman Levin is going to accompany me to Guam and Okinawa. It will be a very important set of visits and perhaps we can try to find ways to at least clarify this matter and move forward.

Admiral, you have mentioned many times your concern with respect to increased Chinese naval activity in this part of the world. I know after my visit last February there was an increase in the operational tempo in the region, the *Cheonan* incident in ROK, the incident in the Senkaku Islands off of Okinawa. I would like to get just your views on the dynamic behind this increase in activity.

It's pretty apparent that the Japanese have begun to adjust the positioning of their military, or at least made some initial decisions in that area. Could you fill us in on that?

Admiral WILLARD. Yes, Senator, I will. To answer the last question first, the Japanese have determined that over the next several years they will re-bias their ground forces from what is currently a focus in northern Japan, the Hokkaido area and northern Honshu, to be more balanced. We'll see their ground forces be laid down further south over time.

Their naval forces continue to advance and they are, in all respects, becoming more influential throughout the region with many of the allies and partners that the United States enjoys. Japan is advancing and adjusting.

With regard to the Chinese and the challenges that we witnessed last year, the assertiveness that was demonstrated in the South China Sea and in the Senkaku Islands near Japan, we believe the motive behind that was a declaration by the Chinese regarding both their sovereign claims over the contested areas within the South China Sea region and over the Senkaku Islands. As well as a declaration regarding Chinese security, and what they termed the near seas, and an assertion that military activity, foreign mili-

tary activity, within those near seas should only come with their permission. This is a desire to influence foreign militaries and particularly the U.S. military from the region.

I would offer that since the discussions that occurred in the ASEAN forums and the very strong statements by Secretaries Clinton and Gates over the course of their participation in the ASEAN regional forum, ASEAN defense ministers meeting, plus the East Asia Summit and the Shangri-La Dialogue, there has been a retrenchment a bit by the Chinese navy. Such that while we continue to experience their shadowing some of our ships that are operating in these waters, we have not seen the same level of assertiveness in 2011 that we witnessed in 2010. Which I take as a positive, particularly given the fact that we have military-to-military relations that have recommenced to a modest extent, perhaps we can make an advancement in that regard.

There is no question regarding their aims to have great influence over that maritime space, and especially over the contested areas that they've laid claim to both the South China Sea and the East China Sea.

Senator WEBB. Thank you, Admiral.

My time has expired, but I would like to get a quick comment, General, from you with respect to this proposed relocation of our military people in Korea. There's a lot of arguments still about the notion of keeping a large American military presence in Korea if it were to be there for the local defense of one nation. I would just like to get your comment quickly on the ability of these forces to deploy to other crisis points outside of Korea.

General SHARP. Sir, we have 28,500 troops in ROK today and Secretary Gates and the President have said that's the right force level, which I agree with, for the foreseeable future. The focus of those troops is number one, every single day, on the defense of the ROK. For the foreseeable future, that is the purpose of our troops there.

As we do move into the future with full tour normalization, if you can have troops there in ROK that have their families there, depending upon the situation in North Korea and what we need based upon what North Korea is doing, it can bring additional options to our Nation as to what to do with our troops.

Senator WEBB. I wish I had more time to discuss that. I may want to in a future discussion.

Thank you, Mr. Chairman.

Senator REED. Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman.

Thank you both for being here and for your excellent service to our country.

I wanted to ask about the Chinese military capabilities in cyber space. The Chinese cyber intrusions have reached a new level of concern. I understand that the Chinese military is becoming increasingly capable in cyber space operations. It's also a concern of mine, especially with respect to our integrated network-centric defense systems.

Would you please describe, Admiral Willard, your concerns regarding cyber security and how best we can reduce our vulnerability? Does PACOM have any plans in place to approach the

problem in a multilateral fashion, including partner countries, interagency, and public-private entities?

Admiral WILLARD. Thank you, Senator. A great question, especially on the multilateral side of it. We certainly have concerns in cyber space. As I've mentioned many times, both to partners in the region as well as in my interactions in Washington, we are defending our networks every day, not solely against Chinese intrusions, but against many intrusions that come from a whole host of global sources.

I depend entirely on cyber space for the command and control of the broader Asia-Pacific and our forces there. I know that General Sharp would say the same thing about his capability to command and control on the Korean Peninsula.

In broader doctrine statements across the board, to include China, in unclassified documents that describe their military goals, the ability to affect the information systems and command and control networks of an adversary are an important basic tenet in all of that. There's no doubt that there's a need to be able to defend cyber space.

The advent of CYBERCOM has been a great initiative on the part of the United States and we're working with CYBERCOM over the coming weeks in a large-scale exercise in Hawaii to advance our ability to both characterize cyber space, the domain that we're operating in, and to sense attacks in cyber space, and to be able to defend in cyber space.

It's critically important to my work and unquestionably there are global challenges, both state actors and non-state actors, that are challenging this particular domain.

The last point I would make is an appeal that the United States in conjunction with the international community must address this. Our allies and partners are coming to us asking for help in this area, to your point regarding multilateral issues, and we have bilateral partners. We have treaty alliances with five nations in the Asia-Pacific: ROK, Japan, the Philippines, Thailand, and Australia. There are cyber space concerns among all those bilateral parties.

It's a very important issue for the international community, and an important alliance issue that we need to deal with.

Senator HAGAN. Do you think more of these threats are actually coming from China than other places around the globe?

Admiral WILLARD. There is a sizable percentage of pressure coming from China, yes.

Senator HAGAN. I'm always concerned about the people that we hire from a technology standpoint, to be sure that we have the resources in our science, technology, education, and math education, we are growing the highly-educated, qualified people to run this. Are you using mostly military or are we contracting a lot of this expertise?

Admiral WILLARD. We're doing both. Right now we're attempting to recruit cyber expertise into our military and then grow that capability inside our military. Undoubtedly, as our economy continues to improve, we'll see pressures to go after that expertise. We're in competition with many that are concerned about information technology experts.

We're attempting to grow from the ground up a capacity within our military, both uniformed and civilian, but uniformed for sure, that will give us this capability.

Senator HAGAN. It's very important for our whole future.

Let me ask a question now on India and Pakistan in a regional context. I know, Admiral Willard, Pakistan is not in your AOR, but I believe it's important to talk about Pakistan and India in a regional context. Securing Pakistani regional cooperation while placating India is a difficult task. Pakistani officials seek a long-term bilateral partnership with the United States based on a regional vision conducive to Pakistani strategic interests and that's going to be difficult to develop as long as there continues to be an India-Pakistani impasse on Kashmir.

Progress is possible if the United States carefully reduces India's expectations for influence in Afghanistan, facilitates the Pakistani movement to reduce its proxies in Afghanistan, and gets India and Pakistan to the negotiating table. Of great importance is the United States making every effort to restore the balance of power between these two South Asian rivals.

How do you see the Pakistani and India impasse regarding Kashmir and the competition over Afghanistan playing out?

Admiral WILLARD. It's an excellent question. There are certainly dynamics between India and Pakistan that are based on historical animosities that we're all aware of, and Kashmir has often been a focal point for that antagonism to play out. The recent concerns in Kashmir that manifested both in demonstrations within the valley and have resulted in some of the accusations that have gone back and forth regarding Chinese presence in the region and so on. Terrorist activity across the line of control are also making this particular challenge acute for the moment.

The Indians have made overtures to attempt to work more closely, at the ministerial level, with Pakistan in terms of ongoing discussions. Unquestionably there remains a level of tension across the border that is very hard to impact. Given the turmoil that has been in Pakistan for the past couple of years, it's hard to imagine that the fragile governance in Islamabad is going to rise to a level where the impasse can be broken in the near term.

To your point, it's important that the United States continue to work with both these partners very carefully and thoughtfully in order to encourage them to come to the table. India has very firm views on this and are sometimes quick to remind us that in their view Kashmir is a bilateral issue and theirs alone to deal with.

The way in which we handle this challenge, the way in which we deal with the two militaries, the way in which we encourage their respective governments to engage, is very important, not just to India and to Pakistan, two nuclear-powered countries, but to all of South Asia and, as you suggest, to the dynamic in Afghanistan that is of great concern to us.

Senator HAGAN. General Sharp, my next question was for you and my time has expired. I will submit that for the record. Thank you.

Thank you.

Chairman LEVIN [presiding]. Thank you, Senator Hagan.

Senator Manchin.

Senator MANCHIN. Admiral Willard and General Sharp, thank you so much. I appreciate it. I know this is going to be a long morning.

Real quick, Admiral Willard, if you will. At a previous Armed Services Committee hearing in March, National Intelligence Director Clapper said he believed that China posed the greatest threat to the United States. Do you agree with Director Clapper's views?

Admiral WILLARD. I don't, although there's a great deal of qualification before the question that was posed could be answered. In terms of the context around the question of what poses a great threat to the United States in the Asia-Pacific, we've discussed the imminent threat that North Korea poses to the Korean Peninsula. The levels of provocations that we've witnessed in a year and the growing threat of nuclearization and advancements in missile technologies on the Korean Peninsula are of grave concern to both General Sharp, myself, and our government as well.

There are many challenges in the Asia-Pacific. China's military advancements are certainly a great challenge. If I were asked what is the biggest challenge I face as the PACOM Commander, I would tell you it's the relationship between the United States and China, and to advance that relationship by becoming a constructive partnership, if that's possible.

I would focus on the more acute threats in answer to a question that didn't have a great deal of context surrounding it.

Senator MANCHIN. General Sharp, at every Armed Services hearing I learn about the efforts of DOD to build capacity of friendly nations, especially in Afghanistan and Iraq. Our ultimate goal is the independence and professionalism of the Nations' security forces so they can defend themselves. It begs the question with Korea. We've been there for quite a while, since 1954. Is there any end in sight of our involvement in that task?

General SHARP. Sir, to begin with, the ROK military is very strong and they are growing stronger every day. If you look at what they are producing internally for their military, what they buy from us from foreign military sales (FMS), the exercises that we work together on, the plans that we have developed, and the most recent defense reform plan that Minister Kim and General Han put out. It's going to make them even a stronger joint capable organization to be able to deter and defeat the threats of North Korea, they are very strong. I don't want to underplay their capability.

Second, we have vital national interests in Northeast Asia that we should protect. If you look into the future, I think that our commitment and what our Armed Forces bring to the plans that we have for the Korean Peninsula, we ought to keep them for the foreseeable future. Not only from a deterrent perspective, but if North Korea were to miscalculate and do an attack, to be able to as quickly as possible stop that attack and defeat the North Korean military.

Senator MANCHIN. Would you know what percentage of South Korea's budget is currently contributing to the U.S. force structure in South Korea?

General SHARP. Sir, they pay about 47 percent, 46, 47 percent of our nonpersonnel stationing costs in Korea. We get approximately

somewhere between about $800 million, depending upon the won rate of the day, in burdensharing money each year. The ROK signed up for a 5-year agreement with inflation on it back in 2009 that goes to 2013 to help defray our personnel stationing costs there.

Senator MANCHIN. Do you think they will be able to contribute more. As we can see, the financial burden that we have right now taking care of America is getting ever more increasing.

General SHARP. Sir, that will be up to the negotiations in 2013, as this goes through. I will say that the ROK support is, not just monetary, but along all avenues, our troops in the ROK. We feel it on a day-to-day basis and it is fantastic. I've never been stationed anywhere in the world where the support from the people, from the military, is as strong as it is in the ROK.

Senator MANCHIN. Admiral Willard, for the last 2 decades China's been building its regional and world influence by spending money on large infrastructure projects in impoverished countries and buying up the rights to natural resources in those countries, which are very, very alarming to me. How does this strategy affect PACOM's efforts to exert our influence with the countries in your AOR? How do you see them moving in? That's a follow-up to the first question I was asking about, the ultimate threat or intimate threat.

Maybe it's alarming from the military buildup, but also economically what they're doing and the control they'll have of nations by using their economic might more than their military might.

Admiral WILLARD. I might answer it two ways. Unquestionably, the economic influence of China throughout the Asia-Pacific region is profound. I might offer, the economic influence of China globally has been remarkable in the last couple of decades.

On the one hand, there is great benefit to that to this region. This is a region that has its share of poverty, misshapen militaries, challenged governances, and to some extent the benefits of China's economic boom have become larger Asia's economic boom, and that's of benefit to the security and stability in the region.

On the other hand, the influence they attempt to exert and in that way exact favor from some of these countries is the influence that we might be concerned about. I would offer that as China was exerting its influence last year in a very assertive way that we were receiving general appeals across the Asia-Pacific from among our partners and our emerging partners with regard to a desire for more U.S. influence in the region. They're asking for the United States to be present and asking for our influence to in some ways I think counterbalance what they are being challenged with from China.

But make no mistake, the economy of Asia has benefited greatly from the economic achievements of China.

Senator MANCHIN. Thank you.

Chairman LEVIN. Thank you, Senator Manchin.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

Admiral Willard and General Sharp, thank you both for your service, as I'm sure you've heard numerous times, but we can't thank you enough, and the men and women serving with you and

sacrificing away from their families, most of them, and thank their families as well for their service.

I'd like to ask both of you about the balance of power insofar as submarines are concerned, and specifically whether you are troubled by the increasing numbers and capabilities of submarines on the part of the nations within the area that you have jurisdiction.

Admiral WILLARD. I can start. I think General Sharp can talk a little bit about North Korea's order of battle, its submarine force, which is unique in its various types.

Within the Asia-Pacific region I would offer two points. First, there is an advancing submarine force in the region with regard to China. They've made advancements not just in submarine numbers, but in submarine capabilities as well, both nuclear-powered and conventionally-powered. We have been observing that for some time that this is a sizable submarine fleet.

The second point is what that has generated is a view by the neighboring nations to counterbalance China through acquisition of their own military systems. We've seen, now, neighbors in the region developing and purchasing submarine capabilities with increasing pace, nations such as Indonesia expressing interest in acquiring submarine capability; Malaysia with the Scorpene. Right now Vietnam is acquiring Kilo submarines. Frankly, even the white paper in Australia indicates that the Australians will sizably increase their submarine force.

We've seen submarines proliferate at the same time that we've seen the Chinese inventory grow.

General SHARP. Sir, from the North Korean perspective, we are very concerned about the North Korean submarine capability and the money that they continue to put into their asymmetric threats, especially the special operations versions of their submarines give them that capability. Also and probably most importantly because the North Koreans have demonstrated a willingness to use them, as last year they did when the *Cheonan* was sunk by their submarine.

We are working very hard with the ROK to be prepared to counter, deter, and properly respond to North Korean submarine attacks, and that has been demonstrated through a series of antisub warfare exercises that we've done with the ROK. The ROK is buying more capability to be able to detect North Korean submarines. They understand the importance of that. We are continually focusing our intelligence, surveillance, and reconnaisance efforts to be able to watch what North Korean submarines are doing.

Yes, we have an increasing concern over that.

Senator BLUMENTHAL. Are you satisfied that the United States is building adequately in its submarine program, at the rate now of two a year, to meet those threats so far as our defense is concerned, and also to protect our allies against the threat, even though it may be asymmetric, as you've described it?

General SHARP. Sir, Admiral Willard and Admiral Walsh have been outstanding to be able to help work together, as I said, on exercises to increase our capability. The overall naval one, I'd defer to Admiral Willard on.

Admiral WILLARD. All of us in the Navy and as a combatant commander, I am very encouraged when the *Virginia* buy was in-

creased to two per year, and I'm very satisfied with the bias of our submarine force into the Pacific. Given time, distance factors, and the description that I gave earlier of the increasing numbers of submarines throughout the region, we're appropriately served with both our classes of submarines that are located in the Pacific.

I'm satisfied. I'm continually looking for ways in which the operational availability, the forward presence of those submarines, can be increased. I'm assured that I'm about maxed out, but I can certainly always use more.

Senator BLUMENTHAL. I assume, without putting words in your mouth, that you would be dissatisfied and concerned if the two per year program were reduced?

Admiral WILLARD. I would be concerned about the U.S. submarine inventory, yes.

Senator BLUMENTHAL. Aside from China, where do you think the greatest potential threat in terms of submarine building is among those nations within your command?

Admiral WILLARD. North Korea has remained, with the exception of the small submarines that they export, relatively modest. China's is obviously very sizable. The remainder throughout the region are nations that we are either allied or partnering with and, frankly, so is China. At the end of the day, provided that China emerges more a partner than a competitor in the Asia-Pacific, we'll be well served with the submarine fleet that exists out there.

Russia is a supplier of submarines globally. As a FMS provider, nations in Europe, and Russia in particular, are the big manufacturers of the world's submarines.

Senator BLUMENTHAL. I apologize for what probably is an overly simplistic question, but how would you compare the capabilities of the Chinese submarines to the most advanced submarines that we're producing?

Admiral WILLARD. Unquestionably, the United States produces the finest submarines in the world. When we look at China's capabilities, they are improving. Frankly, that's true globally. The ability to quiet a submarine, the ability to keep conventionally powered submarines submerged longer, are all technologies that are advancing.

The margin inevitably closes in terms of quiet machinery, endurance, and so forth. There is no question in my mind where the finest submarines in the world are produced.

Senator BLUMENTHAL. Thank you very much.

Chairman LEVIN. Thank you, Senator Blumenthal.

Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman.

Admiral Willard and General Sharp, thank you both very much for being here. I apologize for missing your testimony earlier. I had to preside over the Senate.

I was pleased to hear your responses to Senator Blumenthal's questions about our submarine fleet. Connecticut isn't the only State that has a great interest in what's going on there. We follow that very closely in New Hampshire as well because of the Portsmouth Naval Shipyard, I was pleased to hear your very positive responses.

I wanted to ask you, I should direct this first at Admiral Willard, but, General Sharp, you may also have some perspective. Over the last year and a half the North Atlantic Treaty Organization (NATO) has been debating what its future role in the world would be and has developed its latest strategic concept. One of the subjects of debate during that whole process was what its future relationship would be around the world, and Asia of course is one of the very key areas that was discussed.

NATO obviously has a good partnership with Japan, Korea, and Australia. I just wonder if you have any views about what the perspective is among other countries in Asia, and particularly China?

Admiral WILLARD. Thank you. That's a great question and one that we frankly haven't been exploring with our allies and partners to a great extent. I would offer two points. The United States is a NATO ally and very comfortable working across NATO and, as you suggest, with NATO having influence in the region already, the United States welcomes multilateral opportunities globally. It only strengthens our ability to respond to a disaster or respond to a contingency. It's a great enabling function.

Within Asia, I would offer that ASEAN, East Asia Summit, some of the multilateral forums that exist in Asia, are favored greatly by the Asian nations. We've seen a strengthening of those multilateral forums over the past couple of years in particular. I was greatly encouraged by ASEAN's advances last year.

Without having polled my allies and partners in the region, I would offer that, while some level of influence and partnership by NATO in the region would be welcome, there is also an affinity for these Asian multilateral groups and their own ability to handle both the security issues and economic issues within the neighborhood.

General SHARP. The only thing that I would add, from an ROK perspective, President Lee has very strongly said that he understands the importance of global security and the ROK's responsibility to contribute to that. Hence the ROK has a PRT in Afghanistan. They are in eight or nine U.N. peacekeeping missions around the world. They are establishing a peacekeeping force in order to be able to help with peacekeeping issues around the world. They clearly understand the importance of these type of organizations, security, and stability around the world, which they are contributing to.

Senator SHAHEEN. Do you have any perspective on how China views NATO and whether it views it as a threat or a rival?

Admiral WILLARD. Without having discussed NATO with the Chinese, studying the Chinese as we do, the Chinese would offer that they're most focused on multilateral forums with Chinese characteristics ideally, if not Asian characteristics, associated with them. As a consequence they would view a western alliance in through that optic.

Senator SHAHEEN. I don't think anybody today has mentioned the Strait of Malacca, but we hear a lot of concern about what's happening in the Middle East with Hormuz and the Suez Canal, but very little about the Strait of Malacca. It's one of the world's most critical shipping lanes.

I wonder if you're concerned about potential threats to the Strait and what those might be and whether, given China's continued naval modernization, if we should be concerned about how they're viewing the Strait?

Admiral WILLARD. Interestingly, I think China would offer that one of the motives for their naval advancements is their concern over the strategic nature of the Strait of Malacca. In fact, in the Asia-Pacific we have a dozen strategic choke points similar to the Strait of Malacca, none quite that dense in terms of shipping population, but these are strategic choke points that in history have been fought over and continue to be viewed as critical for the movement of commerce in Asia.

But to your point, the Strait of Malacca is handling the bulk of $5 trillion a year in commercial trade for the region and more than $1 trillion a year of U.S. bilateral trade in and out of the region. It's the choke point that empties into the South China Sea, which is so critical and strategic for all of the partners there.

The Strait of Malacca security is important to everybody in the Asia-Pacific. We are fortunate that Singapore, Indonesia, Malaysia, and Thailand have joined together to commit to securing the Strait. They did this some years ago when piracy was a particular problem, and they did a good job of quelling that particular threat.

As we view the importance of that particular choke point in the region, were a conflict in the region to ensue, the Strait of Malacca and its importance in terms of providing resource to the region becomes focal. In the past as Middle East wars have been fought and PACOM has flowed forces in that direction, we've had concerns in the past regarding the security of the Strait as our forces inevitably have to flow through there to get to the Indian Ocean.

Senator SHAHEEN. Does China cooperate on the effort to keep the Strait open?

Admiral WILLARD. They do. They acknowledge the role that the four nations that I mentioned are playing in terms of maintaining the security in the Strait. Again, they're a huge user, as is the United States. They've been the beneficiary of the security that has been provided across the region, at times by the United States, but most recently by the nations that are contiguous themselves.

Senator SHAHEEN. My time has expired, but I'd be interested, whether there are lessons to be learned from the efforts to prevent piracy in the Strait, if there are lessons that could be learned for the Horn of Africa and the piracy threat there?

Admiral WILLARD. The number one lesson in this is the four nations that have joined together to quell piracy in the Strait of Malacca are all successful nation states with strong governance and some level of military power. When we look at the Horn of Africa and Somalia, it is an ungoverned state, without the ability to secure itself, and the center of gravity of those pirates are ashore in that particular area of the world. We are endeavoring to fight them at the far end, at sea, with mother ships and small boats, but we can't get to that center of gravity.

You have the difference between governed states dealing with a piracy issue and an ungoverned territory.

Senator SHAHEEN. Thank you very much.

Chairman LEVIN. Thank you, Senator Shaheen.

Just a few additional questions. The interrelated elements involved in the Okinawa-Guam realignment, is that there be tangible progress under the agreement, towards completion of the Futenma Replacement Facility on Okinawa. Admiral, has there been any such tangible progress yet as it applies to the replacement facility?

Admiral WILLARD. Senator, if progress toward the landfill permit being signed and progress toward a discussion or a decision on airport configuration by the time of the upcoming two-plus-two forum between the United States and Japan can be considered to be significant and tangible, then yes.

Chairman LEVIN. Has the landfill permit, which is required to begin construction of that replacement airfield, been signed by the governor?

Admiral WILLARD. It has not.

Chairman LEVIN. Isn't that the meaning of "tangible progress"? Isn't that a term under that agreement, at least that's always been our understanding, requires that that permit be signed?

Admiral WILLARD. There are six criteria right now that were written into our National Defense Authorization Act last year with regard to the fiscal year 2011 appropriation, and among those six criteria, as you suggest, the "tangible" word is used in each. Whether or not progress toward the signature or the signature itself is regarded as tangible, sir, I would defer to you to decide.

We believe that progress is being made toward the governor signing that document. We believe that subsequently the landfill itself and the seawall need to follow fairly quickly, and as we progress toward the two-plus-two we're hopeful that the final runway configuration debate can be put to rest.

Chairman LEVIN. Admiral, the next question has to do with the force mix for the marines, whether or not, as it's been reported, the marines would prefer to change the force mix to include more operational troops and fewer headquarters units. Is that true? This is relative to the movement to Guam.

Admiral WILLARD. Senator, there is a Marine Corps preferred laydown. We've looked at Guam in particular and, our entire laydown of marines across the Pacific, to include marines elsewhere in Japan. A Marine Corps air wing is located in Hawaii, and the prospects that rotational forces of marines could be located in northern Australia or other locations proximate to Southeast Asia.

The headquarters elements are an important part of that and there are preferences that the marines have expressed with regard to how to distribute the headquarters elements across those Marine Corps air-ground task force units in order to optimize them.

Chairman LEVIN. As it relates to Guam, is there a preference?

Admiral WILLARD. There is.

Chairman LEVIN. Do you know what it is offhand? Is it for a greater number of headquarters units?

Admiral WILLARD. It is for a redistribution of the headquarters that were originally planned.

Chairman LEVIN. To reduce the number of headquarters units, is that what their preference is on Guam, relatively proportionate to the operational?

Admiral WILLARD. It would reduce them, but that's not the purpose. The purpose is to distribute the headquarters so that we have

senior leadership in the appropriate places where marines are laid down.

Chairman LEVIN. I understand.

On the transfer of power issue going on allegedly in North Korea, recently Kim Jong Il's son was not given the position that apparently he was expected to get, a week ago or so. Is that significant in your judgment?

Admiral WILLARD. Go ahead Skip.

Chairman LEVIN. I should have addressed that to you, General, of course.

General SHARP. I don't think it's significant. The continued progression of grooming Kim Jong Eun and putting people in positions of power within North Korea that support the eventual change is continuing.

Chairman LEVIN. General, is there any recent development relative to gaining access to North Korea to account for our Service personnel who are still missing from the Korean War? Any progress on that?

General SHARP. Sir, with the way that North Korea has been conducting provocations last year and continuing the safety of our recovery teams going into North Korea would be of great concern, and we have not moved forward in that. That recovery team really comes under Admiral Willard. He may want to add something to that.

Admiral WILLARD. General Sharp states it correctly. It's the security for those humanitarian-associated teams that we would be concerned about and the conduct of North Korea over the past many months has not been conducive to restarting it.

Chairman LEVIN. Well, the time is out for our vote and we must run along. I want to thank you both again. Good luck to you, General Sharp, on your future endeavors; Admiral, to you and your family. We're delighted you have them with you today. We thank you both for your great testimony.

We'll stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR KAY R. HAGAN

REPUBLIC OF KOREA OPERATIONAL EXPERIENCE

1. Senator HAGAN. General Sharp, in your prepared statement, you indicated that the Republic of Korea's (ROK) military has gained operational experience through deployments to places such as Iraq, Afghanistan, the Gulf of Aden, Lebanon, as well as participation in various United Nations (U.N.) peacekeeping and humanitarian assistance missions. Can you describe how these deployments have assisted the readiness of the ROK military forces to prepare for full-spectrum conflict?

General SHARP. Full spectrum operations have four elements: offense, defense, stability, and civil support (where U.S. Army doctrine defines civil support as the support provided by the Department of Defense (DOD) to U.S. civil authorities for domestic emergencies and designated law enforcement and other activities). By deploying forces to the operations identified in your question above, sustaining those forces over time, establishing and operating the appropriate command and control arrangements and systems, developing intelligence, and creating a secure environment and protecting identified populations, critical assets, and infrastructure, ROK military forces have gained real world operational experience in the conduct of tasks associated with offensive and defensive operations. Additionally, by providing civil security, the restoration of essential civil services, and support for economic and infrastructure development in places such as Afghanistan, Haiti, Lebanon, and elsewhere, ROK military forces have obtained real world experience in the execution of tasks associated with the conduct of stability operations. Thus, when viewed as a

whole, ROK participation in the operations identified in your question above have helped it maintain readiness for the conduct of full spectrum operations.

2. Senator HAGAN. General Sharp, can you describe how they have institutionalized what they have learned from these operational experiences?

General SHARP. The ROK military has institutionalized a process to identify, collect, and disseminate lessons it has learned through the participation in various operations over the last decade or so. Each military unit that deploys to an operation establishes a Lessons Learned Analysis Officer within its S3 staff section. This officer collects lessons learned type information from staff sections across the deployed unit. Once collected, this information is integrated into reports that are provided to the ROK Joint Chiefs of Staff Operations Support Center and a separate organization called the Peacekeeping Operations Center. In addition to the information provided by deployed units, the Peacekeeping Operations Center—which is under the ROK National Defense University—collects material related to the dispatch of troops to various types of operations from other sources such as academia, think tanks, and foreign militaries. The Peacekeeping Operations Center also has academic personnel and various subject matter experts on staff as well as a library that stores and makes accessible lessons learned type material.

Information collected, reviewed, and assessed by the Joint Chiefs of Staff and Peacekeeping Operations Center is provided to the International Peace Support Force (IPSF). The IPSF utilizes lessons learned information provided to it for the purpose of educating and training in preparation for deployment to an operation. The ROK currently is in the process of constructing a deployment training facility near the city of Incheon. Once completed, this facility will have separate training areas for urban operations, garrison protection, check point security, search and rescue, improvised explosive devices, as well as firing ranges for small arms and crew-served weapons. The facility will also house a library stocked with material related to operational lessons learned.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

BASE REALIGNMENT TO GUAM

3. Senator MCCAIN. Admiral Willard, do you believe that the current posture of U.S. forces in the region, including the planned realignment to Guam, is desirable?

Admiral WILLARD. [Deleted.]

4. Senator MCCAIN. Admiral Willard, are there other sites in the region that could be more advantageous for locating or rotating U.S. forces and would welcome such a presence?

Admiral WILLARD. [Deleted.]

5. Senator MCCAIN. Admiral Willard, you mentioned in a hearing last week regarding the realignment of marines from Okinawa to Guam that the recent disasters in Japan have created uncertainties in the future of the Guam build-up. Can you elaborate on the nature of the uncertainties?

Admiral WILLARD. [Deleted.]

6. Senator MCCAIN. Admiral Willard, you mentioned in your testimony regarding the efforts by the Japanese Government to resolve the closure of Marine Corps Air Station Futenma on Okinawa that, "I feel confident that progress—tangible progress—is in fact being made." How do you define tangible progress?

Admiral WILLARD. Tangible progress is best described as a series of milestones. Obviously the landfill permit is a key piece, and it continues to be a significant step; but the Guam Master Plan Agreed Implementation Plan states that "planning must establish clear milestones in the construction of the Futenma Replacement Facility. When achieved, those milestones will prompt associated actions by the U.S. Government in the movement of marines to Guam. . . . " As such, there is no single moment in time that constitutes tangible progress; the point is rather that both the Futenma Replacement Facility and the Guam move should proceed broadly in parallel, synchronized at a strategic level.

7. Senator MCCAIN. Admiral Willard, can you explain your observations?

Admiral WILLARD. [Deleted.]

8. Senator MCCAIN. Admiral Willard, in your view, should the movement of marines to Guam take place without a viable solution to the issues regarding Futenma?

Admiral WILLARD. No. According to the Guam International Agreement and the Realignment Roadmap, the Okinawa-related initiatives are interconnected, specifically, consolidation and land returns south of Kadena depend on completing the relocation of marines from Okinawa to Guam, and the Marine relocation is dependent on: (1) tangible progress toward completion of the Futenma Replacement Facility, and (2) Japan's financial contributions to fund development of required facilities and infrastructure on Guam.

9. Senator MCCAIN. Admiral Willard, from your perspective as the combatant commander responsible for writing operational plans for the Pacific, is the use of Kadena Air Base on Okinawa a reasonable alternative for basing Marine Corps aviation assets on Okinawa as opposed to constructing a new airfield at Camp Schwab?

Admiral WILLARD. No. The United States has explored this multiple times since 1996 and on each occasion determined that consolidation is operationally unworkable and politically untenable. The U.S. longstanding position has been to insist upon Japan building Futenma Replacement Facility before any move from Futenma.

10. Senator MCCAIN. Admiral Willard, with the Air Force drawdown of F–16s worldwide, have you considered moving Air Force aircraft from Kadena to Misawa Air Base in Japan to make room for Marine Corps aviation on Okinawa?

Admiral WILLARD. Yes. We explored moving Navy and Air Force aircraft to Misawa, as well as to other locations like Yokota and Iwakuni, Japan; Anderson Air Force Base, Guam; and Osan and Kunsan, South Korea.

11. Senator MCCAIN. Admiral Willard, the Navy is still in the progress of developing a plan for Marine Corps training ranges on Guam that may include trading properties or the need to acquire private property on Guam. What is your position on the need for live fire training ranges for the marines on Guam?

Admiral WILLARD. The presence of live fire training ranges on Guam is a prerequisite for the relocation. This is a red line and absolute requirement for successful relocation.

Marine Corps training requirements are generally characterized as individual, collective, and Marine Air-Ground Task Force (MAGTF) skills training. The live-fire ranges proposed on Guam are for individual training of the marines (and other members of the joint force) that are stationed on Guam. This training serves as the first in a series of building blocks, e.g., individual skills are necessary before the collective training, which is necessary to be completed before the most complex MAGTF skills training. The live fire ranges envisioned on Guam itself are not for the larger required Combined Arms training used for collective and MAGTF skills training.

As key elements of individual training, the marines conduct live fire training using known distance rifle and pistol ranges, machine gun ranges, and conduct further individual training using facilities such as a "gas chamber", physical fitness fields, and other such types of training. Currently, all of these facilities for individual training used by Okinawa-based marines are located on Okinawa, and are accessible either by foot or by ground transportation. Most of these ranges do not currently exist on Guam itself, and those that do are antiquated or no longer meet the safety requirements.

Not having these ranges for individual training on Guam itself would have severe negative impacts on the individual marines' readiness. This in turn will negatively affect the readiness of Marine units on Guam and their ability to rapidly respond to crises. To compensate for these facilities not being on Guam, the marines would have to deploy an additional two weeks or more during the year off Guam to another location, such as back to Okinawa to complete the training. This adds additional and unnecessary operational tempo to the individual marines and additional costs, both in transportation and temporary duty funds, to the Marine Corps. Because of the nature of this individual training, this would also likely require additional barracks spaces on Okinawa or the alternate training location to house these marines while they were participating in the live-fire training.

The need for these training ranges was identified early in our efforts to locate marines on Guam, and has been designated as a U.S. Pacific Command (PACOM) Priority 1 training requirement (PACOM Joint Guam Development Group Required Capabilities and Force Flow Priorities, 5216, Ser: J01, 26 February 2007).

My position is, we need these individual live-fire training ranges on Guam for both the marines who will be stationed there and for the remainder of the joint force that lives and trains on Guam, to include the U.S. Navy SEAL (Sea, Air, Land) forces stationed on Guam.

12. Senator McCAIN. Admiral Willard, should we resolve this issue completely before we continue to invest in the construction of a new Marine Corps base on the island?

Admiral WILLARD. No. While resolution of this issue is ongoing, and will take some time, we are confident the issue will be successfully resolved. However, contracts must be awarded now to avoid exponential cost increases in the future.

TOUR NORMALIZATION IN KOREA

13. Senator McCAIN. General Sharp, in your hearing statement, you detail two unprovoked attacks on South Korea by North Korea in the past year that killed South Korean sailors, marines, and civilians. You also cite a report that concluded the acts were hostile, deliberate, and premeditated. Did you have any intelligence or warning of the attacks?

General SHARP. [Deleted.]

14. Senator McCAIN. General Sharp, in your opinion, can this happen again?

General SHARP. [Deleted.]

15. Senator McCAIN. General Sharp, one of your top priorities in your statement is to change the policy for U.S. military members to be accompanied by their families on extended tour in Korea, known as tour normalization. For the past 50 years, only a limited number of U.S. servicemembers were allowed to bring their families, due to the security situation on the Peninsula and the lack of supporting facilities. Considering your statement that North Korea will remain a serious security threat in the region and a significant concern for the United States and the international community, why do you believe it is prudent to station 14,000 families in Korea for 3-year tours?

General SHARP. Of the benefits of Tour Normalization improved readiness stands out as my highest priority. Currently, about 85 percent of U.S. Forces-Korea (USFK) servicemembers rotate each year just as they have completed our Korea specific training and exercise cycle. This limits our ability to achieve the same level of readiness enjoyed by our forces in the Continental United States, Japan, and Europe. Conversely, as we increase the proportion of trained military personnel in place with 3-year accompanied and 2-year unaccompanied tours, we will see benefits such as improved understanding of the region and operational environment, the strengthening of relations with our ROK ally, and enhanced ability to support the transfer of Wartime Operational Control to the ROK. Simultaneously, USFK is in the process of relocating the majority of U.S. forces in the ROK south of the city Seoul, thereby reducing the immediate threat to family members and simplifying the execution of noncombatant evacuation operations (NEO) if such operations should ever become necessary.

16. Senator McCAIN. General Sharp, your statement details extensive efforts and exercises to strengthen the U.S.-ROK alliance, which I strongly support. Why then do you believe we need to station 14,000 military families on Korea in order to "demonstrate in no uncertain terms U.S. commitment to an enduring force presence in the ROK"?

General SHARP. By having families forward stationed alongside their servicemember in the ROK, it sends an unambiguous signal to North Korea and the Asia-Pacific region at large that the United States remains committed not only to ROK security but to maintaining a long-term and stabilizing presence in Northeast Asia as well. A signal such as this is important to not only our ROK Alliance partner but also to other allied and friendly states in the region as the balance of power evolves in the Asian-Pacific. Just like forward stationing American military families in Europe has demonstrated U.S. long-term commitment to the security and stability of that region and deterred Warsaw Pact aggression during the Cold War Era (because of that shown commitment), establishing a similar stationing policy in the ROK will signal to Asian allies, partners, and friends that the United States is committed to maintaining a long-term stabilizing presence in the region, a factor that in turn will help deter North Korea from engaging in aggressive behavior.

On a day-to-day basis, the ROK is a very safe place for our military families to live. North Korea's actions and behavior are closely monitored by the command. If there is a perceived threat or a crisis should occur, the command has in place detailed NEO plans that can be readily implemented if the situation requires such action. These NEO plans are exercised and practiced on a regular basis. While conducting a NEO in the ROK would be no minor task, I am confident that the necessary plans, procedures, and processes are in place to successfully conduct such an operation. Risk to military families living in the ROK will be further mitigated by the relocation of U.S. forces onto two enduring hubs located well south of the city of Seoul. These hubs lie outside the tactical effective range of North Korean artillery.

17. Senator MCCAIN. General Sharp, do we really need to station families in an area near an unstable and unpredictable adversary?

General SHARP. The benefits tour normalization will provide to force readiness and combat capability serve to deter North Korean aggression and thus promote stability on the Korean Peninsula. In turn, this enhanced capability will help deter North Korean aggression and as a result promote stability not only on the Korean Peninsula but in the wider region of Northeast Asia as well—a region that is vital to U.S. national interests. About 85 percent of USFK servicemembers currently rotate each year. By keeping trained military personnel in place for longer periods of time and thus decreasing the annual turnover of command personnel, organizational turbulence will be lowered, trained and ready personnel will be retained for a longer period of time, and the stress placed on troops and units will be reduced. Additionally, by enabling the development of stronger relations between soldiers and families at the individual level, the interoperability of U.S. and ROK forces will be improved and thus the U.S.-ROK Alliance strengthened even further. All of these factors will enhance force readiness and combat capability.

Lengthened tours in the ROK also make U.S. forces stationed there available to support regional exercises and global operations. Without tour normalization, providing this type of regional and global support is limited due to dwell time requirements and considerations related to repeated unaccompanied deployments. This aspect of the tour normalization initiative supports the Army Force Generation Model and enables a more adaptive and flexible U.S. force posture on the Korean Peninsula. It will create a defense capability with long-term capacity for regional and global defense and security cooperation. A strong signal will be sent of not only U.S. commitment to security of the ROK—a key Alliance partner—but also to the broader region of Northeast Asia.

Tour normalization also improves the quality of life for command personnel. By eliminating needless family separations, giving families greater clarity and predictability regarding servicemember deployments, and providing servicemembers and their families with facilities that meet modern DOD standards, force readiness and troop morale will be improved. In its totality, tour normalization will enhance force readiness and combat capability, demonstrate U.S. commitment to an enduring force presence in the ROK, provide greater stability for military personnel and their families, and improve quality of life. Enhanced readiness and combat capability promotes stability on the Korean Peninsula.

18. Senator MCCAIN. General Sharp, in the event that a war with North Korea breaks out unexpectedly, as reflected in your command's longstanding commitment to be ready to "fight tonight", will the priority of U.S. forces be focused on turning back the North Korean assault and supporting ROK's armed forces, or conducting a non-combatant evacuation of the 14,000 U.S. military families from the Korean Peninsula?

General SHARP. [Deleted.]

19. Senator MCCAIN. General Sharp, you also discuss the need for necessary infrastructure including housing, medical facilities, and schools. Do you have an estimate of the total cost to be incurred by DOD for tour normalization?

General SHARP. In September 2010 the Secretary of Defense directed implementation of full Korea tour normalization as affordable and according to no specific timeline. The Secretary further directed that a plan be provided to him on how to proceed with tour normalization no later than 31 March 2011. The Office of the Secretary of Defense (OSD), Services, Joint Staff, and USFK have developed various cost options for implementation of the Tour Normalization initiative that the Secretary of Defense is currently reviewing. The Secretary of Defense will forward his recommendation to the President as part of his fiscal year 2013 budget request.

20. Senator MCCAIN. General Sharp, you state that units built under the Humphreys Housing Opportunity Program "will be rented to servicemembers using their Overseas Housing Allowance (OHA) as the means of payment." At one time we heard the monthly OHA needed to finance this program would exceed $4,000 a month. What is the projected monthly OHA rate, and has this been approved by Secretary of Defense Robert Gates?

General SHARP. The projected monthly OHA for Humphreys Housing Opportunity Program (HHOP) homes will be initially set at $4,200. The HHOP OHA will be a special rate for HHOP units only. Establishment of the rate requires joint approval by the Secretary of the Army and the Chairman of the Per Diem and Entitlements Committee who works within OSD (Personnel and Readiness). The Secretary of the Army approved the rate establishment on 29 March 2011 and forwarded the request to the Chairman of the Per Diem Committee for action. As of today, the request is still within OSD (Personnel and Readiness).

21. Senator MCCAIN. General Sharp, are these costs captured in the current 5-year plan for DOD?

General SHARP. During the initial phase of tour normalization the number of command sponsored accompanied positions in Korea increased from about 1,700 in fiscal year 2009 to over 4,000 in fiscal year 2011 and is included in the baseline budget. Last September, the Secretary of Defense directed full Korea tour normalization. The OSD provided the Service Secretaries with options on how to proceed but without a specific plan and costs. The Secretary of Defense further directed that a plan be provided to him no later than 31 March 2011 on how to proceed with tour normalization as it is affordable and according to no specific timeline. At this time, though we do not have an approved plan on how USFK will proceed with tour normalization and the estimated costs, we do believe doing so is in the best interests of USFK and the military servicemembers serving in Korea. Once a decision is made on how to proceed, a request for appropriate funding will be incorporated into a future budget request.

22. Senator MCCAIN. General Sharp, do you anticipate that the host nation support currently provided annually by the Korean Government will increase equitably to support the additional families?

General SHARP. The ROK has been providing host nation support to help offset the cost of stationing U.S. military forces on its territory since 1991. Since 1991, there has been progressive growth in the nominal value of ROK host nation support provided to USFK. The specific arrangements of ROK host nation support are established in a document called the Special Measures Agreement. Over the years, Special Measures Agreements have covered periods of time ranging from 1 to 3 years. On 15 January 2009, the United States and ROK signed a 5-year Special Measures Agreement that is in effect during the 2009 through 2013 time period. Specific host nation support arrangements for the post-2013 time period have yet to be negotiated and will be specified in a future Special Measures Agreement concluded between the U.S. and ROK Governments. It is my belief that the ROK will continue to provide appropriate host nation support to accommodate the stationing of U.S. military forces to protect its territory, to include the rising number of command sponsored families in Korea.

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

U.S. SECURITY POSTURE REGARDING CHINA'S MILITARY POWER

23. Senator CHAMBLISS. Admiral Willard and General Sharp, Admiral Willard discussed the rise of China and their increasing military power in his written statement. Specifically, he stated that "the scope and pace of [China's] modernization without clarity on China's ultimate goals remains troubling." He went on to discuss China's challenge to accepted interpretations of international law and established international norms with respect to restricting or excluding foreign military maritime and air activities in what it refers to as its "near seas".

It's noted that both the U.S. and China's regional neighbors speculate about what China's intent is. Can you comment on what you believe China's intent is, and how that might affect U.S. security posture and interests in the area?

Admiral WILLARD and General SHARP. [Deleted.]

CHINA'S CHENGDU J–20

24. Senator CHAMBLISS. Admiral Willard, the U.S. military's current top-of-the-line fighter is the F–22 Raptor, the world's only operational fifth generation fighter. In 2009, DOD capped production of F–22s at 183. Experts call the FF–22s the only real challenger to China's J–20. Richard Fisher, a senior fellow on Asian Military Affairs at the International Assessment and Strategy Center concluded that: "this aircraft [J–20] does have great potential to be superior in some respects to the American F–22, and could be decisively superior to the F–35." Fisher in particular pointed to the Chengdu J–20's stealth technology and ability to super cruise, or fly supersonically without using fuel-guzzling afterburners. He said it has super maneuverability due to its thrust-vectored engines that allow for sharp turns. While the J–20's engine is still in development, Fisher said it's supposed to deliver 15 to 18 tons of thrust, more powerful than the F–22. While other experts say it's hard to predict exactly what the J–20's capabilities are, especially in a fire fight—they offered a dire prediction: "With China having a fifth generation fighter, the United States will lose F–22s faster than previous estimates." With the J–20 likely to start entering service in serious numbers by the end of this decade and the Chinese capable of accelerating this event by purchasing new Russian engines and settling for a lesser capability, "the presence of the J–20 in the PACOM area of responsibility (AOR) will arguably alter the balance of power in the region."

This is your AOR and your air space, and I know that the J–20 is a new airplane and we have very little data on it. But it does concern me personally that it flew its first test flight earlier than expected and that the U.S. Intelligence Community is predicting its Initial Operational Capability date may be at least 2 years earlier than originally predicted. What I see happening, at some point in the future, is options the United States currently has in terms of defending U.S. interests and providing deterrence to U.S. allies in the Pacific region may not be available. When those options are no longer available, it will fundamentally change the balance of power in that part of your AOR. I would appreciate your thoughts on this issue and your thoughts on what the United States needs to do to preserve its options and ability to defend U.S. interests in the region.

Admiral WILLARD. [Deleted.]

MILITARY PARTNERSHIPS IN SOUTHEAST ASIA

25. Senator CHAMBLISS. Admiral Willard, you discuss basing and access issues in your statement and the need to attain better access, particularly in South and Southeast Asia. I agree that this is critical. Looking forward 10 years or so, what relationships can we cultivate and what nations do you think would be willing to build closer partnerships with the United States such that our military could have access to their ports and airfields and with whom we could move toward the possibility of basing agreements?

Admiral WILLARD. DOD intends to enhance its presence in South and Southeast Asia. This does not mean, however, that we are looking to create new U.S. bases. Rather, we will work cooperatively with our allies and partners in these regions to identify an appropriate range and scale of security cooperation activities—including training, exercises, security force assistance, visits, et cetera—and then develop the access and other agreements needed to support this cooperation.

In South Asia, potential candidates for enhanced U.S. presence include Bangladesh and Maldives, two countries that are eager for greater bilateral defense engagement and have expressed a willingness to allow a rotating U.S. presence for training purposes. Another option that we as a country should be fostering is in Sri Lanka. Our current relationship with Sri Lanka is on a negative trend, primarily due to sanctions levied as a result of alleged human rights abuses perpetrated by the Government of Sri Lanka during their final push to eradicate the insurgency threat from the Tamil Tigers. The Government of Sri Lanka sees the United States as an unreliable partner and has turned to other benefactors, namely the Peoples Republic of China. Building a stronger relationship with Sri Lanka will truly be a long term project, but the strategic consequences of not engaging could potentially plague us in the coming decades if we are excluded from the region in favor of India and China.

PACOM engagement in Southeast Asia is focused towards expanding our relationship with the region by strengthening existing alliances and partnerships and cultivating new ones. PACOM is looking to our allies and partner (Australia, Thailand, Philippines, and Singapore) to assist with near-term (2–5 years) enduring presence. These countries share stated common security interests with the United States so they are the most likely to cooperate with PACOM to enhance regional stability.

PACOM is also looking to cultivate new relationships with Indonesia, Vietnam, Cambodia, and Malaysia. These countries have not traditionally leaned towards U.S. engagement, but the rapidly changing world order is aligning their interests closer with ours. These emerging partnerships are still in the nascent stages and will require further cultivation before they can grow to the level of our regional allies and partners.

Within Oceania, relationships with Republic of Palau and Federated States of Micronesia (FSM) are two that should be further cultivated. The Compacts of Free Association (treaties) that we have with Palau and FSM have allowed us to maintain close ties with these two countries, and develop a possible receptiveness to the establishment of basing agreements. Among Oceania countries, Palau is particularly well-situated geographically. It is relatively close to Guam as well as other Southeast Asian nations. They have an international airport with a 7,200 foot runway able to accommodate most large jet aircraft and an international deepwater seaport.

26. Senator CHAMBLISS. Admiral Willard, how do we go about building those relationships?

Admiral WILLARD. The strategic engagement for each respective nation with whom we are seeking relations must be tailored towards leveraging our mutual interests.

The Government of Bangladesh has been very supportive of U.S. military engagement including U.S. Navy port visits. We can best cultivate this relationship by continuing at the current level of military to military engagement.

PACOM has allocated resources to maintain a modest level of military to military engagement with Maldivian maritime forces including assistance to help them develop a Marine Corps type capability.

Building a stronger relationship with Sri Lanka will truly be a long-term project, but the strategic consequences of not engaging could potentially plague us in the coming decades if we are excluded from the region. Building this trust starts with using International Military Education and Training (IMET) Funds to get mid- and lower-level military officers to attend U.S. military schools in the United States. They then become our ambassadors to their own military that will slowly but surely rebuild our military to military relationship.

Indonesia has come a long way since the repressive regime of Suharto. It is not only the world's largest Muslim country; it is also the world's second largest democracy and is experiencing challenges and difficulties associated with their decade long transition into a democratic nation. Indonesia's common interests with the United States are regional stability, maritime security (especially in the South China Sea), counter-violent extremism operations, and multilateralism for regional issue resolution. The primary obstacle to PACOM engagement is Indonesia's past Human Rights abuses (which occurred during the Suharto regime). Since making its transition to democracy, Indonesia has made herculean gains towards reform and accountability in Human Rights. It can be expected that the U.S.-Indo relationship will flourish over the next couple of years into a strong and lively partnership between two democracies.

Vietnam is experiencing unprecedented growth and development. However, the Vietnamese government lags behind in liberalization and decentralization. This exacerbates Vietnam's already challenging geo-political situation with the People's Republic of China (PRC). It is this strain with China that drives the Vietnamese towards engaging the United States. The PRC's aggressive expansionism in the South China Sea is the common interest shared by Vietnam and the United States and will be the cornerstone of future Vietnamese relationship building. In the short term, this relationship is still new and trust through increasing contact and engagement must be established before we can move on to more critical issues; trust that the United States will remain active in the region and will not abandon Southeast Asia and other commitments crop up around the world.

Traditionally, the PRC has significant amounts of influence with Cambodia, but recently Cambodia has been reaching out towards U.S. engagement. This shift in principle may be the result of increased indications to the region that the PRC's intentions are not benign. Regardless of the reason for this shift, PACOM should capitalize on this opportunity and cultivate a constructive and fruitful relationship with Cambodia. The present border conflict between Cambodia and Thailand (a U.S. ally) presents a challenge for PACOM engagement because it must balance assistance to Cambodia with its alliance with Thailand. The obstacle to cultivating this relationship is the inability of both Thailand and Cambodia to satisfactorily resolve their disputes. Until then, PACOM must temper its engagement with an eye towards our security commitment to our ally; otherwise the significance of a U.S. alliance would be greatly diminished.

Malaysia is another Muslim country in Southeast Asia with whom PACOM desires a partnership. Malaysia already has the second largest per capita income in Southeast Asia behind Singapore. Malaysia is deeply concerned with the PRC's aggressive assertion of its South China Sea claims. A U.S. relationship will provide Malaysia added security which it can use to engage the PRC in a multilateral forum. PACOM is increasing its mil-to-mil engagement with Malaysia with an eye towards cultivating them into another high-capability, reliable regional partner like Singapore.

In Oceania, relationships that would provide access to ports and airfields and facilitate basing agreements are already in place with Palau and FSM. The Compact Agreements require the United States to provide for the defense of Palau and FSM as well as provide economic assistance. In return, the United States has been granted certain access privileges which are spelled out in the Compacts. Both countries have expressed an interest in hosting U.S. military bases.

INDIA AND PAKISTAN

27. Senator CHAMBLISS. Admiral Willard, India is without question a key country in the region, whose population may soon exceed that of China. Our relationship with India is complicated by its historic non-alignment and desire to maintain strategic autonomy, and also by the U.S.-Pakistan relationship—all of which you discuss in your written statement. Nevertheless, India is the world's largest democracy with a growing trade relationship with the United States and represents an important market for U.S. goods including U.S. defense and aerospace goods. How do you think we might grow this relationship and how might we encourage India to use their influence in the region to establish and preserve stability?

Admiral WILLARD. The key to our growing the relationship between the United States and the Republic of India is to support India's efforts to exercise leadership not only in South Asia but globally. As a democracy with a thriving market economy, India is dependent on a stable and secure South Asia region as much as, if not more, than the United States. Therefore encouraging India to establish and preserve stability in South Asia and the Indian Ocean Region is not the issue, the issue is to influence India to do so in partnership with the United States and other like minded nations who depend on a secure and stable Indian Ocean region to ensure the safe and cost-effective transport of raw materials and finished goods that support and foster a rising global economy that benefits all players.

The foundation for fostering this influence had already been established when both states pledged to develop an enhanced strategic partnership in 2009. To further develop this partnership the United States, through our actions, needs to demonstrate strategic convergence on regional and global security issues. At PACOM we are working with India to promote a shared vision for cooperation on the global commons—the shared domains of sea, air, space, and cyberspace—domains that are available to every nation to use to promote economic growth and improve the quality of life for their people. This cooperation must stretch across the interagency to include all U.S. Government departments and agencies. Efforts are already well underway in the realm of maritime security cooperation with India especially regarding counter piracy operations in the Arabian Sea through the cooperative efforts of the Indian Ministry of Defense and the DOD and Department of Homeland Security. Continuing to promote and encourage high level visits from the U.S. Government carrying this message of cooperation and like minded goals will help encourage India's further efforts to move our partnership forward. Other areas where the United States can positively influence India include mutual support in humanitarian assistance and disaster relief operations, support for India's long standing contributions to global peacekeeping, and developing an open and transparent mechanism to share intelligence and cooperate in combating terrorism.

A major impediment in establishing increased trust between the United States and India is our relationship with Pakistan amidst the historical animosity between India and Pakistan. With India, our actions speak louder than words; our actions should not counter India's strategic autonomy or historic non-alignment but should instead respect their viewpoint and their position as an equal among nations. Additionally, our actions with respect to both India and Pakistan must clearly convey the desire that India and Pakistan continue to dialogue and seek common ground to resolve their differences peacefully and with mutual benefit. A difficult task, but lasting security and stability in South Asia cannot be achieved until this long standing dispute is resolved.

AUSTRALIA

28. Senator CHAMBLISS. Admiral Willard, I have heard some rumblings over the past few years about Australia perhaps not being as confident in the ability or desire of the United States to provide security and maintain the balance of power in South Asia in the future. Therefore, it is argued, Australia may need to look beyond the United States for security partners and not assume that the United States will play the role it has played for the last 60 years in that part of the world. Do you think this is an accurate portrayal of Australia's perspective?

Admiral WILLARD. Australia has expressed increased uncertainty in the South Asia strategic environment, but I have not seen any indication that Australia is looking to diversify its strategic orientation in a way that would negatively impact the United States. In terms of our bilateral relationship, the U.S.-Australia Alliance is closer now than at any point during my Pacific tenure. I do not see that changing. That said, Australia is actively seeking to deepen its partnerships with other U.S. Alliance partners—Japan and the ROK—and has prioritized building its defense relationships with India and Indonesia. These are all positive developments.

In their Defense White Paper, Australia predicts that the primacy of the United States will be increasingly tested as global and regional power relations change through 2030. Australia is concerned about China's growing economic influence and ambitious military modernization-key drivers that, if mismanaged, could upset the regional stability the Pacific has enjoyed over the past 60 years. In addition, Australia faces increasing economic challenges as the Chinese market gains a larger portion of their trade, a pressure that may challenge their historical strategic hedging policy. Australia has managed to have a relatively stable mil-mil relationship with China in which it delivers many of the same messages that the United States delivers in its interactions with the People's Liberation Army (PLA), including the importance of transparency.

Although it is important to understand Australia's concerns, it is more important to highlight their actions. Australia used their Defense White Paper to reaffirm the centrality of the alliance relationship with the United States, lauded as their most important defense relationship. Australia also used their Defense White Paper to identify new strategic capabilities required to deal with the emerging environment, vowing to do more to protect common strategic interests. Most recently, Australia has partnered with the United States to discuss ways to enhance our combined force posture, which could lead to an greater U.S. military presence in Australia and expanded U.S. access to Australian facilities for training and exercise.

Overall, no, I do not think that this is an accurate portrayal of the Australian perspective.

QUESTIONS SUBMITTED BY SENATOR SUSAN COLLINS

U.S. PACIFIC COMMAND FUTURE REQUIREMENTS

29. Senator COLLINS. Admiral Willard, has PACOM established present and future requirements for both missiles and launchers regarding ballistic missile defense in your AOR?

Admiral WILLARD. [Deleted.]

30. Senator COLLINS. Admiral Willard, do you expect that the PACOM requirements for these assets will be fully satisfied now and in the future?

Admiral WILLARD. [Deleted.]

SOUTH CHINA SEA

31. Senator COLLINS. Admiral Willard, last year, Secretary of State Clinton told a meeting of the Association of Southeast Asian Nations in Hanoi that the United States had a national interest in freedom of navigation and respect for international law in the South China Sea, to which China's Foreign Minister response to her statement was "in effect an attack on China." China's attempts to enforce its interpretation of international navigation laws in the South China Sea has resulted in several dangerous encounters between U.S. and Chinese ships and aircraft in the last several years. Further, China has opposed joint military exercises between the United States and South Korea in the Yellow Sea using similar national claims to international waters. Do you anticipate further navigation discord with China?

Admiral WILLARD. Despite policy differences between the United States and the PRC with respect to interpretation of international navigation laws, it is critical

that all efforts are made to ensure that dangerous behavior does not undermine the overall U.S.-China relationship or endanger the lives of sailors or airmen from either nation. Additionally, as China increases its military operations around the globe, it will find greater utility in partnering with the United States and adhering to international maritime standards to achieve common security interests. Although we do not foresee a change in the PRC's position on international navigation laws in the near future, PACOM is continuing to focus on maritime issues with the PLA, especially operational safety, in all venues of engagement as a means to avoid future incidents and prevent unforeseen crises.

32. Senator COLLINS. Admiral Willard, what role does PACOM play in defending the rights of foreign allies to use the waters in dispute?

Admiral WILLARD. PACOM recognizes the rights of all nations to appropriately use the South China Sea consistent with the U.N. Conventional on the Law of the Sea (UNCLOS) regardless of their treaty status with the United States. PACOM plays an active role in ensuring accessibility to the South China Sea and other excessive claim maritime areas. In keeping with this principle, PACOM continues to challenge the excessive claims over the South China Sea by conducting Freedom of Navigation Operations (FONOPs) which reasserts our rights and the rights of all nations to the global common. FONOPs using Navy ships operating within the accepted norms of the international community and UNCLOS. FONOPs also take into consideration the possible response from the disputing claimants and does not antagonize the recognized sovereignty of any disputing nation.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

TAIWAN

33. Senator CORNYN. Admiral Willard, in your prepared testimony, you acknowledge that the Cross-Strait military balance continues to shift in the mainland's favor. According to DOD's 2010 report, Military and Security Developments Involving the PRC, "China's military build-up opposite the island continued unabated. The People's Liberation Army is developing the capability to deter Taiwan independence or influence Taiwan to settle the dispute on Beijing's terms, while simultaneously attempting to deter, delay, or deny any possible U.S. support for the island in case of conflict." Under the Taiwan Relations Act (TRA), the United States is statutorily obligated to make available to Taiwan such defense articles and defense services "as may be necessary to enable Taiwan to maintain a sufficient self-defense capability." In your opinion, how could the Cross-Strait balance have shifted in favor of China, if the United States has been upholding our obligations under the TRA?

Admiral WILLARD. [Deleted.]

34. Senator CORNYN. Admiral Willard, it is my understanding that DOD conducted its own assessments of Taiwan's defense needs from 1997 through early 2004, producing over a dozen studies. Since that time, DOD produced a 2010 study on Taiwan's air defense forces that was mandated by Congress, and reports indicate DOD recently resumed more detailed studies of Taiwan's joint defense transformation. What is the status of each of these reports?

Admiral WILLARD. [Deleted.]

35. Senator CORNYN. Admiral Willard, why did DOD virtually cease production of these valuable studies after 2004 and just resume it last year?

Admiral WILLARD. [Deleted.]

36. Senator CORNYN. Admiral Willard, according to DOD's 2010 report, China has approximately 2,300 operational combat aircraft, including 330 fighters and 160 bombers, stationed within range of Taiwan. A January 2010 Defense Intelligence Agency report on Taiwan's air force concluded that although Taiwan has an inventory of almost 400 combat aircraft, "far fewer of these are operationally capable." What is PACOM's view on whether Taiwan needs replacement fighters to maintain a credible air force?

Admiral WILLARD. [Deleted.]

37. Senator CORNYN. Admiral Willard, in your opinion, does this deterioration of Taiwan's air force indicate that the United States has failed to uphold our obligations under the TRA?

Admiral WILLARD. [Deleted.]

38. Senator CORNYN. Admiral Willard, how does Taiwan's airbase survivability compare to other air forces in the region?
Admiral WILLARD. [Deleted.]

39. Senator CORNYN. Admiral Willard, what scenarios does PACOM use in its assessment of Taiwan's requirements?
Admiral WILLARD. [Deleted.]

40. Senator CORNYN. Admiral Willard, since 2006, the Taiwanese government has made clear its desire to purchase F–16 C/Ds from the United States to augment their aging air force and regain dominance of the airspace over the Taiwan Strait. How have you responded to Taiwan's requests for the F–16 C/Ds?
Admiral WILLARD. [Deleted.]

41. Senator CORNYN. Admiral Willard, in your opinion, would additional F–16s bolster Taiwan's ability to conduct maritime interdiction in a blockade scenario?
Admiral WILLARD. [Deleted.]

42. Senator CORNYN. Admiral Willard, if the administration continues to stall on Taiwan's pending request, and Taiwan becomes unable to purchase these F–16s, what would be the impact on Taiwan's ability to defend its own skies?
Admiral WILLARD. [Deleted.]

43. Senator CORNYN. Admiral Willard, what would be the impact on U.S. interests in the region?
Admiral WILLARD. [Deleted.]

44. Senator CORNYN. Admiral Willard, according to DOD, in 2010, the PLA Navy had the largest force of principal combatants, submarines, and amphibious warships in Asia. This fleet includes 54 diesel attack submarines and 6 nuclear attack submarines. In contrast, Taiwan currently has four diesel attack submarines and zero nuclear attack submarines. What is your assessment of the current status of Taiwan's submarine fleet and the ability of Taiwan's navy to defend against an amphibious attack?
Admiral WILLARD. [Deleted.]

45. Senator CORNYN. Admiral Willard, what is your assessment of how long it will be before Taiwan's viable submarines must be replaced?
Admiral WILLARD. [Deleted.]

46. Senator CORNYN. Admiral Willard, should we be contemplating the sale of new submarines to Taiwan in the near future?
Admiral WILLARD. [Deleted.]

47. Senator CORNYN. Admiral Willard, do you believe we have met our obligations under the TRA to ensure that Taiwan has the opportunity to upgrade its fleet?
Admiral WILLARD. [Deleted.]

48. Senator CORNYN. Admiral Willard, what risks would we face if Taiwan cannot protect itself?
Admiral WILLARD. [Deleted.]

49. Senator CORNYN. Admiral Willard, if hostilities were to break out between China and Taiwan, is the United States currently able to provide an air deterrent over Taiwan, if Taiwan proves unable to protect itself?
Admiral WILLARD. [Deleted.]

CHINA

50. Senator CORNYN. Admiral Willard, in January, China demonstrated its clear intent to attain a fifth-generation fighter aircraft with the initial test flight of the J–20. This fighter, if news reports are accurate, could potentially rival our own fifth-generation fighters. In your opinion, would the United States be able to maintain air dominance against a sizeable Chinese fleet of J–20s with a U.S. fleet of only 187 F–22 fighters?
Admiral WILLARD. The United States faces significant challenges in posturing a credible air deterrent due to geographic challenges and multiple requirements in

comparison to the volume and capability of PRC forces. However, air dominance is not achieved or maintained through fighter aircraft alone. Fighter aircraft are only components of the full joint capabilities of the U.S. military in the region and one-on-one comparisons provide an incomplete picture of the ability of the U.S. to respond to threats to regional security.

51. Senator CORNYN. Admiral Willard, according to DOD's 2010 report, Military and Security Developments Involving the PRC, "China is developing an anti-ship ballistic missile (ASBM)" with a "range in excess of 1,500 km" that is "intended to provide the PLA the capability to attack ships, including aircraft carriers, in the western Pacific Ocean." If fully developed and fielded, what threat would this ASBM pose to U.S. carriers in the Pacific Ocean?

Admiral WILLARD. [Deleted.]

52. Senator CORNYN. Admiral Willard, what steps are being taken to counter this threat?

Admiral WILLARD. [Deleted.]

53. Senator CORNYN. Admiral Willard, according to DOD's 2010 report, DOD is pursuing invigorated Military Maritime Consultative Agreement (MMCA) talks with China. What progress has been made in the MMCA talks regarding confidence-building measures and safe maritime security practices?

Admiral WILLARD. Since its inception, the MMCA has operated as a forum for addressing issues of operational safety in the maritime environment, to include airspace. Along with the recent restart of military-to-military relations with the United States, the PRC has expressed an interest in reinvigorating the MMCA talks as a forum for addressing issues of operational safety in the maritime environment, to include airspace. PACOM welcomes China's attention to what we view as a critical means for avoiding dangerous behavior that could undermine the overall U.S.-China relationship or endanger the lives of sailors or airmen of both countries. Additionally, as China increases its military operations around the globe, it will find greater utility in partnering with the United States and adhering to international maritime standards to achieve common security interests. PACOM will continue to use the MMCA as a forum to focus on maritime issues with the PLA, especially operational safety, in all venues of engagement as a means to avoid incidents and prevent unforeseen crises.

54. Senator CORNYN. Admiral Willard, according to DOD's 2010 report, "U.S.-China military-to-military relations improved in 2009, based on the commitment of President Obama and President Hu to deepen and improve ties, and to take concrete steps to advance sustained and reliable military-to-military relations." Given that the Chinese readily terminated this contact over political issues, as we saw in January 2010 following the Obama administration's announcement of intent to sell defensive arms and equipment to Taiwan, what is your assessment of the value China places on this type of engagement?

Admiral WILLARD. The U.S.-China military-to-military relationship supports the President's vision for a positive, cooperative, and comprehensive U.S.-China relationship. We have made progress in our military-to-military relationship with China, but it continues to lack a solid foundation sufficient to weather turbulence in the bilateral relationship. Stability in the U.S.-PRC military-to-military relationship decreases the likelihood of potentially dangerous misunderstandings as China's capabilities grow and our two militaries operate more frequently in close proximity. PACOM fully supports the DOD's ongoing initiative to develop a bilateral framework with the PLA to steer U.S.-PRC military-to-military engagements and provide stability to the overall relationship. Additionally, PACOM welcomes the PRC's recent favorable response to increased bilateral exchanges on Humanitarian Assistance and Disaster Relief as well as acceptance of maritime safety events as part of scheduled military events this year. Maintaining sustained and cooperative military-to-military relations with the PRC remains a priority for PACOM.

55. Senator CORNYN. Admiral Willard, how is China benefitting from the contact, and what does the United States gain?

Admiral WILLARD. The complexity of the international security environment calls for greater cooperation between the United States and China, at all levels and in all areas, including in the military realm. Continuous open and substantive dialogue about strategic issues is an important element of expanding cooperation, improving mutual understanding, and reducing the risk of miscalculation. As China's political and economic interests and influence expand, so too do the international commu-

nity's expectations that China will cooperate responsibly in all global domains. It is in the best interests of both the U.S. and the PRC to make every effort to ensure stability in our military-to-military relationship which effectively decreases the likelihood of potentially dangerous misunderstandings as China's capabilities grow and our two militaries operate more frequently in close proximity.

SOUTH KOREA

56. Senator CORNYN. General Sharp, North Korea's growing dependence on China means that South Korea is forced to factor China into its North Korea policy. What consultations has the United States had with the Chinese regarding this issue?

General SHARP. PACOM consistently engages the PLA on the issue of the Democratic People's Republic of Korea (DPRK) at every possible occasion. Most recently, the DOD and PACOM discussed the issue of the DPRK with PLA interlocutors at the 11th Defense Policy Consultative Talks held in Beijing. We remain committed to working with China to bring peace and stability to the Korean Peninsula. We seek to continue to work with China on fostering an improvement in North-South relations, since we have agreed that sincere, constructive inter-Korean dialogue is an essential step in resuming diplomacy on the denuclearization of the peninsula.

57. Senator CORNYN. General Sharp, what do we know about Chinese contingency plans in the Korean Peninsula, and how much relevant information are they sharing with us?

General SHARP. [Deleted.]

58. Senator CORNYN. General Sharp, in your opinion, does South Korea have the right to retaliate when its people are killed by North Korea?

General SHARP. Every sovereign nation, including the ROK, has the right and responsibility to protect its citizens. I believe the ROK has the right to respond in self-defense when attacked.

59. Senator CORNYN. General Sharp, what is the United States doing to ensure that South Korea maintains a retaliatory capacity that enables it to protect its own interests?

General SHARP. In response to North Korea's unprovoked attacks on the ROK last year, the United States has participated in a series of combined exercises with the ROK that were designed to enhance both countries capabilities in the Korea Theater of Operations. These exercises have included training in the areas of anti-submarine warfare, battle group air defense, surface warfare, combat air patrols, communications, and ensuring readiness to prepare for, prevent, and prevail against a full range of provocations that could occur on the Korean Peninsula. This series of combined exercises has improved the readiness of ROK military forces and their ability to address the range of security challenges that could emerge.

The United States also stands ready to support the ROK's implementation of its "307" defense reform initiative. A key objective of this defense reform program is the enhancement of active deterrence capabilities. As a part of this objective, the ROK will bolster its sea and air capabilities by: speeding up planned deployment of high altitude unmanned aerial vehicles and the FX–III next generation fighter in order to increase surveillance capabilities; acquire advanced artillery detecting radar systems and precision guided weapons such as Joint Direct Attack Munition to neutralize North Korean artillery; and reinforce the personnel and capability of its Cyber Warfare Command. The ROK will also soon establish a division-sized command to protect the Northwest Islands. The mission of this command will be to maintain a strong deterrence capability against North Korea and to counter attempts to neutralize the Northern Limit Line. Under the command, additional troops and weapon systems will be deployed to observe North Korean forces and to launch accurate and effective counterstrikes in the case of future provocations by Pyongyang. The United States stands ready to support this defense reform plan in a variety of ways to include the foreign military sales program and additional combined exercises and training programs.

60. Senator CORNYN. General Sharp, on March 26, 2010, a North Korean torpedo sank the *Cheonan*, a vessel of the South Korean Navy, killing 46 sailors. If that had been a sovereign U.S. warship, would you have considered this to be an act of war?

General SHARP. The attack on the ROK ship *Cheonan* was a violation of the Korean War Armistice Agreement and an armed attack on ROK forces in violation of the United Nations Charter. I would consider an attack on a U.S. warship the same.

Whether or not it constitutes an act of war is a decision for the Commander in Chief.

VIETNAM

61. Senator CORNYN. Admiral Willard, the United States began providing foreign military financing (FMF) to Vietnam in fiscal year 2009. According to Vietnam's 2009 Defense White Paper, Vietnam's defense budget increased by nearly 70 percent between 2005 and 2008. Reports indicate that in 2009, Vietnam signed contracts to purchase billions of dollars worth of military equipment from Russia. A strong Vietnam has the potential to increase security in the South China Sea. What plans are there to sell arms to Vietnam, and when will these sales take place?

Admiral WILLARD. Currently, there are no plans to sell arms to Vietnam. According to the International Traffic in Arms Regulations, Vietnam can only receive non lethal items, considered on a case-by-case basis.

The U.S. Army Security Assistance Command is in the process of drafting an FMF letter of authorization for four English Language Labs and a training instructor for Vietnam.

INDONESIA

62. Senator CORNYN. Admiral Willard, some speculate that the development of military-to-military relations between Indonesia and China was fostered because the United States was sanctioning Indonesia for past human rights abuses. In 2005, the United States removed restrictions on IMET, FMF, and foreign military sales programs for Indonesia, which many viewed as a step toward normalizing the U.S.-Indonesia military relationship. What is your assessment of the current status of the U.S.-Indonesia military-to-military relationship?

Admiral WILLARD. The U.S.-Indonesian Strategic Partnership is one of the most significant in Southeast Asia with over 140 engagement activities scheduled for fiscal year 2011 and Indonesia recently assuming the Association of Southeast Asian Nations Chairmanship. After years of limited engagement with the Indonesian armed forces, the increased transparency and pace of institutional reforms initiated has provided impetus to renew and advance our military relationship. Secretary Gate's July 2010 decision to resume military ties with Indonesian Army Special Forces after a 12 year hiatus, represents one such significant advancement that we are pursuing in a measured and gradual fashion. We are also looking forward to supporting the newly signed "Comprehensive Partnership," and expanding cooperation in HA/DR, Maritime Security, Peacekeeping Operations, and enhancing professionalism and reform efforts.

63. Senator CORNYN. Admiral Willard, are there plans to sell arms to Indonesia, and if so, when would these sales take place?

Admiral WILLARD. Since 2005, the U.S. Government has slowly re-engaged Indonesia using an ever increasing collection of Security Cooperation tools. Through the National Defense Authorization Act 1206 program, Congress has provided nearly $80 million of maritime domain awareness and interdiction equipment, including weapons. This significant investment is geographically focused in the Tri-Border region bordering Malaysia and Philippines, as well as near the Strait of Malacca.

In addition to our 1206 investments in Indonesia, we are currently exploring options to transfer U.S. Navy and Air Force excess defense articles, most notably the F–16A/B. In this case, Indonesia wants to invest some $500 million to upgrade its existing fleet of 10x F16A/B, and a yet to be determined number of excess USAF airframes, to F16 C+/Block 30 capability. Although not formalized, Indonesia has also shown interest in excess KC–135s and P–3 Orions, as well as the hydrographic surveying ship USNS *John McDonnell*. Using FMF funds, we have provided logistics resources and expertise to rotary wing assets, as well as assisted Indonesia's existing F–16 and C–130 fleet. Indonesia is also considering the procurement of medium and heavy lift rotary wing aircraft through direct commercial sales.

[Whereupon, at 12:19 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

THURSDAY, MAY 19, 2011

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

THE F–35 JOINT STRIKE FIGHTER PROGRAM

The committee met, pursuant to notice, at 9:35 a.m. in room SD–G50, Dirksen Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Reed, Webb, Udall, Hagan, Begich, Shaheen, Gillibrand, Blumenthal, McCain, Chambliss, Wicker, Brown, Portman, Ayotte, and Cornyn.

Committee staff members present: Richard D. DeBobes, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Creighton Greene, professional staff member; Gerald J. Leeling, counsel; and Peter K. Levine, general counsel.

Minority staff members present: David M. Morriss, minority staff director; Pablo E. Carrillo, minority investigative counsel; Christopher J. Paul, professional staff member; and Michael J. Sistak, research assistant.

Staff assistants present: Jennifer R. Knowles, Christine G. Lang, and Breon N. Wells.

Committee members' assistants present: Christopher Griffin, assistant to Senator Lieberman; Carolyn Chuhta, assistant to Senator Reed; Gordon Peterson, assistant to Senator Webb; Tressa Guenov, assistant to Senator McCaskill; Casey Howard, assistant to Senator Udall; Roger Pena, assistant to Senator Hagan; Lindsay Kavanaugh, assistant to Senator Begich; Chad Kreikemeier, assistant to Senator Shaheen; Jeremy Bratt, assistant to Senator Blumenthal; Lenwood Landrum, assistant to Senator Sessions; Clyde Taylor IV, assistant to Senator Chambliss; Joseph Lai, assistant to Senator Wicker; Charles Prosch, assistant to Senator Brown; Brent Bombach, assistant to Senator Portman; Brad Bowman, assistant to Senator Ayotte; Dave Hanke, assistant to Senator Cornyn; and Joshua Hodges, assistant to Senator Vitter.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody.

Today we will seek a better understanding of what the Department of Defense (DOD) found in various reviews of the Joint Strike Fighter (JSF) program after the Nunn-McCurdy certification last year and what actions DOD has taken to ameliorate problems that it found with the program, as well as the best judgment available as to how effective these actions will be in preventing further problems with the program, including cost overruns and delays.

I want to thank Senator McCain for suggesting that we have this hearing today.

Joining us today on our first panel is a distinguished group of officials: Ash Carter, Under Secretary of Defense for Acquisition, Technology, and Logistics; Christine Fox, Director of the Office of Cost Assessment and Program Evaluation (CAPE). That is the CAPE office. Michael Gilmore, Director of Operational Test and Evaluation (OT&E); and David Van Buren, Principal Deputy Assistant Secretary of the Air Force for Acquisition, and in that capacity, Mr. Van Buren also serves as the Service Acquisition Executive for the JSF program.

I want to extend a welcome to our witnesses and thank each of you for appearing before the committee this morning. Another important member of DOD JSF team, Vice Admiral David Venlet, Program Executive Officer (PEO) for the JSF program, is in the audience and he will be appearing formally as a witness on the second panel.

We held a closed briefing for the committee on the JSF program in December 2009 where Secretary Carter and Director Fox briefed the committee.

We held an open hearing last year where we discussed the JSF program, the potential scope of the problems facing DOD, and some of the options that DOD had for dealing with these problems.

The F–35 JSF program is currently the largest acquisition program within DOD's portfolio. Perturbations to the cost, schedule, or performance of a program that intends to buy more than 2,400 aircraft for the Air Force, Navy, and Marine Corps will have significant implications for the rest of DOD's acquisition program and for the DOD budget as a whole.

I would also note that this committee's strong effort on acquisition reform, which became the law on May 22, 2009, including those changes to the acquisition procedures required by implementation of the Weapons Systems Acquisition Reform Act (WSARA) of 2009, will not be judged well unless we can demonstrate some success with the largest of DOD's acquisition programs, even though this program, the F–35 program, started before we enacted acquisition reform.

Last year, delays in producing the F–35 developmental aircraft have caused an estimated 13-month slip in the program for completing testing. Some, including the CAPE office, had been predicting that development could slip by as much as 30 months. It now appears that the CAPE estimate may have been much closer to the mark of how long it will really take to complete development than that 13-month estimate.

We know that DOD intends to release additional information on the new baseline and on a new initial operational capability (IOC)

later this month after conducting a Defense Acquisition Board review of the program.

The additional delays that we see in the revised plan have both cost implications for the F–35 program itself and cost implications for the Services as they try to manage their current force structure of legacy aircraft. The Services have had to come up with more research and development funds, since we are now looking at an increase of more than $4 billion in the cost to complete the system development and demonstration (SDD) program.

What this means is that we now have roughly $13.8 billion left to go just on the SDD program, with total SDD costs now at $51 billion. Indeed, they are costs to us and to the taxpayers of the United States.

The most recent SDD cost increase is somewhat offset by procurement reductions in the near term, but that just simply postpones costs to future years where these costs will add pressure to those budgets.

This year, we know that Secretary Gates announced that he is putting the short takeoff/vertical landing (STOVL) model of the aircraft known as the F–35B on probation, and he drastically cut the planned procurement for the F–35B in the near term. We want to hear more about that situation and when DOD will define what the F–35B test aircraft must demonstrate for that model to graduate from probation.

We also know that recent revelations of the new estimates of total life cycle costs for the JSF program exceeds $1 trillion. We need to understand what that estimate reflects, what assumptions DOD has made to derive the estimates, and how those estimates might compare to a similar estimate for the aircraft that we are currently operating.

Last year, we raised concerns about the JSF program having lost focus on affordability. That was not our assessment alone. That was an observation of the DOD-chartered Independent Manufacturing Review Team (IMRT) report on the JSF program. The report stated: "Affordability is no longer embraced as a core pillar." We need to hear today, specifically, how DOD has responded to that erosion in focus. We also need to hear what steps DOD has taken or plans to take to ensure that operating and support (O&S) costs are reduced as a part of a renewed emphasis on affordability.

This committee has been a supporter of the JSF program from the beginning. Nonetheless, people should not conclude that we will be willing to continue that kind of support without regard to increased costs resulting from a lack of focus on affordability. We cannot sacrifice other important acquisitions in DOD's investment portfolio to pay for this capability.

Those are a few issues that I know this committee will hear more about today.

Now I call on Senator McCain with, again, our thanks for his focus on this issue.

STATEMENT OF SENATOR JOHN MCCAIN

Senator MCCAIN. Thank you very much, Mr. Chairman, and thank you for holding this hearing and our continued oversight over this incredibly troubled defense program.

This hearing furthers this committee's obligation to the American taxpayers to ensure that we are training and equipping our fighting men and women in the most fiscally responsible manner possible, and that every effort is being made to eliminate waste and unnecessary costs wherever possible.

The facts regarding this program are truly troubling. Originally, the JSF program was supposed to deliver an affordable, highly-common, fifth generation aircraft that, by leveraging proven technologies, could be acquired by warfighters in large numbers. Acquiring these jets was supposed to cost a total of $233 billion, or an average of $69 million each, when adjusted for inflation. The program was supposed to, first, deliver operational aircraft to the Services back in 2008.

None of these promises have come to pass. The program first delivered operational aircraft in 2010. When the Services will get their JSFs with real combat capability is anyone's guess. As of today, the total cost to acquire these planes will be at least $385 billion, or an average of $133 million each, and will likely go higher.

Again, I repeat, originally, they were supposed to be $69 million each; now they have reached $133 million each and will likely go higher.

The fact is that, after almost 10 years in development, 4 years in production, according to outside experts, the aircraft's design is still not stable. Manufacturing processes still need to improve, and the overall weapons system has not yet been proven to be reliable. Notably, it has taken Lockheed Martin about 10 years and cost the taxpayers $56 billion to produce and deliver 9 of 12 test aircraft. Over that period, Congress has authorized and appropriated funds for 113 F–35 jets. Lockheed has, however, delivered just 11.

In my view, the program is now at a watershed moment. With austere defense budgets for as far as the eye can see, the JSF program must show now it can deliver JSF aircraft as needed, on time, and on budget.

Since 2009, Secretary Gates significantly restructured the program twice, an indication of how serious this program's problems have become. Those efforts have, rightly, focused on reducing the risk of trying to develop, test, and procure cutting-edge aircraft that have plagued this program since it started. Cost and schedule changes that accumulated over the last few years resulted in critical breaches of the initial cost thresholds. Put simply, JSF is estimated to cost about 80 percent more than when the program started and about 30 percent more than the current baseline set in 2007. No program should expect to be continued with that kind of track record, especially in our current fiscal climate.

I understand that soon DOD will announce new baselines for cost and schedule to reflect a total of $7.4 billion in additional funding, a cut of 246 aircraft from the near-term production ramp, and the addition of 33 months to complete development prescribed by Secretary Gates' restructuring efforts.

As for the future, daunting obstacles remain. Estimates have the early production facing cost overruns of between 11 percent and 15 percent. That is between $700 million and $960 million over the original estimate of $6.4 billion for 28 aircraft. Also, while there

has been improvement in decreasing the number of design changes on the manufacturing floor, which tends to be a sign that the design is more stable, such changes are still being done more frequently than desired. Lockheed Martin still needs to improve how efficiently it moves parts through its manufacturing processes and how it manages its global supply chain.

Additionally, developing the software that is vital to making JSF work as intended is lagging behind schedule. Plus, the new helmet display system that JSF will use is still not on track. Moreover, even after these production problems are solved, we still have to contend with potentially huge costs to maintain all three versions of the JSF. As the chairman mentioned, right now it is estimated to be about $1 trillion, adjusted for inflation. This jaw-dropping amount may be about twice as much as the cost to maintain other roughly comparable aircraft. I understand that this estimate is still early and subject to change. But we need to know that the program is going to bring that number down.

Finally, I am also keenly aware that the Marine Corps needs to start replacing their aging combat aircraft soon, and yet the Marine Corps variant has had the most difficulty in development so far and is facing a 2-year probation after which the Marine Corps' version must show improvement or faces cancellation. Of all the Services, the Marine Corps faces the most drastic consequences of further delays or cost increases due to age of their legacy aircraft.

I look forward to the testimony of all of our witnesses.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator McCain.

We will call on Secretary Carter to kick it off. Thank you.

STATEMENT OF HON. ASHTON B. CARTER, UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS

Dr. CARTER. Thank you, Mr. Chairman, Ranking Member McCain, other members of the committee. I appreciate this opportunity to come before you to talk about the JSF.

I have submitted a written statement jointly with Mr. Dave Van Buren, our excellent Air Force Acquisition Executive, who is with me here today, and Admiral Dave Venlet, our PEO for JSF. We three are the chain of command under Goldwater-Nichols for this important program, and we are responsible to the Secretary of Defense and to you for it.

I am sorry Dave is not at the table here with us, but he is here behind me. I want to thank him in front of all of you for not retiring, as he had planned, but for agreeing to the Secretary's request a year ago that he take over management of this important program, as well as for all he is doing to put it on a stable and realistic course for which Dave Van Buren and Sean Stackley, who is the Navy Acquisition Executive, and I are very grateful.

I would ask that the joint statement of the three of us be entered into the record.

Chairman LEVIN. It will be made part of the record.

Dr. CARTER. With your leave, I would just like to hit some of the main points, specifically to answer some of the questions raised by you, Mr. Chairman, and by Ranking Member McCain.

The main thing I want to convey to you today is the contrast between this appearance before you and my appearance before you in December 2009, which Chairman Levin referenced, in terms of the management information available to me to convey to you and the confidence I am able to have in it, this in contrast to the limited insight DOD leadership had into the program before that.

Back in late 2009, in preparation for last year's budget, I received the first reports of the Joint Estimating Team, which you referenced and which Christine Fox's organization led; a Joint Assessment Team, which looked at the engine for the JSF; and the IMRT, which you also referenced which looked at the activity on the Fort Worth final assembly line. They all indicated to me and to the Secretary of Defense at that time that JSF, our largest program and a vital one, needed management attention. Senator McCain's word was troubled.

While these reports did not contain good news, as I indicated, I believe they were credible at the time, more credible than the information provided by the program office. Based on the work of a relatively small group of analysts, I believe them because when I look back on their track record of predicting the performance of the JSF in the 2008–2009 period, I found that they had done a better job of predicting the program than the program office had itself.

I, therefore, used them as the basis to recommend to the Secretary of Defense a restructuring of the program's development phase, also new program management in the person of Admiral Venlet, to withhold award fees from the performers of the work, and in the restructuring, to slow production over the 5 years by 122 aircraft. These were important actions. They were based on the analysts' reviews.

When I was here last year, I did not have the depth of technical information a program of this complexity and importance deserves.

Now the contrast to this year.

I asked Dave Venlet, when he came in to conduct a technical baseline review of the JSF program, I said: "no holds barred. Tell it like it is." He did that. He will describe that technical baseline review, but it was 120 subject matter experts going through each and every aspect and activity of the program.

Beginning in the fall of 2010, 1 year after I first met with you about the JSF, Dave and I began to receive data from the technical baseline review and began discussions with the Secretary of Defense and other DOD leadership about what management actions to take this year, and those we will be describing today.

If you ask, as you might reasonably do, why should you believe what I am about to tell you, it is the depth of the technical baseline review that gives me confidence this year compared to when I appeared before you last year.

Secretary Gates and this committee have, as you noted, Mr. Chairman, insisted on performance. Senator McCain rightly said we cannot support programs that do not perform. Nowhere is this more important than the JSF. It is our largest. It is a vital program.

Let me now summarize the changes we made to the program this year as a result of the technical baseline review and that are reflected in the President's budget for 2012. I will organize my com-

ments, if I may, Mr. Chairman, in the same way you did, namely development, production, sustainment or lifetime ownership cost, and then the particular issues associated with the STOVL variant.

First, for development. In the development phase, we made two principal changes.

First, we decoupled testing of STOVL from the conventional takeoff and landing (CTOL) and the carrier-based variant (CV), the Air Force and Navy variants respectively, so that all are proceeding as rapidly as possible and STOVL is no longer delaying the other variants.

Second, the technical baseline review indicated additional time and funding would be needed to complete development, extending development by a number of months and adding an estimated $4.6 billion to the previously estimated $9.2 billion to complete.

There are two reasons for these adds. First, the plan test performance has consistently been behind projections, indicating that it will cost more to complete the plan testing than the contractors had forecast. Second, the testing plan fell short of what we believe will be needed. The plan that was there is going to cost more, and we believe more testing will be needed than was in the plan. Test points had been imprudently removed over the years and need to be restored to the program. This adds time and cost. For example, we borrowed 6 of the low-rate initial production (LRIP) aircraft for flight test, adding them to the 12 that had been previously planned to be part of the flight test program, as an example of more investment in the test program.

So much for development.

For production, also two things. First, a decision to delay the ramp-up to full production, and second, our determined efforts to control unit costs. Let me start with the first one.

In deciding at this difficult inflection point when you are going from development into production, you are trying to balance two things. You are trying balance going too fast and going too slow. If you go too fast, you build airplanes before you are sure of all of the changes that will be necessary in them to make them right, and you run the risk of having to rebuild them after you built them. That is called concurrency. That is the first risk. On the other hand, going too slow delays the airplanes and drives up their costs. You are always trying, in deciding when and by how much to ramp up production, to balance those two things.

Extending the development phase meant that it made sense to reduce the ramp rate so that program concurrency remained in the proper balance. We, therefore, decided to hold at 32 aircraft in fiscal year 2012, which was the same number as in 2011, because quite honestly that is the limit of the ability of Fort Worth to deliver finished aircraft. I just cannot tell you that they can deliver more. One can want more, but that is the number that we can actually deliver.

Thereafter, a ramp rate of 1.5, meaning that in each succeeding year you build 1.5 times the number you built in the preceding year, is about the right rate to expand production, starting in fiscal year 2013. That is what the management review team, which looked again this year at the program, recommended to us and we accepted that.

That is how we are handling the question of ramp rate.

With respect to cost, you spoke of an "erosion of focus on affordability," and that is an accurate phrase. Senator McCain gave you the numbers that over the lifetime of this program, the decade or so, the per-aircraft cost of the 2,443 aircraft we want has doubled in real terms. That is our forecast for how much the aircraft is going to cost. Said differently, that is what it is going to cost if we keep doing what we are doing. That is unacceptable. It is unaffordable at that rate. That cost growth has been in every aspect of the production of the airplane, the airframe, the engine, and so forth. It is just too much.

What we are asking is not what the aircraft will cost, if we keep doing what we are doing, but what it should cost, and we call that a should-cost analysis. We are beginning that. That is underway now and it is a very simple thing. It involves scrutinizing every aspect of the bill, every aspect of the cost of the airplane, work by prime contractors, subcontractors, suppliers, direct costs and indirect costs, and seeing how they can be driven out over time of the program. They have crept in. We need to drive them out. My office, the Services, and the Joint Program Office (JPO) under Admiral Venlet, are all involved in that.

Those are the two things we are doing. We have adjusted the production rate and the ramp, slowed it and stayed at 32 airplanes this year, and we are aggressively managing cost.

I just want to make one point. Our decision to delay the onset of the ramp-up to full-rate production by year does not increase the average unit cost over the entire program appreciably, as some have suggested. That is actually not true. Still, we get the airplanes a little bit later.

One sign of our early efforts to get cost under control was the LRIP 4 contract we signed last year. We negotiated that as a fixed-price incentive contract rather than a cost-based contract as an indication of the necessity to get stability in the Fort Worth line such that a fixed price could be named, and we are now aggressively working on the LRIP 5 contract with the same should-cost aim in mind.

We now go to sustainment. Sustainment is having the plane. I remind you that for all our programs, having the thing costs much more than buying the thing. 70 cents of the cost of every program is having it; 30 cents is getting it. Beyond this, as I said, already unacceptably large projected acquisition bill, is a sustainment bill.

I will just tell you what I said to the partners in Fort Worth. They meet every year in Fort Worth, and about a month ago, I met with all the JSF partners from around the world. I said I am going to show you the estimates for sustainment, and I said they are unbelievable in two senses. First of all, they are unbelievable. They are huge. But second of all, you should not believe them because we have not really begun to manage them yet. They are parametric forecasts. Nobody is going to pay that bill. I said, if you thought that was really going to be the bill for sustaining the airplane, we might as well all get up and go out and leave now.

What we have now is a parametric estimate of sustainment costs. There is nothing wrong with that. It is accurate based upon the information that goes into it, but it is way too high. Even as

we go into production, we need to start driving production costs down. Sustainment seems like years away, but now is the time to face that bill and begin to get that under control.

Last note on the STOVL. The Secretary decided to put the STOVL on probation for 2 years, by being held at a production rate of six aircraft per year in fiscal years 2012 and 2013. The reason for probation is that the STOVL is experiencing technical issues unique to this variant that will add to its weight and cost. The probation period is 2 years because that is the time we figure it will take to engineer solutions to these issues and assess their impact. We will fix all these problems. I do not doubt that. The question is how much the fix will cost and how much it will add to the aircraft's weight. Weight is important for the STOVL variant because it has to take off on a 500-foot amphibious ship and it has to land vertically. It is all about gravity and the weight really matters.

At the end of probation, we will assess the cost and the weight, then an informed decision can be made about whether and how to proceed with the STOVL.

In the meantime, six-per-year is the minimum number required to ensure continuity in the engineering workforce involved in assembly of the STOVL at Fort Worth without loss of learning and to sustain the supplier base of the STOVL-unique parts.

I should say, as we work on the STOVL variant, we are success-oriented. We, as the Secretary said, expect success and want success. General Amos, the Commandant of the Marine Corps who is the customer for this aircraft, is taking briefings on it very frequently and has a strong interest in it. I very much appreciate that. That is the story on the STOVL probation, and I can walk through any of those technical issues with the STOVL as you wish, as can either of the Daves.

Let me just close by saying that as part of the Nunn-McCurdy process, this year we were asked whether there were any better alternatives to the JSF, and we did not come up with any better alternatives to the JSF. We want it. At the same time, it has to be affordable, and at the moment in its projections, it is not. We are determined to make it affordable, and those who are performing the work for us share in that objective. We owe you that and we will be working to that end both for production and sustainment.

Thank you.

[The joint prepared statement of Dr. Carter, Mr. Van Buren, and Admiral Venlet follows:]

JOINT PREPARED STATEMENT BY DR. ASHTON CARTER, DAVID M. VAN BUREN, AND VADM DAVID J. VENLET, USN

Chairman Levin, Ranking Member McCain, and distinguished members of the committee. Thank you for the opportunity to address this committee regarding the Joint Strike Fighter (JSF).

The F–35 is the Department of Defense's (DOD) largest acquisition program, and its importance to our national security is immense. The F–35 will form the backbone of U.S. air combat superiority for generations to come. It will replace the legacy tactical fighter fleets of the Air Force, Navy, and Marine Corps with a dominant, multi-role, fifth-generation aircraft, capable of projecting U.S. power and deterring potential adversaries. Furthermore, the F–35 will effectively perform missions across the full spectrum of combat operations. For our international partners who are participating in the program, the F–35 will become a linchpin for future coalition operations and will help to close a crucial capability gap that will enhance the strength of our security alliances.

The multi-role F–35 is the centerpiece of DOD's future precision attack capability. The F–35 is designed to penetrate air defenses and deliver a wide range of precision munitions. This modern, fifth-generation aircraft brings the added benefit of increased allied interoperability and cost-sharing across Services and partner nations. It will also serve to fulfill our commitment to North Atlantic Treaty Organization's dual-capable aircraft mission. The fiscal year 2012 budget includes $9.7 billion for continued system development, test and procurement of 32 F–35 aircraft. In January, the Secretary of Defense announced that the Short Takeoff and Vertical Landing (STOVL) model has been placed on probation for 2 years, pending further successful development. The probation period limits the procurement to six F–35B aircraft in fiscal year 2012 and fiscal year 2013. This 2-year period will provide additional time to resolve the engineering and technical challenges. At the end of the 2-year probation, DOD leadership will make an informed decision on how to, and whether to, proceed with STOVL.

INTERNATIONAL PARTNERSHIP

The F–35 program continues to be DOD's largest cooperative program, with eight partner countries participating under Memorandums of Understanding for System Development and Demonstration (SDD) and for Production, Sustainment and Follow-on Development. The eight partner countries include the United Kingdom, Italy, the Netherlands, Turkey, Canada, Australia, Denmark, and Norway. In October 2010, Israel signed a letter of agreement to purchase 19 F–35A variants for $2.75 billion, with deliveries scheduled to begin in 2015. Through fiscal year 2010, the nine international partners will have provided approximately $4.45 billion of their $4.9 billion commitment to the SDD phase of the program. The United States has commitments from our allies to purchase in excess of 500 F–35 aircraft. Our first Foreign Military Sales (FMS) case; Israel, is underway, and additionally, studies are in progress to determine other FMS possibilities for nations outside the partnership.

PROGRAM STATUS

The F–35 program team achieved a number of accomplishments over the past year, including the first flight of the first mission systems aircraft. It also saw the arrival of the first four F–35A (CTOL) test aircraft at Edwards Air Force Base (AFB), CA, delivery of two additional F–35B (STOVLs) and the first F–35C carrier variant (CV) test aircraft to Naval Air Station Patuxent River, MD, and the completion of the F–35A static structural testing 5 months ahead of schedule with no failures. The program rolled out the first low rate initial production (LRIP) F–35A and completed 410 total F–35 test flights in 2010. In addition, 2010 saw the successful negotiation of the first fixed-price production contract which resulted in significant Department of Defense efficiencies (LRIP Lot 4). Finally, the first two F–35A production aircraft (AF–6 and AF–7) have been delivered to Edwards AFB to support SDD and an operational utility evaluation prior to initial operational training at Eglin AFB this fall.

REVIEWS CONDUCTED IN 2010 AND THEIR IMPACT ON THE F–35 PROGRAM

Program restructure

The program continues to experience challenges as it transitions from development to production despite the significant accomplishments. The Secretary of Defense announced a program restructure in February 2010. The restructure resulted in increased funding for development and production in accordance with Joint Estimate Team II estimates, reduced procurement by 122 aircraft over the Future Years Defense Program (FYDP) in the fiscal year 2011 PB and extended development by 13 months. It further added an additional LRIP lot prior to entering full rate production, reduced the ramp rate to less than 150 percent of the previous year's production, and upgraded the Program Executive Office position from a two-star to three-star flag rank. Program cost growth, including growth from the restructure, resulted in a critical Nunn-McCurdy breach in March 2010. The Under Secretary of Defense for Acquisition, Technology, and Logistics subsequently certified the program in accordance with the Nunn-McCurdy statute, allowing the F–35 program to continue.

We believe the cost estimates for production and sustainment developed during the Nunn-McCurdy process are credible, but simply unacceptable in this fiscal environment. We continue to scrutinize the F–35 Program, in addition to all programs, in order to target affordability and control cost growth. DOD has already seen progress in controlling the cost through should cost methods, one of Dr. Carter's recent Better Buying Power initiatives. Should cost estimates are allowing DOD to

build the correct strategy and form the basis for contract negotiations and contract incentives.

Technical Baseline Review

Following the F–35 Nunn-McCurdy criteria certification in June 2010, the F–35 Program Office conducted the most comprehensive review of the F–35 program ever accomplished. A Technical baseline review (TBR) assessed the cost, schedule and technical risk of the work required to complete the F–35 SDD program. The TBR was heavily dependent upon the technical strengths of Naval Air Systems Command, Air Force Aeronautical Systems Center and the Office of the Secretary of Defense.

The TBR involved more than 120 technical experts and differed from previous Joint Estimating Team (JET) assessments conducted by DOD's Cost Assessment and Program Evaluation office in 2008 and 2009. While the JET reviews were top-down technical program cost and schedule assessments, the TBR was a bottoms-up technical review of detailed plans at the lowest levels. It also drew on knowledge from the aircraft and engine contractors as well as the government test bases, to gain a thorough understanding of the content of the work required to complete the development program.

TBR subject matter experts formed sub teams across the various technical disciplines of test and engineering. They completed assessments of approximately 80 percent of the remaining SDD costs via interviews and detailed analyses of program data and performance artifacts.

The TBR became the basis for additional program restructuring in the fiscal year 2012 PB. The fiscal year 2012 PB called for an additional $4.6 billion to complete the development effort, held F–35 procurement in fiscal year 2012 at 32 aircraft, and reduced procurement by 124 aircraft over the FYDP in the fiscal year 2012 PB. This restructure puts the program on solid ground, with realistic development and production goals and significant reduction in concurrency. As a result of the fiscal year 2012–2016 restructuring, the Air Force F–35A variant has been reduced by 57 aircraft, and the Department of the Navy F–35 B and C variants have been reduced by 67.

The TBR drove several program changes to lower schedule risk associated with testing. The program has adjusted the flight test program to make temporary use of 5 LRIP aircraft, in addition to the original 12 planned SDD aircraft. The flight science portion of flight test has decoupled the three variants so that they may all proceed at their best pace and not impact any of the others. However, the mission system avionics (radar, electro optical/infrared sensor, data links, communication and navigation) is common for all three variants and is not being decoupled. Development testing of the common mission system and flight sciences for CTOL and CV is now scheduled to complete in the first quarter of 2016. The flight science testing for STOVL extends into the last quarter of 2016.

Manufacturing Review Team

In 2010 the same team of experts that conducted the 2009 Independent Manufacturing Review Team (IMRT) assessment, now under the direction of the F–35 Program Executive Officer (PEO) and referred to as the Manufacturing Review Team (MRT), evaluated the contractor's plans and readiness to manufacture aircraft at the production rates outlined in DOD's program of record. The MRT concluded that the contractors could produce the programmed rates if certain process and planning improvements, identified previously in their 2009 IMRT report, continued as planned.

The 2010 TBR and the MRT were conducted with full awareness and benefit of information contained in the 2008 and 2009 JET reviews, the 2009 Joint Assessment Team review of the Pratt & Whitney engine program, and the 2009 IMRT. The 2010 TBR and MRT reviews are the updated assessments of all the previous years' reviews and constitute the combined body of information that contributed to program adjustment recommendations to DOD leadership. We believe these changes were critical to placing the program on solid ground, and are confident that these adjustments will ultimately result in program success.

STOVL DURABILITY TESTING AND AIRCRAFT CHANGES

Concurrency is a major element of the strategic framework of the program. Calendar year 2011 is an important year for progress. The program is performing flight test, delivering its first production aircraft, and performing sustainment of those aircraft. To manage the effects of concurrency, and any schedule and cost impacts, there is close attention and tracking of sources of change, and change integration to identify and close on overall program performance goals.

At this point in the development program, the costlier changes are primarily driven by discovery, in flight test, in static tests, in durability tests, and in line replaceable component qualifications. The TBR took into account the historical rate of change, the cost of each change, and the projected rate of change given the extension of the test program. TBR findings have been incorporated into the program's plan for the remainder of the development effort. An example of change driven by discovery in the structural test program is the STOVL durability fuselage station 496 stress cracks. In November 2010, durability testing on the STOVL fatigue test article, BH–1, found stress cracks on the Station 496 bulkhead. In LRIP lots 1 through 4, there are 29 U.S. STOVL aircraft in production flow. Different modifications (a blend, strap modification or new design dimensions) based upon access to the target location are required for STOVL aircraft depending on the state of manufacturing of each aircraft. Durability testing will re-commence in October 2011 after the fatigue test article is repaired. The delay in durability testing will not impact the flight test schedule, and the changes for production are anticipated to be incorporated in the current manufacturing plan and delivery schedule.

As the test program progresses, the risk of change driven by discovery is reduced. It is difficult to predict what discovery will occur in 2011. However, the TBR and development test plan contain realistic assumptions of discovery, which have fed into realistic assumptions of change and change integration, and their associated cost and schedule impacts to the program.

SOFTWARE DEVELOPMENT AND TESTING

The development of F–35 mission systems software, a component of the air system software, is proceeding according to a schedule adjusted as an outcome of the TBR. As a matter of fundamental process discipline, no new software blocks were created, no functionality was pushed to later blocks, and no capabilities were removed as a result of the TBR. The mission systems Block 1 software has demonstrated stable performance in flight test, and will be delivered with LRIP 1, 2, and 3 aircraft. We have demonstrated, in the initial Block 1 release to flight test, expected functionality of the primary sensors, including radar, electronic warfare, Electro-Optical Targeting System, Distributed Aperture Sensor, and Integrated Communications, Navigation, and Identification. Block 1 maturation will continue through 2011, with an update this fall to include multi-level security capability. Block 2 software, planned for delivery in LRIP 4 and 5 aircraft, introduces multi-ship network functionality, with the first release to flight test planned at the end of 2011. Block 3 software, having just completed requirements review, will complete the SDD development stream and provide full Operational Requirements Document-compliant capabilities. Final Block 3 software is planned to deliver to flight test in 2015, to allow completion of the mission system development in August 2016.

ENGINE DEVELOPMENT PROGRAMS

Pratt & Whitney F135 engines have completed in excess of 17,237 hours of testing (ground and flight), and more than 965 hours of flight testing on all three variants of F–35 aircraft. In addition, the F–35B variants have completed more than 87 vertical landings to-date. Pratt & Whitney is currently supporting flight test on all 3 variants at 3 locations and has delivered 13 production F135 CTOL engines and 8 production STOVL propulsion systems to date. Based on the TBR, the Pratt and Whitney contract will be adjusted to support the extended testing required to complete SDD and to resource the resolution of integration issues in development up to this point.

DOD has initiated termination for convenience of the F136 engine. We believe the financial risks associated with a single source engine supplier are manageable, and are less than the investment required to fund a competitive alternate engine.

F–35 AIRCRAFT PRODUCTION AND DELIVERIES

The F–35 aircraft manufacturing plan, as adjusted in September 2010, remains as the current baseline, and is currently on track as measured by earned hours and station flow. The final Air Force CTOL development test aircraft was delivered to Edwards AFB in January 2011. There are six CTOL aircraft now at Edwards AFB in flight test. Three SDD test aircraft remain to be delivered, one STOVL and two CVs. After the delivery of those three aircraft, there will be a total of eight aircraft, (five STOVL and three CV) in flight test at Patuxent River by the summer of 2011. The original contract delivery dates for the first 3 years of production are all late to their original schedules. New delivery dates based upon the September 2010 adjusted manufacturing plan have 16 production aircraft projected for delivery in 2011. All 16 of these aircraft have their weight on their landing gear in the factory

in Fort Worth and are tracking on schedule to the current manufacturing plan. The first two production aircraft (both CTOLs) were delivered to Edwards AFB and will contribute to flight test as planned.

The JSF Program Office provides a large number of metrics to Congress on a monthly basis. We have increased attention to manufacturing quality metrics including supplier quality, assembly and test. Additionally, we have incorporated oversight into the contractor's supplier risk management process to ensure timely awareness of problems in the supply chain.

F135 ENGINE PRODUCTION AND DELIVERIES

While timely delivery of the F135 has presented schedule challenges in the past, Pratt and Whitney is expected to meet the projected schedule delivery in the near future. The first seven 2011 F135 engine deliveries were each 3 weeks late to Lockheed Martin desired need dates. One more will deliver late; however, current projections indicate the remaining year's engines to make schedule targets. Slightly late engine deliveries are not predicted to delay 2011 aircraft deliveries based upon the delivery schedule in the September 2010 adjusted manufacturing plan.

FISCAL YEAR 2010 FIXED-PRICE AIRFRAME CONTRACT

The Government awarded a fixed-price contract on 19 November 2010 to Lockheed Martin Corporation; Lockheed-Martin Aeronautics Company (LM Aero) valued at $3,887,418,000 (target price) for the purchase of 30 JSF aircraft for the United States, plus 1 for the United Kingdom, and an option for 1 more for the Netherlands. This is the fourth low-rate initial production (LRIP Lot 4) contract, which brings the total aircraft procured to 63.

More specifically, this airframe contract provides for the procurement of 10 CTOL for the U.S. Air Force, 1 CTOL aircraft (option) for the Netherlands, 16 STOVL aircraft for the U.S. Marine Corps, 1 STOVL aircraft for the U.K. Royal Navy, and 4 CV aircraft for the U.S. Navy. The per-variant price is $111.6 million for CTOL, $109.4 million for STOVL, and $142.9 million for CV. In addition, this contract provides for the procurement of associated ancillary mission equipment, flight test instrumentation, and manufacturing support equipment.

During negotiations, this effort to manufacture and deliver F–35 JSF LRIP Lot 4 aircraft was converted from a cost-plus-incentive-fee to a fixed-price-incentive-fee (firm target) (FPIF) contract. This contract-type conversion occurred 2 years earlier than envisioned in the acquisition strategy.

Any overrun to the target cost will result in an equal sharing of overrun costs between the Contractor and the Government up to the ceiling price of the contract. Above the ceiling price of the contract, Lockheed Martin bears the burden of all costs. Should the contractor under run the target cost, the Government and contractor will share equally in the under run savings.

FISCAL YEAR 2010 FIXED-PRICE ENGINE CONTRACT

The fiscal year 2010 engine contract was initially awarded via an undefinitized contract action (UCA) in July 2010 with Pratt & Whitney at a not-to-exceed value of $949 million. The UCA incorporated FPIF terms for the procurement of 32 engines (11 CTOL, 17 STOVL, and 4 CV, including 1 UK STOVL and 1 NL CTOL as options) and retained cost plus incentive fee (CPIF) terms for production non-recurring (PNR) tooling and logistics/sustainment efforts. The procurement of PNR tooling and logistics/sustainment efforts continued on a CPIF basis since the Government does not currently have sufficient cost data to adequately price and allocate risk for a FPIF-type contract. This UCA did not provide coverage for spares since delivery timelines were not sufficiently urgent at the time the UCA was executed.

A preliminary settlement agreement was reached between the Government and Pratt & Whitney in February 2011 for the above effort, including the procurement of five spares (three CTOL and two STOVL). Contract award occurred on 13 May 2011. The per-variant price is $14.99 million for CTOL/CV and $32.07 million for STOVL.

Any overrun to the target cost (FPIF effort) will result in an equal sharing of overrun costs between the Contractor and the Government up to the ceiling price of the contract. Above the ceiling price of the contract, Pratt & Whitney bears the burden of all costs. Should the contractor under run the target cost, the Government and contractor will share equally in the under run savings.

COST PLUS CONTRACTS FOR THE FISCAL YEAR 2010 F–35 PROCUREMENT APPROPRIATION

In addition to the above-referenced LM Aero Airframe and Pratt & Whitney Engine acquisitions, the F–35 Program Office is currently in negotiations with LM Aero for the procurement of logistics/sustainment efforts and PNR tooling. At present, the Government does not have sufficient cost data on logistics/sustainment or PNR tooling efforts to adequately price and identify risk for a FPIF-type contract. As a result, the Government determined that these efforts will continue to be procured under cost reimbursement type contract(s).

The LRIP Lot 4 F–35 Logistics/Sustainment effort (recurring sustainment support, training, support equipment, and spares) was initiated 16 September 2010 by means of a UCA with a NTE value of $511 million. Negotiations for the recurring sustainment support, training, support equipment, and spares are anticipated to conclude in late May 2011.

F–35 PNR tooling for lead-time-away procurement to support F–35 production ramp rate was initiated via a UCA awarded to LM Aero on 19 July 2010 with a NTE value of $820 million. Negotiations for the PNR tooling are anticipated to conclude in late summer 2011.

FISCAL YEAR 2011 CONTRACTS

The F–35 Program Office has received the LRIP 5 proposal for the fiscal year 2011 procurement. This proposal was delayed due to uncertainty in the aircraft quantity being procured in the absence of a fiscal year 2011 Appropriation Act. Proposal analysis is underway with negotiations expected to conclude by the end of the calendar year.

Similar to fiscal year 2010, the F–35 Program Office will apply the majority of fiscal year 2011 procurement dollars to FPIF-type contracts for F–35 aircraft and F135 engines. For the reasons cited above, PNR tooling and logistics/sustainment efforts will be procured using a cost-reimbursement-type contract.

SUSTAINMENT FOCUS

One of the key issues facing the department is driving down the overall unit cost of the airplane and getting our collective (joint) arms around the sustainment of this weapon system. We know that 70 percent of overall life cycle cost is in sustainment and the department is examining the major drivers of sustainment cost and aims to capitalize on opportunities to reduce cost. DOD is working to provide knowledgeable estimates of the 10 largest cost drivers of sustainment: (1) maintenance manhours per flight hour and meantime between repair; (2) establishing a joint sustainment system; (3) balancing modern sustainment capabilities with legacy capabilities; (4) striking the right balance of government and contractor capabilities; (5) getting the right division of labor in international sustainment capabilities; (6) aircraft bed down plans; (7) spares costs; (8) support equipment costs; (9) manpower; and (10) training. We are analyzing each of these cost drivers to place a laser focus on ultimately fielding an affordable system.

PEO EVALUATION OF COST, SCHEDULE, AND PERFORMANCE RISK TO THE F–35 PROGRAM

The schedule and resource adjustments to the remaining development program create a plan with realism to deliver the required capability. We have confidence in the resilience of the plan to absorb further learning and discovery and expect the program to stay on track, so long as it remains resourced as recommended by the TBR.

While still early in the year, the pace of testing is increasing flight test hours and test point accomplishment at higher rates from January 2011. Concurrency of testing and delivering production aircraft for fleet training operations in 2011 demands assessment of the system maturity to enable each Service's systems command granting air worthiness clearances for unmonitored fleet operations. The test points are planned with realistic refly margins to progress in a deliberate way to support this maturity assessment. Progress to initial sea trials for STOVL is tracking solidly to support operations at sea in October 2011. For each technical issue unique to the STOVL model apparent today, there are engineering solutions leading to sound mission performance. Weight will be under closest scrutiny and management attention. The four highest development risks on the program risk management board are software development concurrency (TBR replan has assessed and extended the schedule, and early code writing and lab integration testing performance measures are being closely monitored), pilot vehicle interface, STOVL vertical lift bringback and Helmet Mounted Display. We have put in place a detailed risk management process to address these and all program risks.

Production emphasis continues on dependable delivery schedule, quality and lower cost. The manufacturing plans will be managed to optimize delivery rates as they change due to U.S. and foreign partner procurement adjustments. While not a long record, the program has shown the ability to keep a tight manufacturing flow for 8 straight months since the last adjustment. Previous manufacturing plans were sliding aircraft deliveries by approximately 2 weeks every month. We believe the details are being managed, and span time improvements and margins in place are all bringing realism and resilience to improving schedule performance in manufacturing. In-process manufacturing quality metrics are being tracked and illuminating the need to improve on a continual improvement basis. The external result of product quality in the fleet's hands will come into view as production aircraft begin to support training later in fall 2011.

CONCLUSION

The enhanced capability of the F–35 will provide the backbone of the US combat air superiority for generations to come. The technological capabilities of the aircraft are sound. The program's management over the past year has put in place the right fundamentals and realistic plans using sound systems engineering processes, and we are monitoring and tracking performance using detailed metrics. Overall, there is much work still ahead of us, but through the multiple reviews and adjustments in the past year we believe we have put the program on sound footing for the future.

Thank you again for this opportunity to discuss the F–35 Lightning II program. We look forward to answering any questions you have.

Chairman LEVIN. Thank you very much, Secretary Carter.

Director Fox.

STATEMENT OF HON. CHRISTINE H. FOX, DIRECTOR, COST ASSESSMENT AND PROGRAM EVALUATION, DEPARTMENT OF DEFENSE

Ms. FOX. Mr. Chairman, Senator McCain, and distinguished members of the committee, thank you for the opportunity to appear before you to discuss the JSF program. Since I last testified before you in March of last year, as you have been hearing, there have been many updates to the program. Today I would like to focus on three of the most significant ones.

First, when I testified last year, there was a considerable difference in the cost and schedule estimates between the JPO and CAPE. Since then, Dr. Carter has assigned a new Program Director, Vice Admiral Venlet, who directed an in-depth technical baseline review, bringing us much closer in our estimates and adding valuable data that better informs the JSF assessments across DOD.

Last year, I told you that we predicted the average cost per aircraft would be somewhere between the JPO estimate at the time of $80 million per aircraft in fiscal year 2002 baseline dollars and our estimate of $95 million per unit. Our current estimate is approximately $95 million per unit. Our estimate of average cost per aircraft has been at this approximate level since 2008 and it continues to hold there. This translates to $113 million per aircraft in fiscal year 2011 dollars and, as Senator McCain noted, $103 million per aircraft when adjusted for inflation.

The estimate that continues to change is the estimate for development cost and schedule. As a result of the insights from the JPO's technical baseline review, CAPE now estimates that development will take an additional 1.5 years and cost approximately $4.5 billion more than we estimated in the spring of 2010. These estimates are in line with the current JPO estimates.

As with all of our estimates, it is equally likely that this estimate will be too high as too low. We continue to update our estimate as we learn more from ongoing testing.

There are two key drivers behind the increase in development cost and schedule. The first is software and mission systems integration. CAPE has long said that software would be a driving factor in the time necessary to complete development. However, we underestimated how significant a driver it would be. Software development is proving more difficult than we previously estimated.

The second reason for the increase in development cost and schedule is the Marine Corps' STOVL variant. The STOVL variant accounts for approximately 40 percent of the increase in development costs. This is why Secretary Gates put this variant on probation for 2 years.

Second, I would like to discuss our estimate of the JSF O&S costs. CAPE conducted an extensive independent analysis of the O&S costs of the JSF this past year. Experts from the Navy and Air Force participated in our effort. Our estimate, while developed independently, is consistent with that of JPO.

Our analysis indicates that the costs to operate and sustain the JSF are less than the F–22, about the same as the F–15C/D, but more than the F–16 and F–18. Given the significant increase in capability, it is not unreasonable that the JSF costs more to operate and sustain than some legacy aircraft. However, the fact that it will cost about 33 percent more to operate the JSF relative to the F–16 and F–18 aircraft it is replacing gives DOD a significant bill.

Third, I would like to report on the JSF shortfall. Last year, I stated that CAPE would conduct an in-depth study of the JSF shortfalls, and working with the Services, we completed that study this past year.

For the Air Force, their engineering analysis showed that the F–16s have significantly greater service life than previously estimated, reducing the Air Force's estimated shortfall to a manageable level.

The Navy's aircraft shortfall was of greater concern, and the restructuring of the JSF program increased the magnitude, so additional measures were needed to ensure continued capability for the operational fleet. The Navy is addressing the shortfall with several management and investment measures to include a fully funded service life extension program for approximately 150 F–18 aircraft. Additionally, Secretary Gates added 41 F/A–18E/Fs to the President's 2012 budget request. These aircraft, when combined with the additional 9 aircraft added by Congress in 2011, reduce the previous shortfall of about 100 aircraft in half. Navy and CAPE assess that the latest shortfall projection is manageable.

That concludes the updates I have for you today. Thank you again for the opportunity to appear before you.

[The prepared statement of Ms. Fox follows:]

PREPARED STATEMENT BY HON. CHRISTINE H. FOX

Mr. Chairman, Senator McCain, and distinguished members of the committee, thank you for the opportunity to appear before you to discuss the Joint Strike Fighter (JSF) program. Since I last testified before you in March of last year, there have been many updates to the program. Today I would like to focus on three of the most significant updates.

First, when I testified last year, there was a considerable difference in the cost and schedule estimates between the Joint Program Office and Cost Assessment and Program Evaluation (CAPE). Since then, Dr. Carter has assigned a new Program Director, Vice Admiral Venlet, who directed an in-depth technical baseline review. This review, conducted by literally hundreds of individuals over a period of 6 months, has significantly changed the program office estimates and provided in-depth information to the entire Department of Defense (DOD) including my office. In addition, DOD has developed greater insight into the contractor's production performance, as initial low rate production lots near completion. As a result, the program office life cycle cost estimate is now consistent with our estimate.

Last year, I told you that we predicted that the average cost per aircraft would be somewhere between the Program Office estimate of $80 million per aircraft in fiscal year 2002 dollars and our estimate of $95 million per unit. Our current estimate is approximately $95 million and has been in the low $90s since 2008. This translates to $113 million per aircraft in fiscal year 2011 dollars.

The estimates that continue to change are for development cost and schedule. As a result of the insights from the Program Office's technical baseline review, CAPE now estimates that development will take an additional 1½ years and cost approximately $4.5 billion more than we estimated in the spring of 2010. These estimates are in line with the current Program Office estimates and are funded in the PB12 Future Years Defense Program (FYDP).

There are two key drivers behind the increase in development cost and schedule. The first is software and mission systems integration. CAPE has long said that software would be a driving factor in the time necessary to complete development; however, we underestimated how significant a driver it would be. The F–35 is a sophisticated aircraft with many new mission systems that require integration. The software necessary to seamlessly integrate these systems is taking longer to develop than previously estimated.

Another reason for the increase in development cost and schedule is the Marine Corps' Short Takeoff and Landing (STOVL) variant. The STOVL variant accounts for approximately 40 percent of the increase in development costs. This is why Secretary Gates put this variant on "probation" for 2 years.

Second, I would like to discuss our estimate of the JSF operating and support costs. CAPE conducted an extensive independent analysis of the operation and sustainment costs of JSF this past year. Experts from the Navy and Air Force participated in our effort. Our estimate, while developed independently, is consistent with that of the Program Office.

Our analysis indicates that the costs to operate and sustain the JSF are less than the F–22, about the same as the F–15C/D, and more than the F–16 and F–18. Given the significant increase in capability, it is not unreasonable that JSF costs more to operate and sustain than some legacy aircraft. However, the fact that it will cost about 33 percent more per flight hour to operate JSF relative to the F–16 and F–18 aircraft it is replacing gives the department a significant bill. CAPE is engaged in supporting Dr. Carter and the Program Office in their efforts to get these operating and support costs down before the aircraft are fielded in numbers.

Third, I would like to report on the strike-fighter shortfall. Last year I stated that CAPE would conduct an in-depth study of the strike-fighter shortfall. Working with the services, we completed that study this past year. For the Air Force, their engineering analysis showed that the F–16s in particular have significantly greater service life than previously estimated. The net result of the F–35 procurement ramp associated with the 2012 President's budget and the most recent projections of legacy aircraft lifespan drop the Air Force shortfall down to between 40 and 100 aircraft as we reported in the 30-year aviation plan. This shortfall is relative to a 2,000 plane inventory total. Air Force and CAPE agree that this shortfall is manageable.

The Department of Navy's aircraft shortfall was of greater concern, and the restructuring of the JSF program increased the magnitude, so additional measures were needed to ensure continued capability for the operational fleet. The Department of Navy is addressing the shortfall with several management and investment measures to include a fully funded service life extension program for approximately 150 F/A–18 aircraft. While these management measures help address the shortfall, we judged that they would not be sufficient so Secretary Gates added 41 F/A–18 E/Fs to the PB 2012 FYDP. These aircraft, combined with the additional 9 aircraft added by the Congress in 2011 reduce the previous shortfall of 100 aircraft about in half. Navy assesses and CAPE agrees that the latest shortfall projection is manageable.

That concludes the updates I have for you today. Thank you again for the opportunity to appear before you.

Chairman LEVIN. Thank you very much, Ms. Fox.

Now we will have Director Gilmore. Dr. Gilmore.

STATEMENT OF HON. J. MICHAEL GILMORE, DIRECTOR, OPERATIONAL TEST AND EVALUATION, DEPARTMENT OF DEFENSE

Dr. GILMORE. Mr. Chairman, Senator McCain, members of the committee, the two restructuring efforts that have already been referenced, the one leading up to the Nunn-McCurdy certification that added about 13 months to the program and additional aircraft and some additional flight test points and flight test hours, as well as the restructuring that is still ongoing that Admiral Venlet is conducting as part of his technical baseline review which will probably yield another 16 to 18 months' extension in the program, have, in my view, yielded a realistic program for completion of the development of the JSF.

Why do I say that? One key reason is that the test program now, both for flight sciences testing and mission systems testing, is consistent with our historical experience, including the inevitable discoveries that occur and have already occurred when testing aircraft as complex as the three variants of the JSF.

The recent rate at which flight tests have been conducted is exceeding the technical baseline review plan somewhat, and that is good news. That pace is still less than had been projected previously. Those previous plans were not credible.

Then I would note also that there are difficulties. In particular, even though the pace of flight testing, the number of flight tests that are conducted per month per aircraft are somewhat above the plan, the achievement of mission systems test points are still lagging somewhat. That is not a surprise because mission systems testing in all these aircraft is a challenge.

Although good progress is being made in the program, there are many challenges that remain. For example, flight testing at high angle of attack at high speed between Mach 1.2 and Mach 1.6 and at low altitude and transonic speeds. The problems that have been occurring in the transonic regime, all those flight test regimes are not well-predicted by modeling and could yield to additional discoveries.

Weapons integration, in particular, multiple releases from both the aircraft's bays, could yield discoveries.

Flights with heavy external stores have yet to be done and could reveal additional structural issues. We hope not, but it is possible.

Continued durability testing of the aircraft's structure must be done. It was stopped at 2,000 hours of an 8,000-hour life because problems were discovered in some of the structures. It will resume shortly.

Then, of course, as I already mentioned, mission systems integration and testing, which is already a challenge, will only grow more complex because the very complex warfighting capabilities are yet to come and will be introduced particularly in Block 3 of the software and currently we are in Block 1.

My concerns for conducting Initial OT&E include the following.

Assuring that 18 aircraft are available, incorporating all modifications that are going to be needed to make them fully produc-

tion-representative, there are going to be modifications needed as a result of the discoveries that have already been made. We need to make certain that all those modifications are incorporated in the aircraft used for operational testing.

Weapons certification has to be accomplished in a timely manner, enabling operationally realistic employment during operational testing.

We have to have full air vehicle clearance for all three variants throughout the flight envelope.

We have to have a fully accredited verification simulation.

Again, we have to have timely completion of mission systems testing and subsequent testing of something called a full mission data load which will actually be done in the run-up to operational testing after a lot of the contractor work has been completed.

Thank you.

[The prepared statement of Dr. Gilmore follows:]

PREPARED STATEMENT BY DR. J. MICHAEL GILMORE

Good morning Mr. Chairman, Senator McCain, and members of the committee. Thank you for the opportunity to appear before you today to discuss the Joint Strike Fighter (JSF) program.

TECHNICAL BASELINE REVIEW AND REPLANNING FLIGHT TEST

The Technical Baseline Review (TBR), which began approximately a year ago, recommended changes to mission systems development, as well as to developmental flight test plans and resources that yield a realistic and credible program for completion of the system design and development (SDD) phase of the program. The schedule developed during the TBR extends the SDD phase about 16 months beyond the end-date used during the Nunn-McCurdy certification of JSF. Three reasons underlie this extension:

- More flight test sorties, including re-fly and regression sorties, were needed; the current number of sorties is consistent with historical experience.
- The short takeoff vertical landing (STOVL) aircraft had proven to be more complex than assumed previously and its performance was different than pre-test predictions.
- Progress in developing and integrating mission systems software was less than previously understood, requiring more time and effort.

A final flight test schedule that incorporates the TBR recommendations is being developed; I expect it to be completed by late July. I will be working with the operational test agencies and the program office to adjust plans for conducting operational testing accordingly. For example, because the three different JSF variants will complete developmental flight testing on different schedules, operational testing of all three variants conducted simultaneously will probably no longer occur. Currently, I expect an operational assessment of aircraft with Block 2 mission systems capabilities to begin early in 2015, and initial operational test and evaluation of aircraft with the final set of Block 3 mission systems capabilities to begin during spring 2017. There are a number of prerequisites to conducting operational testing, including that development of all Block 3 capabilities is complete and they are certified for use by operational pilots, that all airworthiness certifications are complete, and a full mission data load is available.

FLIGHT SCIENCES PROGRESS

Over the last 6 months, four more flight test aircraft have been ferried to the test centers and flight rates have improved for the STOVL and conventional takeoff and landing (CTOL) aircraft. An additional three flight test aircraft, expected to be delivered by the end of last month, had not been delivered as of 11 May, but are expected to arrive at the flight test centers soon.

STOVL Flight Test

The STOVL variant flight rate has improved from an average of approximately four sorties per aircraft per month to approximately eight sorties per aircraft per month against a plan of five sorties per aircraft per month. The test team has ac-

complished STOVL mode testing on four test aircraft, an improvement over the single aircraft available for this testing last year. This has resulted in a significant increase in the amount of STOVL mode flight testing. Completing needed modifications to test aircraft (e.g., stronger STOVL auxiliary air inlet doors), adding test aircraft, increased staffing at the flight test center, an increase in the envelope available for flight test, and improvements to parts supply and maintainability have contributed to this improvement in the pace of flight testing. The test team has accomplished nearly all of the vertical landings and short takeoffs needed in preparation for amphibious ship integration trials planned later this year, as well as for the start of STOVL pilot training at the training center early next year.

Conventional Takeoff and Landing Flight Test

The flight rate of CTOL test aircraft continues ahead of the post-TBR planned rate. In the last 2 months, the 3 flight sciences test aircraft have averaged approximately 11 sorties per month against a plan of 9 sorties per aircraft per month. Increased staffing and logistics support have enabled this higher flight rate to be achieved.

Carrier Variant Flight Test

The single carrier variant (CV) aircraft at the flight test center continues to fly at about the planned pace. A second CV flight sciences aircraft, which is the final remaining SDD flight sciences test asset, has completed its first flight at the contractor facility in Fort Worth, TX. Flight sciences testing of the CV aircraft is in the very early stages of flight envelope expansion.

Constraints on available flight sciences test points have, however, begun to challenge the program. The ability to open the available flight envelope and make productive use of the achievable pace of flight testing is dependent on completing analysis and/or modifications required to relieve aircraft operating limitations (e.g., clearance to fly in conditions causing greater structural loads and at higher maximum speed), incorporating additional instrumentation, incorporating design changes, and making changes to control laws.

PROGRESS ON DISCOVERIES IN FLIGHT SCIENCES AND DURABILITY TESTING

The program continues to address previous flight sciences test discoveries of undesirable handling characteristics and higher than predicted structural loads in the CTOL and STOVL aircraft. Flight test results during transonic flight and maneuvers with elevated g-forces have resulted in the need to change control laws in the vehicle systems software to address undesirable roll-off, side-slip, and yawing. Flying qualities in the CTOL aircraft at medium altitudes have improved with these changes. More flight test and analyses are needed to characterize and resolve these problems in the STOVL aircraft, which experiences more severe undesirable handling qualities in a greater area of the transonic envelope than the CTOL aircraft. A risk exists that software modifications to control laws may be insufficient to improve the handling characteristics of the STOVL aircraft, in which case mechanical fixes (e.g., a spoiler system) could be needed. The program is working to develop operationally relevant criteria with which to make final assessments of the efficacy of the software changes to control laws that are possible before examining hardware modifications to the aircraft. The structural loads on the vertical tail fins of both the CTOL and STOVL aircraft, which stem from the side-slip control problem, are higher than predicted and require further analysis. Testing in lower altitude flight operations, of weapons integration, and in high angle of attack environments has yet to be done for any variant and may result in new discoveries.

The program also continues to make progress in addressing problems with STOVL aircraft components that enable vertical lift operations. The roll post nozzle actuator, lift fan clutch and clutch housing, and lift fan driveshaft are being redesigned. The current designs meet the original design specifications, which have proven to be insufficient and can impose limitations on flight operations. The test team is able to safely conduct flight test and STOVL mode operations using flight monitoring systems in SDD test aircraft. The program is adding thermal blankets and better potting material in early low-rate initial production (LRIP) aircraft to the roll post nozzle actuator components to handle greater than anticipated heat experienced inside the roll post nozzle bay below 60 knots; and has started a nozzle actuator component redesign effort to enable the nozzle to withstand higher temperatures. The program is adding driveshaft spacers in early LRIP aircraft to compensate for the unanticipated expansion and contraction of the shaft during flight while a new shaft design is being developed for cut-in to later production. Higher than expected drag on the lift fan clutch during CTOL mode flight heats the clutch to unacceptable levels that affect the ability to transition to STOVL modes for landing. The program

is adding a temperature sensor to the clutch housing so that the pilot can monitor and be aware of increasing temperature inside the clutch housing. Pilot procedures in response to high clutch temperatures are being developed for flight test, training, and operational scenarios. The clutch may be cooled by changing flight regimes (e.g. lowering the landing gear, changing altitude and airspeed), before engaging STOVL modes, fuel and operational conditions permitting. Modifications to the STOVL aircraft auxiliary air inlet doors to address higher than predicted loads and dynamic conditions in SDD test aircraft enabled the pace of vertical lift operations in flight test to be increased. Retrofit and redesign changes are planned to auxiliary air inlet doors on production aircraft.

As mentioned above, the test team is able to safely conduct flight test and vertical lift operations using flight monitoring systems installed in the STOVL SDD test aircraft. However, these problems must be corrected in aircraft that are to be used for training and operational testing because those aircraft will not be monitored in-flight. The schedule for implementing these corrections is currently driven by the planned dates for initiating CTOL-only mode training operations in early 2012, as well as unmonitored STOVL mode flights, which may potentially be needed as soon as late 2012 if the ability to conduct unmonitored flights is desired commensurate with the delivery to the Marine Corps at Yuma, AZ, of STOVL aircraft from the fourth LRIP lot. If testing of the changes is not complete by late 2012, aircraft at Yuma, which will have limited capability, will fly in CTOL mode only.

Late last year, fatigue cracks occurred in a wing carry-through bulkhead on the STOVL durability test article after approximately 1,500 hours of test. Root cause analysis showed that high stress concentrations occurred at the location of the cracks; those concentrations were not predicted by the finite element modeling that had been conducted. The CTOL and STOVL durability test articles, SDD flight test aircraft, and early production aircraft will be modified according to a retrofit plan that includes blending edges in the areas where the stresses are concentrated and adding structural "straps" to strengthen the bulkhead. A redesigned bulkhead will be incorporated in later production aircraft. The STOVL durability test article will be modified with both the retrofit and the redesigned parts and is expected to resume durability testing late this year or early in 2012. The CTOL durability test article may re-enter testing as early as next month. However, the bulkhead problem generated a thorough review by the program office of the durability of the design for all three variants. This effort identified additional candidates for modifications to assure aircraft are durable through at least two structural fatigue lives (16,000 hours). For example, a wing root rib in the CTOL variant was identified as needing a re-design. Early LRIP CTOL aircraft will require retrofit of modifications of this structure and a re-designed component will be incorporated into later production aircraft.

MISSION SYSTEMS

Mission systems development and flight test plans were restructured as a result of the TBR. Block 0.5, the first mission systems software version, began flight test in mid-2010. Though more stable than initial versions of the mission systems software released in the F–22 program, Block 0.5 experienced too many problems to complete its assigned flight test objectives. Fixes for the problems discovered with Block 0.5 were subsequently incorporated into an initial Block 1 software version which began flight testing early this year. Block 1 flight test execution and integration of final software elements is slightly behind the current post-TBR plan. Efforts in the last 6 months have focused on completing the regression testing generated last year by problems discovered with Block 0.5 and supporting the fielding of a portion of the Block 1 capability needed to begin initial pilot training later this year. Approximately 40 percent of original Block 1 test points have been deferred to the next block, Block 2, because of aircraft limitations in the Block 1 configuration. I estimate there is likely to be at least a 1-month to 2-month delay in completing flight testing of the remaining available Block 1 capability, which is currently planned to conclude in October of this year. The potential exists for a further delay because in order to meet this year's goals, flight test productivity must be significantly greater in terms of mission systems flight rate and test point completion than has been the case during the last year of mission systems flight testing. The addition of the first two LRIP production aircraft, AF–6 and AF–7, to the SDD test fleet will be helpful, but before these aircraft can contribute to missions systems flight testing, they must be loaded with the latest Block 1 software and then participate in a maturity demonstration needed to support the beginning of pilot training later this year. The maturity demonstration is required to assure CTOL production air-

craft can be flown safely without control room monitoring, as will be the case during training and operational testing.

The development and integration teams are essentially on the TBR-adjusted timeline for releasing the first Block 2 capability to flight test in November of this year. Testing will be done initially of software incorporating about one-half of the full set of capabilities planned for Block 2. The deferred Block 1 test points will also have to be flown. Block 2 integration and flight test is planned to complete in late 2013. Block 3 development and integration is in an early stage; it is slightly lagging planned levels of completion by 10–15 percent, and is planned to continue until mid-2015. Producing and integrating the software that provides the complex capabilities in these later blocks of mission systems will be a substantial challenge.

Successful development of the Helmet Mounted Display System (HMDS) presents one of the more significant challenges to providing combat capability. It is integral to the F–35 mission systems architecture and the concept of operations—it displays key aircraft handling/performance information as well as tactical situational awareness and weapons employment information on the pilot's helmet visor. In the F–35, the HMDS replaces the conventional heads-up display (HUD) found in other fighter aircraft. Problems include integration of the night vision capability, symbology jitter, and latency. These stem in turn from problems with camera hardware, insufficient computer processing power, inaccurate head position tracking, and poor helmet fit, complicated by vibration-inducing airframe buffet experienced at high angles-of-attack in some dynamic maneuvering regimes. The program is pursuing a dual path to resolve the technical issues and provide a system that will enable flight test to proceed and meet operational mission needs. One path is to complete development of the original HMDS system by the end of SDD Block 3. The alternate path is to integrate a technically mature, existing helmet mounted display system that addresses the symbology stability issues that have been discovered, but requires an additional night vision system (such as existing night vision goggles) to provide night combat capability. As a further risk reduction strategy, the program continues to investigate the possible incorporation of a conventional HUD, should some of the current problems prove to be unsolvable with either the original HMDS or an alternate helmet. If a HUD is, in fact, required, this would involve significant modifications to the current cockpit design.

MODELING AND SIMULATION—VERIFICATION SIMULATION

The program has continued planning of validation efforts for F–35 modeling, development of the virtual battlespace environment, and integration of the two into one simulation intended for integrated test and evaluation. Several staff members were added over the last several months to the verification simulation (VSIM) verification, validation, and accreditation (VV&A) management team. More work is needed to determine the adequacy of the current VSIM VV&A effort, with regard to manpower, integration with the lab and flight testing programs, and timing of verification and validation efforts with respect to the points in the program where the different components of VSIM need to be accredited for use. Although the VSIM VV&A management team may now be adequately manned, the detailed analytical work of model validation will have to be performed by experts in the individual subsystems and subsystem models, and the program has yet to clearly identify the manpower and other resources required to perform this detailed analysis. Furthermore, robust model validation is based on comparison of model performance with lab and flight test results. The program has only begun the process of matching validation data requirements to test events that can provide the required data. The upcoming integrated master schedule needs to assure that adequate time is allotted for the correction of model deficiencies identified in the validation process, including the required turnaround time for deficiency identification and correction, between the collection of data to analyze given models and dates at which fully validated versions models are required for use.

MODELING AND SIMULATION—OTHER MODELS AND CORPORATE LABS

The program's latest modeling and simulation accreditation planning indicates a total of 34 models and virtual laboratories (including VSIM) for use as test venues in developmental testing need to be accredited. The program had originally planned to accredit 11 models by the end of fiscal year 2010, but delays and the current replan are moving most of those accreditations to completion at later times, with a new schedule awaiting the replan results. Three accreditations have been completed so far. The need dates for model accreditation are, in many cases, tied to delivery dates for capabilities in the jet. That is, as mission capabilities shift from one configuration block to another, the dates at which the capabilities will be verified

move accordingly; likewise the dates at which the models used in verifying those capabilities need to be accredited. In other words, the schedule for modeling and simulation accreditation is currently dynamic, and will remain so until the schedules for delivering capability to which accreditation is tied have stabilized.

PROPULSION TESTING

Ground testing for production qualification is completed for the F135 STOVL propulsion system, and CTOL ground testing is planned to complete in July. Flight test of the production-representative F135 initial service release (ISR) engine has continued in all three variants and is making progress consistent with the post-TBR plans: STOVL ISR flight test has accomplished approximately 25 percent of the total SDD test points required; CTOL flight test has completed approximately 33 percent of the total test points required; and CV flight test has completed approximately 27 percent of ISR test points. Two CTOL flight sciences test aircraft engines have been modified to correct the engine afterburner "screech" problem that was reported last year. Engine afterburner screech did not slow flight test. A small number of test points were attempted last year and could not be achieved due to the screech-driven limitation. Flight test planners deferred testing in the regimes where screech limits operations, and have instead been conducting other testing—essentially re-sequencing test events. One of the recently modified CTOL test aircraft has flown test points in the regime that could not be sustained last year due to screech and was able to achieve the desired test conditions. Continued flight test will determine the efficacy of the modifications to the engine made to correct screech.

Chairman LEVIN. Thank you very much, Dr. Gilmore.

Do you want to add anything here, Mr. Van Buren? The statement included your remarks, but would you like to add anything?

STATEMENT OF DAVID M. VAN BUREN, PRINCIPAL DEPUTY ASSISTANT SECRETARY FOR THE AIR FORCE FOR ACQUISITION

Mr. VAN BUREN. I would, Senator. Very short comments.

Thank you very much, Chairman Levin, Ranking Member McCain, and other distinguished members of the committee.

I would like to start by echoing the sentiment of Dr. Carter's testimony in that our visibility into the program has become much clearer in the past year.

Since April 2009, I have been the Service Acquisition Executive for the JSF program. Upon taking on that new responsibility, I observed a significant and unpredicted amount of changed traffic growth that occurred in the first half of 2009. This changed traffic was primarily in the subsystems hardware elements of the aircraft, such as line replaceable unit redesign, tubing, and wiring. This affected the ability of the prime contractor to ensure that all major sections of the aircraft, whether built by Lockheed Martin, Northrop Grumman, or BAE Systems, seamlessly fit together.

Because of the volume of this changed traffic, it was impossible to truly predict the overall impact to the delivery schedule of the flight test aircraft and early LRIP production deliveries. These changes were not driven by JPO scope increase, but rather by design and build execution. As a result, late deliveries of the jets delayed the flight test program and early LRIP deliveries were impacted by out-of-station work, late parts, and general inefficiency in the production line. As Senator McCain notes, this created an overrun condition to production lots 1, 2, and 3.

The good news is that the change traffic disruption and inefficiency are coming down now. The manufacturing leadership in Fort Worth is now executing to a production schedule that they can

commit to. I must say, however, that this is a delivery schedule that delivers jets at a rate of 1 to 1.5 per month for 2011.

The next step in this production maturity is to achieve a steady production rate of 4 aircraft per month, which I believe can occur in 2013. This will require continued further improvements in section build span times, subcontractor performance, and other various efficiencies. It will also require a continued reduction in change without major discovery issues of flight or structural tests that impact the configuration.

We in DOD leadership, as you noted, came to the conclusion in very early 2010 that the LRIP contract should be a fixed-price incentive contract based on JPO and contractor assessment of risk. We successfully negotiated this fourth production contract significantly under the CAPE independent cost estimate (ICE), which is our job. We are now working with the contractor team on a should-cost of LRIP 5 to continue this drive for affordability.

Much is always made of the detailed measurement of manufacturing labor efficiency or learning on the production line and how it impacts overall program cost. In the case of LRIP 5, the Fort Worth manufacturing, fabrication, and assembly labor cost portion is less than 1.5 percent of the overall proposed aircraft price. Therefore, the proper emphasis of our should-cost team will be to evaluate labor, support labor, material, subcontracted equipment, and all elements of overhead costs. The focus of our affordability effort is to maximize the percentage of manufacturing cost, the overall delivery price, to minimize sustaining support labor cost, and minimize the period of performance for each production lot build.

In summary, we have great confidence that the technical baseline review has addressed program risk in detail. While the production line has become more stable, significantly increased delivery rate execution has yet to be proven. In fact, during the LRIP 4 negotiations last year, deliveries moved to the right by 8 months on that contract. I can assure you that DOD has detailed oversight of execution to ensure that the program plan by profile is aligned with the industry's team ability to manufacture and deliver aircraft. In the same light, we strive to achieve the most affordable JSF on a daily basis for our warfighters and the taxpayers.

Thank you again for the opportunity to appear.

Chairman LEVIN. Thank you very much, Mr. Van Buren.

Let us try an 8-minute first round.

You indicated, Secretary Carter, that there has been a significant increase just in this 1 year in the estimate for completing the development and demonstration program, the SDD. The total cost of development I believe now is going to be over $50 billion, just on development. There is a $4 billion increase in the estimate to complete it just in this last year, and you have explained the reasons for that.

Secretary Gates last year announced that you have asked Lockheed Martin to share in some of the cost increases in SDD that now the independent reviews are predicting for this F–35 program. Has Lockheed agreed to share in these cost increases?

Dr. CARTER. Yes. Agreed is not exactly the right word. When it comes to an award fee in a contract of this kind, the award fee is

really in our hands. Last year, at the Secretary's direction, we removed an award fee that was awardable to Lockheed Martin and just took it away. This year, we said here are some targets which, if you achieve each of these targets, you will get a portion of the award fee. Lockheed Martin hit just a few of those targets and therefore received a very small fraction of their possible award fee.

Chairman LEVIN. Before you go any further, can you tell us for the record, each of those award fees, what they could have earned and what they were awarded?

Dr. CARTER. I would be happy to do that. In fact, I can give you that data throughout the lifetime of the SDD.

[The information referred to follows:]

[Deleted.]

Chairman LEVIN. Some of those have already been reached or not reached. Right?

Dr. CARTER. Yes. The reality is this year they reached hardly any of them.

Chairman LEVIN. Before you continue, is that part of the $4 billion increase?

Dr. CARTER. No. There is no award fee in the increase.

Chairman LEVIN. Is that part of the estimated $13 billion to complete the SDD? Are those award fees included in that?

Dr. CARTER. They are.

Chairman LEVIN. Now you wanted to go forward.

Dr. CARTER. Yes. What I am saying is you have the numbers exactly right. $9.2 billion was our estimate for how much it would cost to complete development. We added $4.6 billion to that. That is almost exactly a 50 percent increase. That is additional cost that we think is realistic that we will have to incur. We are not adding an award fee to that because, needless to say, we are not pleased to have to pay the extra money in the first place.

Chairman LEVIN. If those award fees are given, will that increase that $9 billion?

Dr. CARTER. No. It is included within.

Chairman LEVIN. Thank you. Keep going.

Dr. CARTER. When you get to LRIP, the early LRIP contracts were cost-plus contracts. As I said, starting with LRIP 4, with an eye to instilling discipline, we insisted on a fixed-price incentive contract.

Fixed-price is good discipline for both us and for contractors who work for us because we have to be able to specify exactly what we want. That is good discipline on us. They have to be able to specify a price, which means they need to have control over their processes and their suppliers. That is good discipline for them. The earlier we can get into that kind of discipline in production, the better.

LRIP 4 was early to do that but we wanted to force the issue and we did. We negotiated the LRIP 4 contract last year, as Dave indicated, at a price that was lower than CAPE had estimated, and that was good news.

We are now entering into the negotiations for LRIP 5. That too will be a fixed-price incentive contract.

The way that works is good discipline again for both the government and the contractor. Every dollar of underrun is shared. That

is an incentive to the contractor. They get a piece of every dollar that is underrun; and every dollar that is overrun, they have to pay part of.

Chairman LEVIN. Going back to those award fees just for one moment. You say that is something that is not technically an agreement. That is something that you will award if they reach a certain target. Were targets changed since your last testimony?

Dr. CARTER. No. They were the ones that we established a year ago for this past year, and we set them up like a slalom course. I said, they only got through a few of the gates.

Chairman LEVIN. There has really been no change in that since the testimony.

Dr. CARTER. Correct.

Chairman LEVIN. Then how are they sharing in cost increases? In other words, Secretary Gates said you are going to ask Lockheed to share in the cost increases. There has been no change in the award fee system since he said that he would ask Lockheed. There has not been a cost-plus contract but the kind of contract going forward for the LRIP 4 that you just described. But where are they sharing in the cost increases?

Dr. CARTER. In the SDD phase, the SDD contract, the extant contract, contains only award fee. It does not have a provision otherwise for cost sharing. We shoulder the entirety of that cost growth, and they lose the award fee part.

Chairman LEVIN. Yes, but my point is here that there has been really no change in the award fee system since then.

Dr. CARTER. That is correct for the SDD, because that contract was already negotiated many years ago.

Chairman LEVIN. Have you requested Lockheed to share in the cost increases here in a way that they have not agreed?

Dr. CARTER. No. I think that, obviously, they have sacrificed considerable award fee in SDD. They will be on a share line in LRIP.

Chairman LEVIN. They have not sacrificed. They have not met a target which had been previously set. That is not a sacrifice. That is not a change. That is something that they had agreed to.

Dr. CARTER. It was an award fee that was——

Chairman LEVIN. It was a system they had agreed to. They did not meet the award.

Dr. CARTER. That is correct.

Chairman LEVIN. What I am looking for is where are we going to get some savings from Lockheed here. Where are they going to share in this big headache that you folks clearly have and you are trying to solve? What is their piece of the solution?

Dr. CARTER. The most important piece of the solution right now for them and the others who work for us on the JSF program is going to be in the should-cost for production. Dave Van Buren indicated some of the drivers of cost. He gave you a number, which is worth focusing on, that the actual assembly at Fort Worth is a very small fraction of the overall bill. What is the rest of the bill for? Just like you go out to dinner and you get the bill after dinner and you want to say, "well, why did I pay this much for a side of broccoli? I did not realize if I ordered another iced tea, I had to pay twice," and so forth. We are going through the bill that way with Lockheed Martin, Northrop Grumman, and BAE Systems so that

we are only going to be paying costs that we understand and are willing to justify. Where they have grown in the last 10 years, we are going to ask ourselves why is it larger than it was 10 years ago and what can we do to begin to drive it back to where it was when the program started. That is the short should-cost exercise, and we will do that both for production and for sustainment.

Chairman LEVIN. Thank you.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

Secretary Carter, I would like to begin by saying I appreciate the outstanding work that you are doing. Your work has been exemplary, and a great example of that is the process you went through in the awarding of the tanker process. I do not think anybody could complain that the bidding and award for the tanker was not a fair, open, and transparent process. I thank you for the good work that you are doing.

Obviously, all of us are deeply disturbed about the progress—or lack of progress—and these incredible cost overruns that we have been experiencing. To start with, as briefly as possible because I do not have a lot of time, what happened?

Dr. CARTER. A couple of things happened over the last 10 years. You try to ask oneself why we have the numbers that you gave, which showed a doubling in our forecasts for the cost of the airplane. I would say two things.

First, in the decade of ever increasing defense budgets which we have just enjoyed, it was always possible for our managers, when they ran into a technical problem or a difficult choice, to reach for more money. The money was available in the decade after September 11. It is natural that some fat crept into all of our activities over that period. It is identifying that and beginning to work that out, that is what should-cost is all about.

Second, the thing that happened that is specific to the JSF is that it was, because of its novelty and its joint nature, put in an organization, the JPO, separate from the Navy's normal Naval Air Systems Command (NAVAIR) and the Air Force's normal Aeronautical Systems Center, centers of expertise, in order to allow it to be new, novel, and joint. That was probably a good decision at the time, but 10 years later, I think we had overdone that.

One of the things that Admiral Venlet and Dave Van Buren are doing now is restoring to the program the technical expertise resident at Pax River, Dayton, and elsewhere. Infusing this program office with it so that the government side of the program is strong. I told you I did not have good management information a year ago because the program office was not strong. It did not have our very best people looking at this airplane, and all of our information came from the performers of the work and not from us. That went on for a long time in the JSF program, and the JPO was not as strong technically as it should have been.

Those are the two causative factors.

Senator MCCAIN. I thank you for that explanation.

I am sure you understand the frustration that members of this committee feel. We have received testimony after testimony over the 10-year period that you are describing. Things were going pretty well, that we were pretty well on track, that yes, there were

some cost overruns. In all candor, we had to rely to some degree on the Government Accountability Office (GAO) for the facts, and many of us—or at least some of us—saw this train wreck coming, which has led me to your comment. Is this accurate from what you said? Right now it is not an affordable program and the sustainment costs are not affordable. Is that correct?

Dr. CARTER. That is correct. If we live the estimates, we cannot afford to pay that much. I do not think we have to live those estimates, and our objective is to make sure that those estimates do not come true and that we do have an affordable program.

Senator MCCAIN. It seems to me we have to start at least considering alternatives. If the situation right now is not acceptable, we have to do two things, it seems to me: make it acceptable but also think of alternatives if we cannot do that.

Dr. Gilmore, did I hear you say the previous plans under your area of supervision were not credible?

Dr. GILMORE. First, I advise on developmental testing. My focus is operational testing. I am not actually responsible for planning the program.

What I did do, when I first took office, is take a look at the planning factors that were being used. For example, there are planning factors for reflying sorties, test sorties, when you do not get all the information that you originally hoped you would get when you fly a sortie in the test aircraft. There are planning factors for what are called regression sorties. That is, you have made a change to the aircraft. For example, they are making changes in the flight control system now in order to deal with something called transonic wing roll-off, which is an unexpected loss of lift on one wing in the transonic regime where models cannot predict very well what the chaotic air flow is. You make a change to the flight control system software. You want to go back and refly previous points you have already flown to make sure you understand the behavior of the aircraft. That is a regression sortie.

The original planning factors for refly and regression were 15 percent and 20 percent, 15 percent for refly and 20 percent for regression. Now we stand, as a result of the technical baseline review, at 35 percent and 66 percent. That is one of the reasons that we now have 14,000 hours in the flight test program as opposed to 8,000 hours before all of the restructuring.

That is just one example of assumptions that were made that were clearly out of line with our experience with programs like the F–18E/F and the F–22. You want to be somewhat aggressive. You do not want to put yourself in a position of repeating mistakes that were made before, assuming that you will repeat those mistakes. You can see that those planning factors were well out of line with historical experience.

Senator MCCAIN. It is too bad that we cannot, Mr. Chairman, ask those people who made these estimates and made assumptions before this committee to explain that. That would probably be a waste of time.

According to the GAO, software providing essential JSF capability is not mature and releases to the test program are behind schedule. Is that true, Ms. Fox?

Ms. FOX. That is our understanding, sir. The software is behind, yes.

Senator MCCAIN. What do we do?

Ms. FOX. Sir, I do not have an answer for what we do. We are tracking it. I know that the program office is on it. The software development is proving to be much more difficult, as I said, even than CAPE estimated originally.

Dr. GILMORE. Senator, Ms. Fox already mentioned one of the reasons that the software is behind schedule. It is a hard job to develop all this mission systems software. The mission systems software by source lines of code in JSF is going to be between two and three times the number of source lines of code in the F–22. This is a very complex job. We are just beginning.

One of the reasons that the achievement of mission systems flight test test points is behind schedule is because we have one dedicated mission systems flight test aircraft. Two or three of the other aircraft can do mission systems testing, but a couple of those aircraft are STOVL aircraft and right now they are being used primarily for STOVL flight sciences testing. There are two additional Air Force variant aircraft that have just been delivered that can do mission systems testing, but they are not going to be able to start doing that for about 4 months because they are going to be used to do what is called a maturity demonstration in order to enable training to start using unmonitored flights later this year down at Eglin.

The problem is we only have one dedicated mission systems flight test aircraft. In another 4 or 5 months, we will have three, and that may enable us to catch up and drop the next block of software later this year as planned. It is planned in November. According to my estimates, it may slip a couple of months. Right now, we are limited by test aircraft.

Senator MCCAIN. Thank you.

My time has expired.

Mr. Secretary, I hope that you would, for the record or in conversation, ascertain what is being done on the issue of the unacceptable sustainment costs, what action or plans we have for that.

I would share the chairman's concern about what Lockheed Martin has done to absorb some of the costs of these overruns. I am not sure that all of these costs, Mr. Chairman, should be borne by the taxpayers when it is clear that Lockheed Martin has done an abysmal job, in not keeping with their original contract obligations which they had the luxury of cost-plus contracts at the time. That is an area we need to look at more seriously.

[The information referred to follows:]

Currently, F–35 sustainment cost is an estimate produced by models of standard elemental cost categories used for all programs. To reduce the estimates, the program will conduct a series of design reviews on each element of sustainment activity (supply, transportation, repair and overhaul, et cetera). These design reviews will produce F–35 specific data on cost drivers for various strategy options in each activity. These strategy options, with costs illuminated, are then evaluated in war games by flag and general officers of each Service and international partners. The series of design reviews and war games will continue into 2012 until all sustainment cost center activity is examined and the lowest cost choices are in view. These choices will produce updated reduced estimates with sufficient F–35 specific fidelity for planning, budgeting, and execution.

Senator MCCAIN. I thank you, Mr. Chairman. I thank the witnesses.

Chairman LEVIN. Thank you, Senator McCain.

Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Dr. Carter, a few times in your testimony this morning you referred to the JSF as a vital program, and toward the end of your testimony, you said you have raised the question about whether there were any better alternatives. Your answer is no. Of course, the program, as you said, and I agree, needs to be affordable.

It may be helpful at this point, at least in summary fashion, if you describe why DOD still feels this is a vital program and there are no better alternatives.

Dr. CARTER. That was part of the Nunn-McCurdy certification, and in this Nunn-McCurdy certification, I was required to and did look at alternatives to the JSF program and found none that met the full spectrum of needs represented by the JSF. I just remind you for each of the Services, the needs are somewhat different, but the Marine Corps really does want a STOVL aircraft, and the Harriers are going out of the fleet. This is it.

The Navy has the F/A–18s and we did decide, the Secretary decided, to buy more F/A–18s. For the Navy in the near term, there is an alternative. We are availing ourselves of that alternative.

For the Air Force in the long run, after the F–16 and the F–15 go out of the fleet, it will be the mainstay of the Air Force's air fleet.

In that sense, for each of the Services, the Navy a little bit less so, but only in the near term, are relying on the JSF to come through. In that sense, we do not have any alternative to it. We need to make it succeed. To make it succeed, we need to make it affordable.

Senator LIEBERMAN. In the consideration of alternatives, I know this is hypothetical, but would it include unmanned aerial vehicle (UAV) which is a fascination of people right now?

Dr. CARTER. It does. UAVs can do some of the missions of manned aircraft. We are not in a position to say at this juncture that in the time frame that the JSF would be delivered, that its missions could be accomplished by UAVs.

Senator LIEBERMAN. I know that there has been significant interest among our allies around the world. Of course, they have bought into the program, in the JSF. Does that continue to be so?

Dr. CARTER. The original partners are with the program. Some of them have slipped their buys to the right, for reasons having less to do with the JSF per se. In many of these countries, their defense budgets are under pressure and they have had to defer their buys. That turns out to work out well since the production has not ramped up and is not going to ramp up as quickly as it was originally forecast. But there are a number of foreign partners.

Senator LIEBERMAN. That was very helpful. That, in short, is why DOD concludes, notwithstanding the concern about affordability, that the JSF remains a vital and necessary program for our national defense.

Let me now go to the question that would be a layman's question at this point. I appreciate everything you are trying to do to make

the program affordable. If there are these concerns about exploding costs, is one alternative here to try to take off some of the bells and whistles?

Over the course of my service on this committee, as we have watched other programs go up in costs, sometimes not quite worked as we hoped, one of the explanations has been, we just tried to put too much into it. We got so carried away by advancing technologies, that we just tried to put too much into it.

Is one of the ways to make this program more affordable to take some of its advantages off of it?

Dr. CARTER. That is the last place I would go. Requirements creep has not been the driver. Requirements have been relatively stable. This is not like the presidential helicopter or something. The Services really want the capabilities that are represented by the aircraft that we are giving them.

The cost growth comes from all the individual processes and piece parts costing more than we thought they were going to and more than they should.

The last place I want to go is to dumb down the airplane. I do not think that is necessary. We are not at that point yet. We can have the airplane that is on the books and just control the processes that go into it. I hope it does not come to that. I do not expect and we are not looking to do that.

Senator LIEBERMAN. I hope not too, but I hope we keep it in mind if the costs continue to escalate.

Dr. Gilmore, in your prepared testimony, you mentioned that a new flight test schedule is being developed based on the recommendations of the technical baseline review, and we have heard others testify to that. Based on your experience with this JSF and other programs, how much confidence do you have as an independent observer, commentator, and judge that the new schedule will get the test program right? What would you say are the biggest risks that you foresee in achieving the test program as it is now constituted?

Dr. GILMORE. The test program, as it is currently constituted, and is emerging from the technical baseline review, has a reasonable chance of being executed consistent with expectations.

That is not a guarantee because, as I mentioned in my opening remarks, these are very complex aircraft. I mentioned the challenges that lie ahead that could lead to additional discovery, and discovery means it is something that you had not necessarily expected and therefore you cannot predict with certainty how you will have to deal with it and the amount of time it might require to deal with whatever the discovery is. There is no guarantee here.

The current assumptions, like the two assumptions on refly and regression rates I was explaining to Senator McCain, affect the number of flight test points you need in order to build up and fully expand the flight envelope. Previous assumptions had been that we would be able to just go immediately to the edge of the envelope rather than building up and that was not reasonable. That is not the case now.

The pace of flight testing, which the aircraft currently have been exceeding, and that is a good thing, is more in line with historical experience. Previously the program had assumed they would build

up almost immediately to 12 flights per aircraft per months. That was not reasonable based on historical experience.

I am not talking ancient historical experience. I am talking historical experience with F–22, which had its own problems, as well as the F–18E/F. Because those assumptions are pretty much consistent with our historical experience, I say this has a reasonable chance of being executed according to expectations.

Now, with regard to the biggest challenge, is one I have already mentioned in my view, is integrating and testing the mission systems software. The mission systems on this aircraft are going to be the most complex we have ever had on any aircraft, with information from multiple sensors being fused in order to provide the pilots with extremely good, unprecedented situational awareness, threat warning, modes of attack that our other aircraft do not have that we cannot discuss in open session but depend on the sensors and other capabilities. That is going to be a challenge. It already is a challenge, and I would say that is probably the greatest challenge to come. It is not until we drop block 3 software, which will not occur until June 2015 on the current schedule, that we will be actually integrating all the weapons in the aircraft, all the weapons capability in the aircraft. Before that, we are getting increasing capability but it is not all the warfighting capability that comes with block 3. To me, that is the biggest challenge, and we are just at the beginning of that.

Senator LIEBERMAN. Thanks very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Lieberman.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman. Thank you, Senator McCain, for having this hearing.

It seems to me like it is a situation where you are taking from Peter to give to Paul. At first glance, I am wondering if the enormous amount of money that we are spending on this program in the shifting, the adjusting, and everything is affecting other military programs by cancelling other programs to pay for this. I am wondering is there a concern that this is going to trickle down to affect the safety and security of our troops at all because of the enormous amount of money we are going to be spending on this program, Mr. Secretary?

Dr. CARTER. Senator, I have that concern. That is why I do not want to pay what we are forecasting we are going to pay. We can use that money for other military capability, other military needs. It is clear the country is not going to give us more money, ever-increasing budget every year to accommodate this kind of thing.

In the near term, I will say that we have not had to add money to the F–35 budget for the simple reason that the money we have added to development we have taken out of production because, as I indicated, we slowed production.

Senator BROWN. Right. By slowing production, we have gone from an amount that was requested and projected down to an amount that, quite frankly, will put us at a tactical disadvantage. You have Britain going from 138 to 40 planes. I am presuming because they are deeply concerned about the delay and cost. Yes, there is pressure on their military budgets, but there is another

message being sent which is, are you guys ever going to get this thing done.

I concur with Senator McCain.

To use a little analogy, it seems like we are going across the ocean. You are at that point now where you have so much fuel to either go here or go there. We are at that point right now. Where are we going? We are spending a tremendous amount of money. Just the fact that you are saying that they are going to be spending tremendously more than what was anticipated and what we can afford, at what point do we cut the cord and go in a different direction? Or can we at this point?

Dr. CARTER. I truly believe that we can manage out a substantial amount of production and sustainment costs and make the aircraft affordable. That is the path we are on. That is what you ought to expect of us. You are absolutely right. If the estimates do not change over the years, we are not going to be able to buy 2,443 of these airplanes.

Senator BROWN. As a result of that, since it is going to be the primary weapons system being used in the military, that puts us, I would argue, at a tactical disadvantage. Is that right?

Dr. CARTER. Yes. It is less than the capability we want. You are absolutely right.

Senator BROWN. Then the whole cost-plus contracts, fixed-price contracts. At what point do we say listen, here is a contract. You are working for the U.S. Government. You are getting paid top dollar, and here is what you need to do. Here is what we expect you to do. We hold them to the contract. I have never seen anything like it where we just continuously award, I am glad you have cut back on the award part of it. Is there a plan to go forward with fixed-price contracts in the future so we can prevent getting into these messes?

Dr. CARTER. There absolutely is. That was, by the way, an important feature of the WSARA thinking. We have taken that on board. We did a lot of cost-plus contracting in the last decade, in the decade of plenty, and we are going to do a lot less of it in the coming decade. We are going to do more fixed-price contracting. As I said, that requires discipline, both on our side and on the contractor's side, and we need to have that discipline. With a cost-plus contract, you just go in and say, "well, I will pay whatever it takes to get there." We cannot go into that.

Senator BROWN. We cannot do that anymore.

I was not going to mention it, but you brought up the cost overruns of the engine associated with this. I noticed initially it had gone up 68 percent. Then since 2008, the engine costs have increased by 500 percent. Whereas, by the time that this program is fully implemented, which I believe is in 2035, the F–35 will comprise about 95 percent of our aircraft. Is that right?

Dr. CARTER. That is correct. The 500 percent number is not correct. I have seen that number elsewhere.

Senator BROWN. What is the number?

Dr. CARTER. It is about the same as the aircraft overall. It is about a factor of two in real terms over the decade. The engine shares in the cost growth of the JSF. It has not been a driver of the cost growth.

Senator BROWN. Are you concerned at all about the operational risk of having a one-engine program for the entire F–35 fleet? If you are not, are you telling us that there is no chance that the primary engine will fail or undergo a major malfunction ever?

Dr. CARTER. We have one engine type for the F–22. We have one engine type for the F/A–18. This is normal and routine now for our tactical aircraft. It is something that we are very comfortable with.

Senator BROWN. I have also heard you and others talk, competition brings great price benefits to the taxpayers. In the littoral combat ship (LCS) program, you have awarded two contracts to build the ship. Budget requests have gone up through fiscal year 2016. I still have never really gotten a reason as to if it is good for the other programs, why is it not good for an engine. We are going to basically put all our eggs in one basket. One engine is tremendously over budget and another engine is a little bit different. I still have not gotten a good reason.

Dr. CARTER. Let me try to explain our reasoning on the question of an alternate engine. It is simply an analytical judgment. It goes exactly to the point you named. If you had a second engine manufacturer, then you could compete the two engines against one another lot by lot as you built the aircraft. To get yourself to that point, you have to spend the money to develop the second engine, to get the tooling to build the second engine, and the sustainment for a second engine. In other words, you have to have a whole second engine infrastructure. You have to pay that bill to develop the competitive alternative.

The question is whether that bill, which you pay up front, will ever be repaid in terms of lower prices induced by competition between the two variants. In our estimates, that bill will not be repaid, and that is why we do not favor investment.

Senator BROWN. They are self-funding the second engine for the next 2 years to keep moving it along at a point where they will be able to provide a competitive engine so we can actually save money, as we have done with many other programs, whether it is the LCS or other weapons systems. What is your position on the continuation and self-funding of that engine?

Dr. CARTER. We are in the process of terminating the contract for the F–136 engine. Whatever decisions the performers of that work make is up to them. Our estimate for the cost to prepare the alternate engine for real competition which, as I said, would not repay this cost in our calculations, is about $2.9 billion, a very substantial amount of money.

Senator BROWN. It is nothing compared to what you guys have been spending so far, quite honestly, on this whole program. It is unbelievable. I have never seen anything like it. I concur with Senator McCain in asking to hold this hearing because it just seems like there is this go-along/get-along mentality up here where no one is watching the taxpayers' money.

My time is over, Mr. Chairman, I have some questions I would like to submit for the record for the second panel as well. Thank you.

Senator REED [presiding]. Thank you.

Secretary Carter, the F–35B version is on a 2-year suspension. When General Amos was here, I asked him about whether that 2

years could be shortened, and he suggested that the Marine Corps is working very actively to try to bring that 2-year suspension down. Please share your thoughts on whether it is going to be a 2-year delay absolutely or something short of that.

Dr. CARTER. We have identified four problems so far, have a path to try to resolve those problems, and a timetable for doing that. General Amos has seen that timetable. We certainly would like to resolve all those issues as quickly as we can. There may be, however, more problems that emerge from flight tests. We cannot really predict that.

Secretary Gates wanted a 1-year probation, and it was we who advised him that we could not resolve all these issues reliably inside of 1 year.

General Amos is right. We would like to do it quicker. As I sit here right now, I could go through each of those problems with you, cannot promise that it will be resolved inside of 2 years. If we get them all resolved inside of 2 years, then we will have a clearer picture and make the decisions sooner.

Senator REED. Thank you.

With respect to some of the issues, I will turn to Dr. Gilmore. One of the issues with the F–35B is a software modification in terms of the vertical ascent issues. You are going to have to make structural modifications with a spoiler. Are you any closer to ascertaining which approach? My presumption, I could be completely wrong, is that the software approach would probably be less expensive and quicker to implement. If you could give me any help on those issues.

Dr. GILMORE. Yes. The answer to that question is yes.

There is a problem with the chaotic airflow in the transonic regime which causes loss of lift on the aircraft, unpredictable loss of lift. It is called roll-off. It also causes the aircraft to yaw, side-slip, which then creates greater stresses on the structure, particularly in the vertical tail and other places.

That problem has been seen on the STOVL aircraft. It has also been seen on the CTOL aircraft. In the CTOL aircraft, the information I have is that they have been able to deal with this problem satisfactorarily through changes to the flight control software, scheduling forward flaps and that sort of thing.

They are trying the same sort of fixes in the flight control software on the STOVL version. They have made progress, but they still have not made as much progress as they would like. They are developing a rigorous set of criteria that they can use in order to evaluate the STOVL's handling qualities, and they have not yet made a decision on whether they are going to try to do some more changes to the flight control software, do an evaluation, and then make a determination whether there would be any structural changes that would be needed.

There is provision in the structure of the CV aircraft, jumping yet another aircraft, for a spoiler, but there is not in the STOVL version. That would be a major change if it were needed. JPO is hopeful it will not be needed, but they do not have the final answer yet.

Senator REED. Do you have a sense of how much more delay would be engaged if they had to make the structural change?

Dr. GILMORE. No, I do not know. You could ask JPO that.

Senator REED. Thank you.

The other issue, and this goes to the F–35A. We have heard that the range is less than the requirements which was 590 nautical miles. In actuality, it goes 584. That raises a question with respect to the B and C models, whether we are going to see a decrease in range, which means increased fuel costs, reduced time on station, et cetera. It seems to me 6 miles is not a lot, but operationally it could be very significant. Mr. Van Buren, you are the designated hitter.

Mr. VAN BUREN. Senator, both the B and C variants currently exceed the requirements with regard to range payload. Over the course of the last 2 years, the A model has historically been above that. It just recently dipped back down below. A flight test program over the continuation of the configuration definition, normally gets little fluctuations that are against this requirement number. I would ask Admiral Venlet in the second panel as to where he would proceed with the future, but our expectation is that it will come in and meet that requirement of 590.

Senator REED. Very good.

Let me shift back to Dr. Gilmore or anyone on the panel who feels best able to respond. Our presumption is when we start talking about trying to rein in costs, you are going to look at every system. You are doing that now. Secretary Carter pulled together lots of people around the table.

One issue is the helmet mounted display system. Is there a serious consideration about abandoning that system and going to something that is a traditional system? Or is the helmet mounted system so integral that it cannot be abandoned but it has to be fixed? Can you give me an idea about that? Dr. Gilmore?

Dr. GILMORE. As I explained in my written testimony, there are two paths that are being pursued. One is to push ahead and try to fix the problems with the helmet, which include latency in the images that are displayed, particularly the infrared (IR) images at night. That is a problem.

Then there is jitter. There is symbology which is projected on the helmet visor that in today's aircraft appears on the displays on the aircraft dash. There is jitter when it moves around and it gets fuzzy.

They are trying to fix those problems, but they are pursuing an alternative path which would take an existing helmet with capabilities similar to the helmets that are used for off poor sight cuing and aiming of the AIM–9X, use that helmet in conjunction with night vision goggles, which would give you night capability. Then the pilot would have to peer down underneath the night vision goggles in order to see symbology displayed on the cockpit displays. But that is the way pilots do business at night now. It would not be an improvement, relative to what they do now, but it would be no worse relative to what they do now.

Then as a very last resort, the program would consider incorporating a heads-up display that exists in current aircraft, but my understanding is that the program thinks that one of the first two approaches will work out and that probably will not be needed.

That would be a good thing because that would be a major modification to the aircraft.

Senator REED. Very good.

Final question. Secretary Carter, you have already mentioned the international participation here. Let me not prejudge the answer. One, this international participation seems almost logically to reduce the cost of a copy to us. It is critical in terms of the financing. Let me ask you. Everyone seems to be in accord with the steps you are taking to develop the system. I know they have pushed back some of their acquisitions because of their budget problems. But they still seem to be there to buy their requisite number of aircraft and to do it in a timely manner.

Dr. CARTER. That is right. We are going to buy a little bit north of 2,400 of these airplanes, and the total projected foreign buy is in the neighborhood of 600 to 700. It is a substantial increment to ours. It will drive down unit cost accordingly.

In the main, the partners are holding numbers but sliding to the right under largely their own budget pressures. My counterparts and I talk all the time. They have the same concerns and determination about affordability that we all have. They know this aircraft very well. In the main, they are counting on it, the way we are counting on it. They are in the same boat we are. I talk to them all the time trying to keep them informed.

Senator REED. Thank you very much.

Thank you, Mr. Chairman.

Chairman LEVIN [presiding]. Thank you very much, Senator Reed.

Senator Cornyn.

Senator CORNYN. Thank you, Mr. Chairman. I want to express my gratitude to you and to Senator McCain for holding this hearing. This is some of the most important work we can do. As money is tighter and people are asked to share in the sacrifices at the Federal Government level in terms of what we provide, DOD needs to be part of that analysis, but I know we all agree that we don't want to sacrifice our preeminence when it comes to national security. Taxpayers ought to get their money's worth and not have one penny more wasted than we can possibly avoid.

What comes to mind when listening to some of the testimony is what Mark Twain said about if you are going to put all of your eggs in one basket, I am paraphrasing, you better take care of that basket. It sounds to me like that is what we have done, in large part, with the F–35.

Mr. Van Buren, what is the age of our aircraft fleet? My understanding is most of the planes that our airmen fly are older than they are.

Mr. VAN BUREN. Obviously, the tanker aircraft are the oldest, and the last tanker will be retired when it is approximately 80 years old. We are very thankful for the proceeding on with the tanker contract.

The fighters are younger, but still on the average of 20 to 30 years old.

Senator CORNYN. Secretary Carter, you described, I think to Senator Lieberman, this aircraft is vital. In your written testimony, you described it as a dominant, multi-role, fifth-generation aircraft

capable of projecting U.S. power and deterring potential adversaries.

Why is it important that we produce this aircraft, as economical as possible, for our national security and as well as to those of our partners who are joining us in the purchasing and the development of this aircraft?

Dr. CARTER. The advance that the JSF represents over its predecessors is captured in the phrase, "fifth generation versus fourth generation." There are a couple of key differences there. One, is that this is a very stealthy aircraft compared to its predecessors, and that is an advantage. Two, is that it has a very substantial onboard sensor suite and capacity for electronic attack.

As it flies against enemy air defenses, both the passive stealth, the inability of the radar to see it in the first place, and the active electronic attack measures are a level of sophistication over their predecessors. Therefore, it has a higher probability of penetrating more difficult and heavily defended airspace than its predecessors.

Then its onboard sensors allows it to acquire targets—airborne targets, ground targets, and so forth—with a lot more sophistication to attack them than the predecessor. Not surprising with the passage of time that we can build a better airplane, and it is a lot better airplane than its predecessors.

Senator CORNYN. My understanding is DOD plans to field an operational fleet of 2,443 aircraft at this point?

Dr. CARTER. That is correct.

Senator CORNYN. Although, if you look at previous examples of the B–2 Stealth bomber and the F–22 Raptor, because of budgetary constraints, we saw the original projections of what the size of the fleet would be constrained. What would be the impact, in your view, of a reduction of the number of these aircraft for one reason or the other? What does this do in terms of our national security interests?

Dr. CARTER. A reduction that is forced by the inability to produce the aircraft for the amount of money it was originally projected to cost would be really unfortunate. If we decide later we don't need that many airplanes for a legitimate national security reason, that is one thing. If we decide we are forced to fewer than we want simply by cost, that is the outcome I am trying to avoid, we are all trying to avoid.

Senator CORNYN. I appreciate your good work. I believe that we need to do whatever we need to do to protect our national security. Money that cannot be spent because of greater oversight and care in terms of the development and production of these aircraft is a critical role this committee plays and what I think the taxpayers expect from us.

How would you characterize, Secretary Carter, the program's overall test flight performance to date?

Dr. CARTER. As my colleagues here have indicated, it has consistently fallen short of expectations over the last 3 or 4 years but is beginning to catch up. Of the issues mentioned so far, the two that I focus on are software. That was mentioned. We still owe you collectively an answer on what we are doing about the software.

We have described, and I completely agree with Ms. Fox's and Dr. Gilmore's concerns about software, and I won't try to do it myself. Perhaps later, Admiral Venlet can address that software issue.

Then, in the STOVL variant, there are those four STOVL-unique issues, which are the door that opens up over the engine in the back when the lift fan is on; the drive shaft that connects the engine to the transmission—from the main engine to the transmission that, in turn, drives the lift fan; the heating within the transmission itself; and then the things that are called the roll posts that go into the wings. Those are the four issues on the STOVL variant. They are the ones that we are going to work through and see how much weight and cost they add to the STOVL.

STOVL is inherently more complicated. It is not surprising that we are having more difficulty with it because it has this complex flight envelope and this necessity to land vertically. Those are the two most serious engineering concerns we have going forward. We have plans to address all of those, and they are realistic plans. We still have to accomplish those plans.

Senator CORNYN. Currently, we have eight partner nations, and I understand there may be a ninth that is going to make a commitment to purchase as many as 19 of these F–35A variants. Of course, the goal of putting all our eggs in this one basket is to create a common multi-service platform and one where the costs could be spread among our partners, our allies.

If our partner nations perceived uncertainty and potentially reduced funding on the part of the United States toward completion of the F–35 program, how do you think it would impact their commitment to this program?

Dr. CARTER. They have the same attitude toward our commitment that we have to theirs. They want us to buy more because they know that will drive down their unit cost. They all want the airplane, just like we want the airplane.

So far, the solidarity among the JSF partners has been pretty impressive. If we get to where we want to get to with the JSF, there won't be any other airplane that you can buy that is as good for the dollar as the JSF, and we may see our export sales in decades ahead expand further, and that is a great thing.

Senator CORNYN. Thank you very much. My time is up.

Chairman LEVIN. Thank you, Senator Cornyn.

Senator Begich.

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

I wanted to have a couple of questions, but then just some quick follow-up. I want to follow up on the efforts with our allies in purchasing, you said 600 to 700 planes over the span.

Just for my own edification, what is or has the contractor indicated that if they didn't participate, what would happen to the price? 10, 20, 40 percent?

Dr. CARTER. I don't know whether Christine has done that assessment, but if you backed down the buy——

Senator BEGICH. Yes.

Dr. CARTER.—from the neighborhood of 3,100 to 2,600 planes, do you have an idea of the affect on the average procurement unit cost would be?

Ms. FOX. I don't have that answer off the top of my head. I would be happy to get back with you.

Senator BEGICH. Would you?

Ms. FOX. It would obviously increase the cost. You change the denominator, you are going to increase the cost. I don't want to give you an off-the-top-of-my-head answer.

Senator BEGICH. Could you share that with me?

Ms. FOX. Absolutely.

[The information referred to follows:]

If we assumed that there are no international purchases of Joint Strike Fighters, the Average Procurement Unit cost would increase by approximately 5 percent. We provided the attached table in March 2010 based on previous Office of Secretary of Defense/Office of Cost Assessment and Program Evaluation cost estimates. We can update this after our Milestone B recertification estimates are completed but would not expect the effects to change appreciably.

Sensitivty of JSF PAUC and APUC to International Purchase Assumptions

March 31, 2010

Item	100% International Participation - 700 Partner JSFs	75% International Participation - 525 Partner JSFs	% Change from 100% Case	50% International Participation - 350 Partner JSFs	% Change from 100% Case	25% International Participation - 175 Partner JSFs	% Change from 100% Case	0% International Participation - 0 Partner JSFs	% Change from 100% Case
PAUC (BY$02)	$ 108	$ 109	0.7%	$ 110	1.6%	$ 111	2.6%	$ 113	3.9%
APUC (BY$02)	$ 90	$ 91	0.9%	$ 92	1.9%	$ 93	3.2%	$ 94	4.7%
PAUC (TY$)	$ 152	$ 154	0.8%	$ 155	1.6%	$ 156	2.7%	$ 158	3.9%
APUC (TY$)	$ 132	$ 133	0.9%	$ 135	1.9%	$ 136	3.1%	$ 138	4.6%

Senator BEGICH. The second part, I know the pricing from cost-plus to fixed-price has been shifted to now happening. I know a year or so ago, 2 years ago, we had a subcommittee meeting about this issue, and we have had several other meetings. One of the concerns that I had back then is can we get to a fixed-price sooner?

My understanding is now you are there. Can you tell me the positives of that? I am assuming the contractor, everyone has agreed to it because you wouldn't be able to get there unless the contractor agreed to it. Can you tell me the positives of that, whoever could respond to that?

Dr. CARTER. The positives of a fixed-price are that, in the first instance, it requires us and the contractor to both get completely disciplined about the design we are asking for and for them the processes they are delivering to. We wanted to get to that point earlier on the JSF and not leave it loose for another couple years, which was the original plan.

Senator BEGICH. Right.

Dr. CARTER. Now you can't just wish for discipline. So just changing contract type doesn't make it so.

But we wanted to create an environment in which it was necessary for Admiral Venlet, his people on the government side, Lockheed Martin, and the other contractors on their side, to have that kind of discipline. We did that in Lot 4. We will do that again in Lot 5.

What it means is everybody needs to stare in the face the fact that if they overrun, they pay. That is good discipline.

Senator BEGICH. Right. Good for the taxpayers. Again, I want to thank you and Lockheed for doing a good job and getting that sooner rather than later.

Let me ask a question. I wanted to follow up on a question Senator McCain was probing on, and that is how they determine the pricing, the estimation, and of course, where we are today and where we didn't get to. It is a question I ask most departments when I hear this.

Are the same people who did those estimates still within the system of the DOD bureaucracy doing more estimates on other stuff? The reason I ask you this is because if we don't change that component, and you made a major change, to be very frank with you, in this program by changing who was running it. I give you credit for that. That is a strong statement.

If you saw the same estimators estimating the same stuff, how am I going to be comfortable and confident? First question is, are those same people, the bulk of them, still working in those same areas of estimation?

Dr. CARTER. Let me say at the beginning that I value the function of cost estimators. In some cases, they are excellent experts, many of whom work for Ms. Fox.

When I got those estimates, it wasn't that I didn't believe them. It was that I didn't want to live them. They were entirely credible. What I want our mangers to do, and this is what I and Dave tell our managers all the time; is just because we budgeted your program to that much money because, historically, things like this have cost this much, that is how we do the budgets.

When you ask us, or in this case, this committee has required us to budget to the ICE performed by Ms. Fox's office, I respect that process. It requires us to put an amount of money in the budget that history tells us in the past we have paid for that kind of program.

I don't want my managers to spend all that money.

Senator BEGICH. I understand that.

Dr. CARTER. I want them to underrun.

Senator BEGICH. I guess my struggle is—the F–35 is one. I can sit here and list off other programs that have had estimates, and then they are off not 1 or 2 or 3 percent, but multiples. It seems the system of how we are going after these and trying to be more accurate in our estimation, which, of course, is important for us as we are trying to appropriate resources, creates a confidence gap.

I am trying to resolve that confidence gap, to be very frank with you. There are some great steps you have done. I have been on this issue since the day I got here 2½ years ago. I appreciate it because I think it is a good platform. It is a great opportunity for us. But we have to continue to ride, and I would show others.

Ms. Fox, do you want to respond?

Ms. FOX. Sir, I just wanted to say that one of the requirements of the WSARA is that my office work across DOD on cost estimating techniques. That is one of the things that we are doing to try to raise the ability to do cost estimation across DOD.

The other thing that the act requires is that we bring those forward more visibly at the very beginning of a program, and that is another effort that is underway. Dr. Carter doesn't want to pay the estimation that we have, and I am with him in that.

But doing the cost estimation in a way that doesn't make assumptions that allow us to go forward for a program where we have just significantly underestimated it is the goal of the legislation. We are trying to help with that.

Senator BEGICH. At some point, I am assuming there is some metric of measurement that you will determine those techniques are working or not working?

Ms. FOX. Sir, we always track back, how did we do? What did we get right? What did we get wrong? There is no one metric, but we keep all the historical information, and we are keeping track of our own estimate, as well as others in DOD's estimates.

Senator BEGICH. I forget what that legislation requires, does it require you to come back to the committee at some point and report or give some written document of the accuracy of your technical estimation?

Ms. FOX. Sir, we owe you an annual report on our cost estimation work of the previous year. That report was provided last year for the first time and is about to come to you this year.

Senator BEGICH. Right. Let me go into one other area. Secretary Carter, you mentioned, and I agree with you, sustainment is a big ticket. Let me get some refinement here on what is, and I can't remember the exact phrase you used. The costs are acceptable or they are not acceptable now based on sustainment costs.

How big a differential is it between what they are saying it will cost and what you want to see it? In other words, because so far I haven't heard, and maybe I don't want to. But I am curious, is

10 percent too much, 100 percent too much? What are they saying it will cost and what you are trying to get to that makes it sustainable?

Does that make sense, the question?

Dr. CARTER. It does. I can't give you a good answer on that now because my basic answer is, I want to get out as much as I can of the cost that is in there, and I can go through each of the drivers of cost. There are 10 drivers, I won't take the time to go through them, of sustainment costs for the JSF. I want to get each one of those down.

I am greedy.

Senator BEGICH. Is your goal 30 percent, 20 percent, 50 percent?

Dr. CARTER. You are in the right ballpark easily.

Senator BEGICH. Okay. It is not a small amount?

Dr. CARTER. No.

Senator BEGICH. It is a significant amount?

Dr. CARTER. It is, exactly.

Senator BEGICH. Okay. My time is up. But I want to just comment. I know Senator McCain made a comment about sustainability, and if you can't get there, what is planned? What is the next plan? I will leave that as an open question for the record.

Thank you very much.

Chairman LEVIN. If you would get us that for the record, what are the backup plans if these goals, targets are not met? It is an important exercise in discipline for you and for us.

A number of Senators have made that request. I think Senator McCain raised that issue, and Senator Begich and others. We need to know what the driver is to succeed here, and part of that driver is to have a backup plan.

[The information referred to follows:]

The Joint Strike Fighter (JSF) Nunn-McCurdy Integrated Process Team #2 determined that there are no alternatives that will provide acceptable capability to meet the joint military requirement at less cost. None of the alternatives provide the robust basing options needed to operate from multiple environments to include land, sea, and austere land bases. The F–15E, F–16, and F/A–18 E/F lack the stealth features to be survivable in higher threat environments. The F–22 is the strongest alternative in terms of survivability and lethality in the air-to-air arena, but it lacks the sensors and weapons to meet required lethality against ground targets. With extensive upgrades, the F–22's capability against ground targets could be improved, but potential design limitations, technical risk, lack of basing flexibility, and high cost eliminated this alternative.

The increased capability associated with 5th generation aircraft comes at a price and is a major driver of both procurement and sustainment costs. Thus, JSF affordability is a major concern for the Department of Defense. Analysis indicates that it will cost about 33 percent more to operate and sustain the JSF relative to the F–16 and F–18 aircraft it is replacing. The program can make upfront investments to improve the reliability and maintainability of JSF. Cost Assessment and Program Evaluation assesses that these improvements, while important, will have a limited effect on operations and support costs. If further reductions in cost are required, our actions will need to address reduced JSF flying hours. Options include a smaller JSF force or increased use of flight simulators.

Chairman LEVIN. Thank you, Senator Begich.

Senator Portman.

Senator PORTMAN. Thank you, Senator Levin. Well said.

Senator McCain, Senator Levin, thanks for holding this hearing. As a new member of the committee, this has been a frustrating

process because I have heard incredible numbers in terms of the estimates of the cost and the timing being so far off.

In these fiscal times we face, it is particularly concerning. We are talking about not just restraining spending in the DOD budget, but many, including your boss, have talked about reducing spending in programs. Here we are talking about a program that, based on the information we have heard today, is estimated now to cost 80 percent more than when the program started.

Ms. Fox, you said it is $4.5 billion more expensive than it was just a couple of years ago, just 1 year ago. Actually, in your testimony it was $4.5 billion more expensive in the last year. It is taking years longer than originally estimated, of course. In fact, there has been a 4-year delay in the program just since 4 years ago.

I share in the frustration, and we have to have a qualitative edge, this is our next generation, our fifth-generation qualitative edge. We need to get it right. We have talked about software and STOVL, and we have talked about the pilot helmet mounted display problem. It sounds like we are beginning to identify the problems.

Secretary Carter, it sounds like you are on top of some of these specific issues, but this is a program that just cries out for reform, help, and competition. Dr. Carter, you have been big on this better buying power idea, head-to-head competition drives productivity and value. I couldn't agree with you more.

Based on all the experience of previous weapon systems, having competition enables us not to just get the cost down, which we obviously have to do in this case. You had just said, in response to Senator Begich, we can't afford it. The sustainment costs, we have talked about, but it also improves the quality.

From an operational point of view, when you have 95 percent of our fighters, with some of these gentlemen behind you who have been, like Senator McCain, in a position of having to be out there as warfighters and wanting to have that qualitative edge, we have to be sure we have competition on the operational side as well.

You know my concerns, Secretary Carter, because we have talked about them. I just think given these incredible cost overruns, the huge problems we are having with this program, that to not have a competitive engine makes no sense.

In response to earlier questions about this, you said it is normal and routine not to have competition. I would say the GAO is going to tell us later how it has been normal and routine in some programs to have competition. They will talk about the F–16 program and the great engine wars of the 1980s and how much money was saved.

You probably disagree with GAO's estimates that they say we can save $10 billion to $20 billion just by having competition. Again, that doesn't even get at the operational concerns of having 95 percent.

I don't think there is anything normal and routine, by the way, about having 95 percent of our fighters depend on one engine. That is not normal and routine. Nor are, again, these unprecedented cost overruns that we have seen. We have never seen a program like this in terms of the amount of money we are talking about.

You also said that it is an analytical judgment, and the analytical judgment was the upfront cost can never be repaid. The costs in this program so far have been about $3 billion to develop a competitive engine. That is all wasted when you terminate, as you guys have decided to do. You are even talking about destroying some of the incredible technology that has been developed with that $3 billion of taxpayers' money.

You said it will cost about another $2.9 billion going forward in order to develop a competitive engine. Again, this is in the context we are talking about a $110 billion program, which is going to be an estimate that will be increased soon. GAO said that you can save $10 billion to $20 billion just through competition.

But that $2.9 billion cost, of course, others would not agree. What GAO says, it would cost $1.8 billion. They said that last year.

They said that before, by the way, the competitive engine manufacturers, General Electric (GE) and Rolls-Royce, decided that they were going to self-fund over the next 2 years. They said it costs only $1.8 billion, and their self-funding is in response to your decision to terminate the competition.

I would ask you about your $2.9 billion number, those testing costs, does that take into account the fact that GE and Rolls-Royce have committed to bear the costs for the F–136 development over the next couple of years? To move to a fixed-price contract, per Senator Begich's question, which is, to me, a template that ought to be used in all this.

I see a real inconsistency here between the incredible and frustrating numbers we have been talking about on costs and delays. Then on this one idea of competition, we are talking about 95 percent of the fighters to say that somehow our analytical judgment is that we can't have competition.

Let me just be candid about something. I started off getting interested in this particular issue with this particular program because GE Aircraft has its headquarters in Ohio, and they don't manufacture as much in Ohio as they do in other States. But their headquarters are there, and they have a presence there that is important.

The more I dig into this, the more I learn about it and the more I learn about not just this program, but other programs and what competition has meant, the more convinced I am that this is one area, relatively important area, in an airplane, the engine, where we can make strides in terms of the cost and on the operational side.

With that, Dr. Carter, I would like you to respond to my comments and questions on the $2.9 billion testing cost. Do you still hold by those numbers, despite the GAO report and despite the decision in the interim of GE and Rolls-Royce to go ahead and commit to bear the cost of development over the next couple of years?

Dr. CARTER. We do, and I may ask Ms. Fox to comment further. Just to be clear, the $2.9 billion that we talk about is to prepare the second engine for competition. That includes completing development. It includes some production tooling, everything it takes to have a second engine available for competition.

That is the estimate. Actually, Christine's people have done that estimate, and I believe that number is still good. It is the same number no matter who pays it. It is $2.9 billion.

Senator PORTMAN. Wait a minute. It is the same number to the taxpayers, no matter who pays it?

Dr. CARTER. No. It is obviously not the same number, but it is the same cost.

Senator PORTMAN. Your $2.9 billion is not the cost to the taxpayers?

Dr. CARTER. Sorry?

Senator PORTMAN. The $2.9 billion is not the cost to the taxpayers?

Dr. CARTER. No, $2.9 billion that I was speaking about is the cost to complete the development in our estimate.

Senator PORTMAN. Okay. You weren't talking about your cost or taxpayers' cost.

Dr. CARTER. In preparation for competition of the——

Senator PORTMAN. You were talking about the costs.

Dr. CARTER. Correct.

Senator PORTMAN. Over the next 2 years, the industry, the contractors have agreed to bear those costs and then go to a fixed-price contract. Does that change your $2.9 billion figure as to the cost to the program, meaning the cost to the taxpayers?

Dr. CARTER. Two comments on that. First, as I said, it is $2.9 billion, irrespective of who is paying the bill. Obviously, less to the taxpayers if somebody else is paying for it.

You also mentioned a fixed-price contract, and this gets back to a comment I made earlier about a fixed-price contract. The F–136 engine isn't at a point yet where its technical specifications are clear. That is normal in an aircraft engine program at the early stage that the F–136 engine is at.

Therefore, and at that stage, a fixed-price offer isn't really meaningful because the engine that is offered, that is on the test stand, is not the engine that we intend to use. It is, instead, the engine that evolves from that one. Fixed-price isn't really appropriate to discuss for the F–136 engine at this stage.

Let me ask Ms. Fox to comment on the $2.9 billion.

Ms. FOX. Certainly. We did do the cost estimate of the $2.9 billion. It does include, as Dr. Carter said, the cost to complete development, which is about $1.2 billion in our estimation. Then it includes the other things that you would have to pay to bring it up to a place where it could fairly compete.

Our estimate last year and in previous work that we did, was that would happen in 2014. But with changes to the program, including changes to the engine, including changes to the F–136 engine development program, we now estimate that would not be possible until 2017.

You have to continue on with your investment until then. That is part of it. There is procurement cost, tooling——

Senator PORTMAN. We have gone from 2014 to 2017, assuming you are going to rely on one engine?

Ms. FOX. Sir, that is the time where we think that the two engines would be in a place where they could fairly compete. In other

words, the time when the F–136 could have achieved all of the things that——

Senator PORTMAN. Since you terminated the other engine, why would you be estimating two engines?

Ms. FOX. This is our estimate before termination, sir.

Senator PORTMAN. Okay. Could you get back to us, please, Dr. Carter, on what the costs are? I think it is unusual, Mr. Chairman, that before the committee, DOD is telling us what a cost is, and the assumption has to be that is the cost to the government. Then coming back and saying that is the cost of development that doesn't include the private sector commitment here.

I would like to know what the net cost is to the taxpayers and what the savings would be. Then in terms of a fixed-price contract, I would like to hear more about why a fixed-price contract isn't appropriate.

Thank you very much. My time is expired. I appreciate the chairman's indulgence and your testimony here this morning.

[The information referred to follows:]

In April 2010, the General Electric/Rolls-Royce F136 Fighter Engine Team provided the Joint Strike Fighter Program Office an unsolicited offer for a fixed-price contract for the developmental engine that was in testing at the time. That engine configuration had roughly 100 hours of ground testing (as of the offer date), and 0 flight hours. According to the offer, the Department of Defense (DOD) would be responsible for the costs of all changes required during future development and test. Since a large number of such changes are inevitable as the engine is developed, the fixed-price is meaningless. The offer also included additional pricing terms and conditions which shifted considerable risk to the government, which is not standard with a true fixed-price contract.

At termination, the F136 only completed 1,705 hours of its approximately 10,000 hour ground test program. It takes 3,000 to 3,500 hours to build the maturity required to begin flight testing. It takes another 1,500 to 2,000 hours to attain maturity required for low rate production where the engine's performance and initial durability have been demonstrated. The remainder of the testing demonstrates full life durability, environmental effects, and re-qualifies design changes to rectify specification shortfalls uncovered in ground and flight test. At termination, design changes were known to be needed for the F136 to meet its specification. These design changes were not completed and have not been tested. The F136 engine has zero flight test time. The level of design maturity and stability lacking in the F136 make it unsuitable for a successful fixed-price contract. DOD and contractors generally do not sign fixed-price contracts until the design has stabilized. The F135 engine has accumulated over 10,000 ground test hours and a significant number of flight test hours and its design has stabilized making it suitable for a fixed-price-type contract.

Regarding cost, it would take $480 million, not $100 million, as some press reports have suggested, to continue development of the F136 for the next year. DOD continues to estimate that it would take $2.9 billion to prepare the F136 for competition. DOD cannot afford such wasteful spending, this year or in the future.

Chairman LEVIN. Will you provide that figure for the record as to how the $2.9 billion will be changed, would be changed, with the agreement, or the decision on the part of the manufacturer to take the cost to themselves during the next 2 years? How does that $2.9 billion figure change with that willingness on the part of the second engine manufacturer?

Will you do that for the record, Secretary Carter?

Dr. CARTER. Yes, sir.

[The information referred to follows:]

The $2.9 billion estimate would be reduced by General Electric's decision to self-fund the program. The $2.9 billion estimate included approximately $0.7 billion of alternate engine development work over the next 2 years. The Cost Assessment and Program Evaluation's estimate is based on the assumption that General Electric

would conduct a fully-staffed development and test qualification program. Furthermore, it was assumed that this work would be integrated with the overall development qualification schedule of Lockheed Martin. If these operating assumptions were held constant, with the sole difference being that General Electric funded the activity and would not pass the cost back to the government via increased overhead rates or higher production prices, the $2.9 billion estimate would be reduced by approximately $0.7 billion.

The additional complication is that during this 2-year timeframe, the development effort is being ramped down. This makes assumptions about the rate of work completion significant. Our Joint Strike Fighter program office has estimated the first year of this year period would require approximately $480 million.

We do not know, however, under what assumptions General Electric would operate under a self-funded program. Until that is defined, we cannot conclude that $0.7 billion would be reduced dollar-for-dollar from the $2.9 billion estimate. Furthermore, any presumed reductions are based on the supposition that General Electric would not pass these costs back to the government via increases to overhead or production prices.

Chairman LEVIN. Thank you.

Thank you, Senator Portman.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

To pursue that line of questioning and, first, let me thank all of you for your work and your expertise and the dedication of this project. Is there any precedent for self-funding a program of this magnitude in dollars and importance to our national security? Dr. Carter?

Dr. CARTER. Not that I am aware of.

Senator BLUMENTHAL. Do you have a concern that even though the representation is that there will be self-funding, that American taxpayers could, in fact, foot the bill for these expenditures?

Dr. CARTER. $2.9 billion is a lot of money for anybody, and I would be concerned if the idea is that we are going to pay for it later by acquiring engines that, as I said, we don't think are necessary and don't make the cut for us in terms of their contribution to taxpayer value for national defense. That is why we haven't wanted to invest in the second engine.

I would certainly hope no one has it in their mind that we are going to pay for that later. Because whether you pay for it now or pay for it later, it is $2.9 billion we can't afford for an engine we don't need.

Senator BLUMENTHAL. Perhaps I am just stating it in different terms, there may be claims down the road, and there are these claims all the time in defense procurement contracts, that American taxpayers may pay the increase to the cost of this project? Is that true?

Dr. CARTER. I would have that concern.

Senator BLUMENTHAL. Let me ask you about the equipment, the tooling, and the property involved in the second engine. Doesn't that belong to the American taxpayers? It is not GE's, is it?

Dr. CARTER. No. It is taxpayer property, and it is now the termination contracting officer, in our normal procedures, arranging for the disposition of that. But it is government property.

Senator BLUMENTHAL. DOD has decided to terminate it and, therefore, is entitled to have that property back. Correct?

Dr. CARTER. That is correct.

Senator BLUMENTHAL. Are you taking steps, you have mentioned a couple of them, to, in effect, take that property back, terminate

the program, stop any potential risk to the American taxpayer so that the project will be completed with the least cost possible.

Dr. CARTER. The termination contracting officer is doing precisely that, following the normal procedure for contract termination, taking possession of government property, and arranging for its disposition.

Senator BLUMENTHAL. You have talked very credibly and persuasively about managing out and driving out the unnecessary costs in the range of 20, 30, 40 percent. When will we know whether, in fact, that goal is possible?

Dr. CARTER. I hope and expect that you will see indications of that in the LRIP 5 contract negotiations, which will be concluding in the next few months. Then you will see them again in LRIP 6 and more in LRIP 7.

I hope and expect that they will be progressively better. It has taken time for cost to creep in. It will take time to drive it out. I am expecting over the years that we will get better and better, as all businesses do, at identifying costs and driving out costs.

All businesses are constantly in the process of driving costs down, and our enterprises that are working for us on this particular project will be doing the same thing.

Senator BLUMENTHAL. As your shareholders, though, if we were asking the question, give us a date by when we will know whether or not that goal can be met, what would you say?

Dr. CARTER. We will have a much better indication in a few months of the cost structure of the JSF than we have ever had and that we have right now. It is a little bit like the difference between what we knew about SDD last year and what we know now.

We are going to have a greatly improved understanding of the cost structure of the JSF in just a few months. We are working on it intensively. We have to.

We are going through every piece of it. We have a very substantial effort. Dave Venlet is involved in it. Dave Van Buren is involved in it. I am involved in it personally.

Senator BLUMENTHAL. None of us on this committee—I can't speak for others—I have no doubt about your dedication, your expertise, your skill in seeking to achieve that goal. You have just used the term, "over the years we would know," and that is a little fuzzier than, "over the next few months."

If you think it will be over the next few months, that is a lot more comforting than over the years.

Dr. CARTER. No, I am sorry. I don't mean to be vague. Our understanding of the cost structure will improve dramatically in the next few months.

The actual reduction of cost will occur during the period of production of the aircraft, which is some years out. We will be eliminating cost as the production process ramps up because it is in the future, and it will be a progressive process.

We can't snap our fingers and remove all that cost. It is something we need to work out over time. What we will have in the next few months is a much better understanding of what that path is.

Senator BLUMENTHAL. We would be able to ask you these questions with more specificity in, let us say, the next quarter?

Dr. CARTER. I think so, yes.

Senator BLUMENTHAL. Finally, let me just turn to what I regard as the elephant in the room here. Senator McCain and others have asked you about alternatives, and the chairman asked you to come back as to what the alternatives are. Without asking you to speculate, are there alternatives here?

Dr. CARTER. There are no good alternatives to the JSF for either of our Services or our international partners. We just went through that analysis, as required by law under Nunn-McCurdy. We looked at alternatives, and we don't have any good alternatives. We want the airplane.

Senator BLUMENTHAL. Is there anything that we can do to help you drive down cost, to manage out those costs that Congress, the Senate, or this panel can do in light of the fact that there are no good alternatives here? We need this aircraft. We need to make it work. We need to make it affordable.

Most important, we need to convince the American taxpayers that it is necessary, affordable, and that there are no good alternatives.

Dr. CARTER. This committee has contributed a lot to our acquisition practices over the last couple of years. That was through the WSARA and other provisions. I appreciate that and thank the committee for giving us many of the tools that we do use to try to deliver better value to the taxpayers and the warfighters.

Senator BLUMENTHAL. Thank you very much.

Chairman LEVIN. Thank you, Senator Blumenthal.

Senator Ayotte.

Senator AYOTTE. Thank you, Mr. Chairman.

I also want to thank you and Ranking Member McCain again for holding this important hearing.

Just to summarize what you are saying, this is still a very critical project for our country, and there isn't a good alternative. The importance of the F–35 JSF program is one that we agree on in terms of getting that capability to our warfighter in a way that we can afford and in the production rates that we want them to be.

I share all of the panel members' concerns about the cost overruns and look forward to your detailed analysis as to how we will be able to meet the cost measures to afford this program going forward.

I wanted to ask you about the ramp-up rates for production. Secretary Carter, as I understand it, in fiscal year 2010, 32 JSFs were funded. Then, in fiscal year 2011, 35 were funded, and yet, for fiscal year 2012, the proposal of DOD is actually to go back to 32 planes.

Just looking at what we are trying to get at in terms of overall production rates, I was surprised to see us creeping up and then go down in terms of production rates and wanted to understand why our production rates aren't increasing, given what we are trying to produce overall?

As I understand it, the goal is to produce almost 2,500 of these JSF aircraft in the next 25 years. We would hope that the production would be going, even if it were gradually, in the opposite direction. Senator Begich had already asked Ms. Fox about the production costs and as we produce more what that impacts on the individual cost for each fighter that is produced.

As I understand it, you are going to get back to the committee on that issue, but I wanted you to comment on what the thought process was as to why we are not going in this direction, as opposed to that direction, in fiscal year 2012?

Dr. CARTER. I can do that, and the difference between 35 and 32 planes is a difference between what the United States buys and some additional airplanes bought by others. Our buy has been stable at 32. Your question still is, why aren't you going up?

Senator AYOTTE. Right.

Dr. CARTER. Why are you flat? The reason for that is that based on their performance to date, that is what I can sit before you today and tell you the Fort Worth line can produce. The line has not matured in a way that makes it reasonable for me to ask you to give me money for more airplanes than 32.

That is just sort of fact of life. A second reason is that it would be imprudent to try to go faster up the ramp for the following reason: that risks building aircraft that we are, at the same moment we are building it, discovering in tests need modifications.

You don't want to build too many, you want to get into production as quickly as you can. You don't want to get in there so fast that you end up rebuilding the early aircraft on the basis of what you learn in tests.

That is the balance between going too fast and going too slow that I was referring to, and we think that the 1.5 factor per year strikes the right balance between going too fast and too slow. Those two things together explain why flat in 2012. Just not ready to go up the ramp. Then why the ramp is a 1.5 ramp in the out-years.

We are advised by the IMRT, that that is the maximum year-on-year increase in production rate that we can prudently plan for the Fort Worth facility.

Senator AYOTTE. I look forward to your getting back to us on the information on what you anticipate the rates in terms of if we increase production, how do we reduce cost? That goes into the cost analysis overall of what we are looking at, to whether we cannot only produce the right specifications we want for our warfighters, but also make sure that we can actually get production so it is a viable program going forward.

Ms. FOX. Could I just add that as long as the total of 2,443 aircraft holds, the change in the ramp, it delays when we get aircraft. It is reflected in the cost and the development cost. But the average cost per aircraft doesn't significantly change with regard to the ramp, just for your information.

Senator AYOTTE. Since you had said earlier, so you don't think that there is any change?

Ms. FOX. The change in the ramp is not a significant driver in cost in any way in the average cost per aircraft.

The reason for the change in the ramp, the increased development, is an increase in cost, as we have all already testified to. That is the cost that we are experiencing in the near-term, but the average cost per aircraft won't change with the ramp.

Senator AYOTTE. I just wanted to clarify, Secretary Carter, you were saying that the 35 planes in 2011, that some of them were due to international acquisitions? That is different than what I understood.

Dr. CARTER. Let me get back to you on that, and perhaps the second panel, I am sure Dave has that at his fingertips. I could find it out here. I remember a couple of United Kingdom and Dutch planes in there. I think that explains the difference.

Senator AYOTTE. Okay. If you could get back to us on that, I would really appreciate it, just so we can understand which way we are going.

[The information referred to follows:]

Final fiscal year 2011 appropriations included funding for up to 35 total U.S. aircraft. These aircraft will be procured in Low Rate Initial Production (LRIP) Lot 5. There are no planned partner procurements in LRIP Lot 5.

Some confusion likely resulted from the fact that the F–35 program was restructured between the fiscal year 2011 President's budget submittal in February 2010 and the enactment of final fiscal year 2011 appropriations in April 2011.

The fiscal year 2011 President's budget requested 42 total F–35 aircraft. Following the Nunn-McCurdy review and certification of the F–35 program, and the resultant Technical Baseline Review, the Secretary announced that the Department planned to procure 32 aircraft in fiscal year 2011. H.R. 1473, the Department of Defense and Full-Year Continuing Appropriations Act, 2011, signed into law on April 15, 2011, provides appropriations for up to 35 total F–35 aircraft.

Senator AYOTTE. As a follow-up on the extra engine issue and in response to what Senator Blumenthal raised, it is very important for the committee to understand the full costs. We have GE offering to pay for the next 2 years what it will cost to build the extra engine.

There are additional costs, as I understand it, that go beyond those 2 years of development that taxpayers would incur. It is important for us to understand what those costs would be. As we are looking for, particularly when you come to us, which is quite unusual, to tell us don't spend money here, we take that very seriously. I look forward to seeing what those numbers are.

Thank you.

Chairman LEVIN. Thank you very much, Senator Ayotte.

Senator Shaheen.

Senator SHAHEEN. Thank you, Mr. Chairman.

Thank you to all of our panelists for being here. Hopefully, you are almost finished this morning.

Dr. Carter, as the chair of the European Affairs Subcommittee of the Senate Foreign Relations Committee, I am particularly aware of the importance of the F–35 program to our international partners and to our North Atlantic Treaty Organization allies. As we are seeing in Libya and Afghanistan, interoperability is particularly important with the threats that we are facing today.

I know there have been a number of questions about how our international partners are participating in viewing the program. I am not going to repeat those. I just want to reiterate the importance of making sure that our allies are fully aware of what is happening with the program and are updated on a regular basis.

Dr. CARTER. They are, indeed. I make a point whenever we make an important decision or there is a change in data or something, I usually call them all. At a minimum, send them a letter.

What they, quite understandably, do not like is to read in the newspapers something about an airplane that their government is buying. I try to avoid that.

Senator SHAHEEN. Good. Thank you.

One area I don't think we have talked about today is the importance of the supplier base for the F–35 and what the impact is on the supplier base of dramatic changes to timelines and cost estimates for many of the small companies that are part of that supplier base. We hear from companies in New Hampshire about the difficulties in planning when there are dramatic changes in contracts.

I wonder if you could speak to that or Ms. Fox could speak to that, and how we maintain supplier stability throughout this process?

Dr. CARTER. It is a very important point, and, in fact, turbulence is a serious driver of cost at the prime and the subcontractor levels, which is why we would like to get ourselves on a smooth glide slope for the JSF and hold to it because there is great economy in stability in these programs.

You are absolutely right. Most of the cost associated with the airplane isn't retained at the prime contractor level. It is paid down to the subs. The two big airframe subs are BAE Systems and Northrop Grumman. They, in turn, have their chain of subs.

Those companies that are small and sometimes very innovative are an important part of our industrial base. They are a conveyor belt of new faces, new ideas, and so forth. The supplier base is something very important to national defense. The whole defense industrial base is important to national defense, but that is an important piece of it.

We were talking about the engine earlier. The engine is, let us take the Pratt & Whitney engine. The Pratt & Whitney engine, about 15 percent of the cost of that engine is for Pratt & Whitney to assemble the parts and 85 percent on a dollar is paid out to the subcontractors for the parts.

The majority of the cost of these articles actually filters down to the supplier base. Their competence, their efficiency, are essential to our success.

Senator SHAHEEN. I am pleased to hear you say that. We have a lot of those subcontractors in New Hampshire who are providing parts to BAE and to Northrop Grumman. We think they are very important, and we want to see them continue.

As you point out, the innovation that they are developing is critical, as we look not just at this aircraft, but at the future needs that the military will have.

We have all talked about how many times the program has been restructured. I want you to think about next year and imagine if you are testifying a year from now before this committee. What would you want to be able to say about where the program is? How will we know that it is back on track? What is the biggest obstacle to achieving progress over the next year?

Dr. CARTER. I would like to take the four phases. I would like to tell you that SDD is executing the way we wanted it to. The biggest risk there is software.

I would like to tell you that we had made a substantial dent in the projected average procurement unit cost of the aircraft, and I don't think there is any risk there except stubbornness. There is excess cost in there. We can identify it.

I would like to be able to tell you that our estimates for sustainment are realistically lower. I don't think there is a lot of risk there either. They certainly will be more realistic because we haven't really taken that on yet. They will be better. I hope they are lower also.

Finally, for STOVL, I would like to be able to report that we are working through the problems on STOVL and that we are able to solve them at acceptable cost and weight penalty.

Senator SHAHEEN. What do you mean by stubbornness?

Dr. CARTER. Resistance to changing the way we are doing things on this airplane, the way it has evolved over the last 10 years, and getting it back to where it started when it was a much more affordable airplane.

Senator SHAHEEN. Thank you.

Finally, how would you rate the fifth-generation stealth capabilities in the F–22 and F–35 to those that we have seen from Russia, their T–50, and the Chinese J–20? Where does our technology rate with respect to theirs?

Dr. CARTER. In all respects, the F–35 dominates those aircraft and will, therefore, dominate them in the skies. We will have more of them, and they will be better. That is the prize here for getting this program right.

Senator SHAHEEN. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Shaheen.

Senator Chambliss.

Senator CHAMBLISS. Thanks, Mr. Chairman.

Let me make something clear here. When you just responded to Senator Shaheen, with respect to the other aircraft, Secretary Carter, she mentioned the F–22 in that mix. The F–22 is clearly a far superior air-to-air airplane than the F–35. Do we agree on that?

Dr. CARTER. Yes, absolutely.

Senator CHAMBLISS. Okay. I listened to you back in my office a little while, to all of you talk about this program. Those of us who have been in such strong support of this program and know that the program has to succeed are very frustrated. I am sure some of that frustration exists with each of you.

Secretary Carter, you and I have been through this, it seems like on an annual basis for the last few years, and we keep waiting for that good news to come forward. It just doesn't seem to be there, and I am really concerned.

There is no question that there is no alternative. We have to keep pounding away here until we get this thing right. I would just urge all of you to redouble your efforts, both on the IOC, on the costs, on all of these issues that keep coming up. This thing has to succeed.

I am concerned, Secretary Carter, about the comment that Ms. Fox made in her statement that the O&S costs of the F–35 are less than the F–22, equal to the F–15 C and D, and greater than the F–16 and the F/A–18. This is significant because it is going to cost 33 percent more per flight hour to operate the F–35 than it does the F–16, the F/A–18, and that is why you are going to experience a shortfall of 40 to 100 aircraft due to that cost increase.

I understand the shortfall is a manageable shortfall, but the Navy has a greater concern than the Air Force with the shortfall. As a result of that, they have invested in, or DOD has invested in, 150 F/A–18s. Did any of the funds used to purchase those F/A–18s come from F–35 funds?

Dr. CARTER. In effect, they did. It was a change made at the same time, and while that wasn't our first choice, that was what we needed to do to avoid the shortfall. The funding for the 41 this year, I think, Ms. Fox will agree with me, in effect, came from the F–35 line.

Senator CHAMBLISS. That is very troublesome that we are spending $6 billion, I think, on those F/A–18s, fourth-generation aircraft that are going to have limited utility, particularly the longer they stay in the inventory. We know they are going to be there 15, 20, 25, or 30 years maybe.

With our potential adversaries developing stealthy aircraft that are going to be much superior to the F/A–18 and here we are equipping our folks with airplanes and spending a lot of money that if we just waited and bought more F–35s, it just seems to me like it would be money better spent.

In that vein, I am a little troubled by some press reports that I am seeing that our F–35 partner nations are in contact with Boeing to purchase F/A–18s to compensate for the delays in the F–35 deliveries. Again, it is a huge mistake.

We can't tell other folks what to do, but here we are because of the delays in this program, putting our partners in a position of taking money they would use to buy F–35s, and they are going to buy fourth-generation aircraft. Is that, in fact, the case? Do we know whether our partners are negotiating to buy fourth-generation aircraft?

Dr. CARTER. There are some that, like we, as a partial short-term mitigation to the slip in the JSF schedule, are buying other aircraft instead.

Senator CHAMBLISS. Mr. Van Buren, would you care to comment on this issue as it relates to the Air Force, the shortfall issue?

Mr. VAN BUREN. In the short term, we will look at life extension programs for the F–16 to compensate for the later deliveries of the F–35. The Air Force understands the balance of producing these aircraft when the configuration is known and that the ramp that has been created by DOD is a prudent one with regard to making sure that the configuration we finally accept is one that will be fully capable.

Senator CHAMBLISS. Mr. Van Buren, Secretary Carter, the recent Selected Acquisition Report states that the F–35 will have to recertify milestone B decision later this month. Are we on track to do that?

Dr. CARTER. We are. At this point, that is kind of a formality. We have gone through the Nunn-McCurdy process. It requires us to do this. We have done all the work. CAPE has done the cost estimate. Ms. Fox has presented you with that data today, or that is available. That will occur in the next few weeks. It is, at this point, a formality.

Senator CHAMBLISS. Ms. Fox, affordability is the underlying premise of the F–35 in Europe as I note from your statement. In

your opinion, what can be done in the near term to help drive down these costs that Dr. Carter has promised before he leaves, he is going to come back next year and tell us is happening.

Ms. FOX. Sir, I do think that the software is an area we all really do need to focus. If we can get the software development up, the lines of code required have been known for a long time. The difference in the estimate is how quickly the contractor can produce the code.

They are producing it at a slower rate currently than we had estimated before or had been hoped. If we can figure out how they can produce the code more quickly and, as Dr. Gilmore said, test it more quickly, that will help quite a lot in getting the development cost down. I defer to Dr. Carter's expertise in negotiating the average cost per aircraft through fixed-price contracting.

O&S is hard. There are certainly aspects of O&S that we want to help and support Dr. Carter's efforts to try to get those costs down for the long term, as we field these aircraft in numbers. There are certain parts of O&S, though, like the cost of fuel and the fuel consumption that this high-performance aircraft will use compared to legacy that will be very difficult to address.

Whether we can get it all the way down to legacy is something that I and my office doubts. Whether we can get it down, however, we do believe that there are ways to get it down in some of the repairables, for example, the contractor logistic support, which is a focus area of JPO and Dr. Carter as well.

Senator CHAMBLISS. Dr. Carter, are we having problems with the F–22 software today?

Dr. CARTER. We are.

Senator CHAMBLISS. Is there any relativity to the problems there with the problems with the F–35 software?

Dr. CARTER. For F–22, we have software that is fully functioning but does not have all the functionality we want. We have basic software builds that we are now adding capability to. In the F–35 at this stage, we are still building the basic capability, which we will then add to, block-by-block, later.

The F–22 modernization program is a concern to us. Dave and I talk about it a lot. Let me just ask, Dave, if you have anything to add about F–22 modernization?

Mr. VAN BUREN. Increment 3.2 that we are currently embarking on in the F–22 to our warfighting customer is taking too long to implement, and we are working with the company to try to speed that up, make it more affordable, more economical, and get the capability into warfighters' hands sooner.

Senator CHAMBLISS. Was the software problem with the F–22 the reason it was not used in the Libya operation?

Mr. VAN BUREN. That is outside of my area of expertise. I would defer to the operational side.

Senator CHAMBLISS. Dr. Carter, do you know?

Dr. CARTER. I would prefer to have General Schwartz or someone else respond to make sure he gets an answer to you. But that was an operational decision that he and General Fraser made, and I wouldn't like to speak for them. If you don't mind, I will get an answer for you.

Senator CHAMBLISS. If you could get us an answer for the record, I would appreciate it.

[The information referred to follows:]

The main reason the F–22 did not participate in the Libya conflict was its distance from the fight. During testimony with the Senate Defense Appropriations Subcommittee, General Schwartz is quoted as saying: "Had the F–22 been stationed in Europe, in proximity and therefore more available, it undoubtedly would have been used," but because the Libya operation "came together fairly rapidly, the judgment was made to apply the various resources we had in close proximity."

Fighters already stationed in the U.S. Air Forces in Europe theater, such as the F–15E and F–16, were more than capable of ensuring mission success. There are no known software problems in the F–22 that would prevent combat employment.

Senator CHAMBLISS. Thanks, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Chambliss.

We will now excuse this panel and move to our second panel; we thank you very much. There are a number of questions for the record that you have been asked to provide. We would ask that those be provided within a week.

Thank you.

Our second panel this morning, or this afternoon now, will be VADM David J. Venlet, USN, PEO, F–35 Lightning II Program; Michael J. Sullivan, Director, Acquisition and Sourcing Management, GAO; and Charles T. "Tom" Burbage, Executive Vice President and General Manager, F–35 Program Integration, Lockheed Martin Aeronautics Company. [Pause.]

Thank you, gentlemen, all of you, for coming this afternoon. We appreciate your being here.

I am in an unusual situation here now where I must leave. I am going to leave you with a question, however, that I would appreciate your answering, Admiral, when it is your turn.

I will leave the gavel in the hands of Senator McCain, unless there is someone on my side who shows up. I don't know if you have opening statements or not but if you do, they will be welcome. I am going to have to ask you in your opening statement, Admiral, to answer the following question for me. I will have to ask my staff what your answer was.

Last year, you completed negotiations on the F–35 aircraft in the fiscal year 2010 program that was called Lot 4 aircraft. That was a fixed-price incentive fee contract, which is a good thing. We would encourage DOD to move away from cost-plus contracts. I understand that the contract price, including the potential ceiling price of the contract, was lower than the CAPE estimate of the production cost, and that is also good.

However, unfortunately, it was announced earlier this year that you are expecting overruns from $700 million to as much as $964 million on the Lot 1 through Lot 3 aircraft, which are being bought with cost-plus contracts. We have also heard press reports that the bid prices for the Lot 5 contract are higher than the negotiated prices for the Lot 4 aircraft. If that is true, those facts would be very troubling.

As I turn the gavel over to Senator McCain for any opening statement that he might have and then to recognize you for your opening statements, I would ask you, Admiral, if you would address that question in your opening statement?

I want to again thank my colleague, Senator McCain, for his initiative in this matter and for taking over at this point.

Thank you.

Senator MCCAIN [presiding]. Thank you, Mr. Chairman.

I have no opening statement. I appreciate the patience of the witnesses. I know you will appreciate the lateness of the hour. Please proceed.

Are you first, Admiral?

STATEMENT OF VADM DAVID J. VENLET, USN, PROGRAM EXECUTIVE OFFICER, F–35 LIGHTNING II PROGRAM

Admiral VENLET. Yes, sir. Happy to go first.

Thank you, Chairman Levin and Ranking Member McCain.

Distinguished members, thank you for being here today.

My opening statement, I would like to tie three points from the previous panel's questions, several that you all asked. I would like to start with the WSARA.

You asked a question about what happened and what we can do, Senator. Senator Lieberman asked about confidence in the plan going forward. There is an intersection in my mind, and that intersection is the fundamentals of systems engineering.

I would say that the mention and the emphasis in the WSARA on systems engineering was applauded as a systems command commander where I sat. That is what forms the basis for confidence in this adjusted plan going forward. There is not a record of performance for you to have confidence in, Senator.

Right now, I am bringing you a plan with changes in it, with resilience in it, with realism in costs, and an embracing of those fundamentals of systems acquisition that has not been there. That is the basis for the confidence going forward. What can we do? What does this new plan do?

This new plan adds time, and it adds money because of the risk to software. How you address the risk, is to have time for the rework, and you resource that plan with people to do the work and a schedule.

One of the most significant adjustments in this new schedule was a 2-year extension of what we call that middle capability block of Block 2. That is the most powerful lever of what we can do about it to handle and put some resilience in this program to deal with the expected further discovery of issues that we need to do about it.

You have a unified and aligned assessment of the program across GAO, Department of the Treasury, CAPE, and the program office like never before. There is a long road ahead to complete development and deliver aircraft at rate dependably and begin sustainment in the fleet. There will be setbacks and missed goals, as there will be advances and accomplishments.

The firm grasp on realism and determination to live within the currently committed resources will go beyond keeping the independent assessments aligned. It will enable the solutions to each of the challenges we discover and deliver the capability that the Services need so critically.

To specifically speak to Chairman Levin's questions about the fiscal year 2010 LRIP 4 contract, the ceiling is below the unit recur-

ring flyaway cost estimate line. The issues that are at play in affecting the current costs are a combination of what you experience in any program and learning curve from building the aircraft. It is also affected by the change generated from the concurrency of building while we are testing, and it is also affected by the movement of quantities.

Most of the time, programs have any one of those factors working singly at a point in time. This program has all three working at the same time. Thus, the challenge. It is what it is. We are dealing with it.

The LRIP 4 fixed-price incentive contract with that 50–50 share line of overruns, where industry would yield fee for overrun at that 50–50 share, and the ceiling of 120 percent does protect the exposure of the government to an overrun in the percentage range of approximately 6.4 to 6.5 percent. Because of that ceiling protection where if the costs would exceed that, they would be borne by the company.

The first 3 years of production, LRIPs 1, 2, and 3, were cost-plus. Yes, I do see a range of possible ultimate costs between 11 to 15 percent. We are working to get resources to pay those bills in the program. But that is the major lever of near-term affordability impact. That was pulled in the 2010 choice to pursue fixed-price incentive.

We are in receipt of the contractor's proposal for LRIP 5, and we are in the initial stages of fact finding. We are also conducting that rigorous should-cost that the previous panel spoke about. We will negotiate privately with the company, and the government fully expects to get the benefit of learning wherever we land.

We will negotiate privately, sir. But the fundamentals of getting the benefit for the taxpayers better than what we got last year, we will continue with at least as good, if not stronger, incentive lines and ceilings as we negotiate that.

I will stop there and look forward to your questions, sir.

Senator MCCAIN. Mr. Burbage, welcome.

STATEMENT OF CHARLES T. "TOM" BURBAGE, EXECUTIVE VICE PRESIDENT AND GENERAL MANAGER, F–35 PROGRAM INTEGRATION, LOCKHEED MARTIN AERONAUTICS COMPANY

Mr. BURBAGE. Good afternoon, Mr. Chairman.

My name is Tom Burbage. I am the Executive Vice President and General Manager for the F–35 Program Integration for Lockheed Martin. I joined the F–35 program in the summer of 2000 and have spent a full third of my industrial career of 32 years with the F–35 team.

Since 2005, my responsibilities have been to ensure that all requirements for the United States and our international customers are fulfilled and to coordinate with our international partners around the world to achieve the full potential of the F–35 program.

Lockheed Martin is very sensitive to the committee's concerns on ensuring predictability and discipline in the execution of our current plan and visibility of our costs, in all dimensions. I sincerely appreciate the time your staff has spent with us to see and understand the progress and importance of this critical program.

Thank you for the opportunity to represent the F–35 industrial team. I have submitted my full statement for the record, which I ask to be made part of the hearing record.

In the interest of time, I will forgo any additional opening statement. I look forward to your questions, sir.

[The prepared statement of Mr. Burbage follows:]

PREPARED STATEMENT BY TOM BURBAGE

Mr. Chairman, members of the committee: On behalf of Lockheed Martin and the F–35 Joint Strike Fighter (JSF) industrial team that I represent today, thank you for the opportunity to participate on this panel with Vice Admiral Venlet and Mr. Sullivan. For the record, I would like to touch on two important points in my brief opening statement. The first is the value proposition of the F–35 JSF program and the second is the current performance of the program.

The value proposition of the F–35 starts with the driving requirement to recapitalize the three tactical air services of the United States plus those of our closest allies-those nations that stand with us in coalition operations. The program will reduce the cost of the military enterprise which for the past two decades has been engaged in sustained, joint-service, coalition based peacekeeping and combat operations like the Balkans, Iraq and Afghanistan. The F–35 will be a powerful enabler of coalition building that incorporates advanced technologies to ensure it will be effective against future threat scenarios that are likely to be far more stressing in other regions of the world. In the case of individual services and individual nations, there is real opportunity to reduce expensive infrastructure while introducing revolutionary new capabilities. The Marine Corps's intention to replace the F–18, AV–8, and EA–6 with the F–35 is estimated by the marines to save $1 billion per year when the transition is complete. Across the current partnership, F–35 will replace A–10, F–16, F–18, AV–8B, EA–6B, Tornado, and Italian AMX aircraft.

The F–35 also leverages the economies of commonality and scale in procurement and sustainment that come with much broader participation than traditional single-service fleet recapitalization. From the industrial perspective, we are also recapitalizing the aerospace industry with new manufacturing technologies as we introduce production efficiencies across the industrial partnership. The F–35 program today involves more than 1,300 suppliers in 47 States and supports nearly 127,000 direct and indirect U.S. jobs. In addition, we are implementing global industrial partnerships as part of the government-to-government agreements. Those industrial ties will enhance the economic relationships between the United States and participating allied nations and will underscore the military ties that enable coalition burden sharing in the future. This international participation also makes F–35 potentially the largest program in the Department of Defense that can favorably affect the U.S. balance of trade. It is clear that capturing the full potential of F–35 depends on maintaining a strategic perspective and making decisions that will enable the future success of this program. In this new reality, the value proposition is more relevant today than ever before.

Next, I would like to provide an update on the current performance of the program. I am pleased to report that we are making significant progress on the current plan and in just the past week we have delivered our second F–35C Navy carrier variant and the first two production F–35s to the Air Force. From a technical perspective, we believe the risks that are part of the introduction of this revolutionary F–35 weapon system are now understood. There are several critical elements still ahead of us, mainly in the full implementation of advanced software fusion, integration of weapons and demonstration of full shipboard compatibility. That said, early testing has allowed us to understand our main technical challenges and develop resolution paths for them. Examples of these are the integration of the Helmet Mounted Display into the next generation cockpit and mission system and flying qualities in the transonic flight regime. Where we anticipate challenges, we try to test early and identify shortcomings and we've done that on F–35. Our main issues have been well publicized and we are on path to resolve them. It is worth noting that the performance of the short takeoff and vertical landing variant in flight test has been very good since November. Our F–35B test airplanes at the Naval Air Test Center are all performing vertical landings and we are on track for shipboard testing this fall. We expect to deliver our third Navy F–35C in the next few weeks and will begin shipboard compatibility testing at Lakehurst this fall. In addition, all of our Air Force conventional takeoff and landing test jets are in active testing at the Air Force Test Center in California. Our mission system testing is underway and software stability and sensor performance have been exceptional.

Since the new schedule was put in place in late 2010, our factory performance has been on plan. We have essentially eliminated out-of-station work in the factory and are now delivering complete jets to the flight line. We have recently delivered our first two production jets to the U.S. Air Force.

IN THE PROCUREMENT PHASE

The initial F–35 acquisition strategy was originally structured around 6 Low Rate Initial Production (LRIP) lots of about 250 airplanes that would employ cost-plus type contracts. In 2010, the industry team agreed to move to a fixed-price-type contract with the fourth LRIP Lot, 2 years earlier than originally planned. This agreement occurred after 31 production airplanes were under contract with none delivered.

During LRIP Lots 1 through 3, our initial performance across our supply chain was heavily influenced by the incorporation of changes identified in the 2004 weight reduction redesign, changes required for our suppliers to complete full qualification testing of their components and changes found in early ground and flight testing. This change incorporation resulted in inefficiencies in the manufacturing process due to late delivery of parts, incorporation of late parts out of the normal manufacturing sequence and transfer of some assembly work to the flight line where completion is much less efficient. These impacts that are due to the concurrent development, test and production activity are captured in a term called concurrency cost and includes future modifications that may be incorporated later in the life cycle of the jets in that contract. The team is focused now on any opportunity to reduce the concurrency estimate and improve the final cost to complete on these early production lots. All cost overruns are shared between the contractor and U.S. Government in this phase.

In LRIP Lots 4 and 5, these are the initial fixed-price-type contracts which Lockheed Martin has agreed to take 2 years earlier than the original acquisition plan. Our factory performance metrics are now showing significant improvement in all key areas, we are experiencing excellent learning curve reductions in assembly hours and we have essentially eliminated all traveled work. By the end of 2011, we will have sufficient actual cost data to know the projected cost for the 32 airplanes in LRIP 4. We have recently submitted our proposal for LRIP 5 which includes 35 airplanes and are in the initial negotiations for that contract. It is important to note that our LRIP 4 settlement was significantly below the government's estimate and our initial proposal for LRIP 5 is also below the December 2010 government estimate.

FUTURE PRODUCTION

Future production contracts are expected to be firm fixed-price and will combine both U.S. and allied partner procurements into a single contract buy. It is important for future affordability to provide stability in annual orders and to move to higher, more efficient production rates as quickly as practical. It is important to remember that the F–35 program has invested heavily in highly automated, precision and motion-based manufacturing infrastructure in our factories and throughout our global supply chain to ensure industrial capability to deliver the F–35 at the efficient production rates envisioned. However, over the last 2 years, program adjustments have moved approximately 240 U.S. airplanes out of the near-term production profile into future years. There has also been an additional movement of some planned partner nation procurements in response to those changes. This movement is the single largest contributor to the increase in unit cost for the F–35. We are fully cognizant of the risk of retrofit to airplanes procured before adequate structural testing is complete, but we believe that risk has been reduced significantly with the production order reductions already applied and will be further reduced when two lifetimes of durability testing for all three variants is completed in 2013. At some point the potential cost risk of retrofit for a limited number of airplanes is clearly much less than the cost benefit to all future airplanes that comes with accelerated achievement of production cost improvement with higher production volume. Our most significant cause for concern is the retention of efficient production profiles in the future to capture the economies of scale that allow affordable recapitalization of the U.S. and allied multi-role fighter force.

FOR SUSTAINMENT

We are fully engaged with the F–35 Program Office and the operating services of the U.S. and partner nations to ensure that operating and support costs are fully characterized and optimized. We remain absolutely convinced that the focus on F–35 supportability from the beginning has resulted in real design features that will

enhance reliability, reduce maintenance hours per task and facilitate unit-level, service-level, and coalition-based operations. We are also certain that moving to a single family of airplanes will allow significant reductions in infrastructure relative to the many independent logistics pipelines that support today's variety of operational fleets.

In summary, we understand the committee's overarching concern to see schedule and cost control and predictability going forward. We share that concern and are fully committed to drive down costs in the face of challenging fiscal realities. Lockheed Martin is attacking every element of cost within our operation, both direct and indirect. We have invested over $1 billion in factory efficiencies in our facility in Fort Worth and another $450 million in information system improvements which will streamline our operations across the F–35 enterprise. As a program, we are investing in affordability initiatives in our supply chain and we are working closely with our Government counterparts to develop a should-cost approach to future production lots.

Mr. Chairman, the JSF program is a first of its kind—3 variants, 9 international partners, more than 1,300 global suppliers. It was conceived 20 years ago for the exact situation we find ourselves in today—global economic pressures in an increasingly uncertain security environment that regularly requires our allies to join forces. Now more than ever this new reality requires a value proposition that only the F–35 program can deliver. While we have experienced and overcome significant challenges to date, there is no doubt that the F–35 will be the most relied upon aircraft for the United States and our allies for decades to come.

On behalf of Lockheed Martin and the F–35 industry team thank you again for this opportunity. I look forward to your questions.

Senator MCCAIN. Thank you.

Welcome back, Mr. Sullivan.

STATEMENT OF MICHAEL J. SULLIVAN, DIRECTOR, ACQUISITION AND SOURCING MANAGEMENT, GOVERNMENT ACCOUNTABILITY OFFICE

Mr. SULLIVAN. It is a pleasure to be here again to discuss the JSF program, DOD's largest ever and so important to plans for recapitalizing our tactical air forces.

I will make some brief comments and then be happy to take questions. I have submitted a written testimony for the record.

Mr. Chairman, over the last 15 months, defense leadership has taken positive action to restructure the JSF program. We strongly support the actions that leadership has taken, many overdue, that we and some other organizations have previously recommended.

We have been concerned since program start about the risks posed by the high degree of concurrency between development, testing, and production activities and have consistently recommended reducing annual procurement quantities until sufficient testing is completed.

The Secretary's substantial reduction of 246 aircraft through 2016 certainly helps lessen the risk of concurrency. Even with that reduction, however, total development cost is now estimated at about $56.4 billion, and the development program will not be completed until 2018, a 26 percent cost increase and a 5-year schedule slip from the program's baseline.

We also note that over the next 5 years, annual funding requirements for procurement on this program more than double, and the annual quantities will more than triple.

The program had mixed results in 2010 against the goals that it had established for itself, achieving 6 of the 12 major goals and progressing in varying degrees on the rest. There are some encouraging signs. The pace of the flight testing accelerated in 2010. The program accomplished three times as many flights as in the 3 prior

years combined. Also, there is much more work in process on the manufacturing floor.

These signs of improvement are counterbalanced with continuing setbacks in some areas. For example, while the Air Force's conventional variant and the Navy's carrier variant performed well in limited flight tests in the past year, the STOVL, essential to the Marine Corps' future aviation plans, had numerous technical problems, and DOD has directed the 2-year probation to solve them.

Also, the final delivery of test and production aircraft is still lagging, and improving factory throughput and the global supply chain are now urgent priorities for the program. Also, design changes on the manufacturing floor continue at higher rates than expected and may increase further as flight testing continues and the design has to be tweaked. This indicates the design is still not fully stable several years after the critical design review.

Finally, integration and testing of software, which we have heard from most of the panelists today already, is essential for achieving 80 percent of the fighter's functionality, is significantly behind schedule as it enters its most challenging phase.

Mr. Chairman, let me conclude by saying the JSF program's time to perform at cost and schedule targets has definitely come. GAO pointed out several years ago that official estimates were unrealistic, that they were based on optimistic assumptions rather than robust systems engineering knowledge, and that plans to cut test assets and reduce flight testing were ill-advised.

We now support recent restructuring efforts and believe that the added funding, extended time to complete systems development, and a more robust flight test program provide a more achievable program. However, this program still lags behind expectations and is not out of the woods yet. Now is the time for much more disciplined decisionmaking.

Looking forward, a focus on affordability and continued strong oversight is critical. With future budgets likely to be austere, the JSF program is planning an unprecedented amount of funding for a sustained period, averaging more than $13 billion of funding requests per year through 2034.

That is why we recommended in our last report that DOD take measures to ensure that it does not exceed current planned funding limits outlined in the Future Years Defense Plan, and if it must, it should report the reasons for increases to Congress first. After 10 years of product development and 4 years of production, it is time for the JSF program to make good on its estimates now and deliver aircraft in a predictable manner.

Mr. Chairman, that concludes my statement.

[The prepared statement of Mr. Sullivan follows:]

PREPARED STATEMENT BY MICHAEL SULLIVAN

Chairman Levin, Ranking Member McCain, and members of the Senate Armed Services Committee: Thank you for the opportunity to discuss our work on the F–35 Lightning II, also known as the Joint Strike Fighter (JSF). The JSF is the Department of Defense's (DOD) most costly and ambitious aircraft acquisition, seeking to simultaneously develop and field three aircraft variants for the Air Force, Navy, Marine Corps, and eight international partners. DOD is acquiring the conventional takeoff and landing (CTOL) variant for the Air Force, the carrier variant (CV) for the Navy and Marine Corps, and the short takeoff and landing (STOVL) variant for the Marine Corps. The JSF is the core of DOD's long-term tactical aircraft recapital-

ization plans as it is intended to replace hundreds of legacy aircraft. Total planned U.S. investment in JSF is now about $385 billion to develop and acquire 2,457 aircraft through 2035. Acquisition costs are expected to rise when the department establishes a new approved program baseline next month.

With such a substantial funding commitment amidst pressing warfighter requirements for this next generation capability, DOD has lately recognized numerous technical, financial, and management shortcomings and announced a major restructuring of the JSF program in February 2010. In March 2010, the department declared that the program experienced a breach of the critical cost growth statutory threshold and subsequently certified to Congress in June 2010 that the JSF program should continue.[1] Appendix I summarizes the evolution of JSF cost and schedule estimates at key junctures in its acquisition history through the Nunn-McCurdy certification. Since then, in January 2011, the Secretary of Defense announced additional development cost increases and further changes consequent to the ongoing restructure.

GAO has reported on the JSF acquisition program for a number of years. We've identified serious and continuing problems, including escalating costs, deteriorating schedules, unsatisfactory performance in manufacturing and delivering aircraft, slow progress in testing, and concerns about not meeting warfighter requirements on time and in quantity. We issued our latest JSF report on April 7, 2011.[2] While we supported the thrust and rationale behind the department's restructuring actions, we continued to find generally slow progress across the program and serious affordability challenges, both in terms of the investment costs to acquire the JSF and the continuing costs to operate and support it over the life cycle. To sustain a focus on accountability and facilitate trade-offs within the JSF program, we recommended that DOD: (1) maintain annual funding levels at current budgeted amounts; (2) establish criteria for evaluating the progress of the short takeoff and landing (STOVL) variant and make independent reviews, allowing each variant to proceed at its own pace; and (3) conduct an independent review of the software development and lab accreditation processes. DOD concurred with our recommendations, but this has not been the usual case. Appendix II summarizes key findings and recommendations in our body of work from 2001 through 2010 and the department's generally lukewarm responses and actions taken during that period.

My comments today are focused largely on our latest review and the April 2011 report. This was the second annual JSF report under our current mandate in the National Defense Authorization Act for Fiscal Year 2010.[3] For that report, we: (1) evaluated program cost and schedule changes and their implications on affordability; (2) identified progress made in 2010 against established goals; (3) assessed elements of design stability and manufacturing maturity and reviewed production results; and (4) reported the status of development testing and technical challenges facing the program. To conduct this work, we evaluated DOD's restructuring actions and impacts on the program, tracked cost and schedule changes, and determined factors driving the changes. We reviewed program status reports, manufacturing data, test plans, and internal DOD analyses. We discussed results to date and future plans to complete JSF development and move further into procurement with officials from DOD, the JSF program office, contractor officials, and members of the independent review teams. We toured aircraft and engine manufacturing plants, obtained production and supply performance indicators, and discussed improvements underway with contractors. We conducted this performance audit from May 2010 to March 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions

[1] Commonly referred to as Nunn-McCurdy, 10 U.S.C. § 2433 establishes the requirement for DOD to submit unit cost reports on major defense acquisition programs or designated major subprograms. Two measures are tracked against the current and original baseline estimates for a program: procurement unit cost (total procurement funds divided by the quantity of systems procured) and program acquisition unit cost (total funds for development, procurement, and system-specific military construction divided by the quantity of systems procured). If a program's procurement unit cost or acquisition unit cost increases by at least 25 percent over the current baseline estimate or at least 50 percent over the original baseline estimate, it constitutes a breach of the critical cost growth threshold. When a program experiences a Nunn-McCurdy breach of the critical cost growth threshold, DOD is required to take a number of steps, including reassessing the program and submitting a certification to Congress in order to continue the program, in accordance with 10 U.S.C. § 2433a.

[2] GAO, Joint Strike Fighter: Restructuring Places Program on Firmer Footing, but Progress Still Lags, GAO–11–325 (Washington, DC: Apr. 7, 2011). Refer to the related products section for a complete list of GAO reports and testimonies.

[3] Pub. L. No. 111–84, § 244 (2009).

based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

JSF RESTRUCTURING IMPROVES PROGRAM, BUT AFFORDABILITY IS CHALLENGED BY RISING COSTS AND DELAYS

DOD has substantially restructured the JSF program over the past 15 months, taking positive actions that should lead to more achievable and predictable outcomes. Restructuring has consequences—higher development costs, fewer aircraft in the near term, training delays, and extended times for testing and delivering capabilities to warfighters. Key restructuring changes include the following:

- The total system development cost estimate rose to $56.4 billion and its schedule was extended to 2018. This represents a 26 percent increase in cost and a 5-year slip in schedule compared to the current approved program baseline established in 2007.
- Resources and time were added to development testing. Testing plans were made more robust by adding another development test aircraft and the use of several production aircraft; increasing the number of test flights by one-third; extending development testing to 2016; and reducing its overlap with initial operational testing.
- Near-term procurement quantities were reduced by 246 aircraft through 2016; the annual rate of increase in production was lowered; and the start of full-rate production moved to 2018, a 5-year slip from the current baseline.
- The military services were directed to reexamine their initial operational capability (IOC) requirements, the critical need dates when the warfighter must have in place the first increment of operational forces available for combat. We expect the Marine Corps' IOC will slip significantly from its current 2012 date and that the Air Force's and Navy's IOC dates will also slip from the current dates in 2016.
- To address technical problems and test deficiencies for the Marine Corps' STOVL variant, the department significantly scaled back its procurement quantities and directed a 2-year period for evaluating and engineering technical solutions to inform future decisions on this variant. DOD also "decoupled" STOVL testing from the other two variants so as not to delay them and to allow all three to proceed at their own speeds.

The fiscal year 2012 Defense budget reflects the financial effects from restructuring actions through 2016. Compared to estimates in the fiscal year 2010 Future Years Defense Program for the same 5-year period, the department increased development funding by $7.7 billion and decreased procurement funding by $8.4 billion reflecting plans to buy fewer aircraft. Table 1 summarizes the revised funding requirements and annual quantities following the Secretary's reductions. Even after decreasing near-term quantities and lowering the annual rate of increase in production, JSF procurement still escalates significantly. Annual funding levels more than double and quantities more than triple during this period. These numbers do not include the additional orders expected from the international partners.

Table 1: Proposed Development and Procurement Funding and Quantities for Fiscal Years 2012-2016

Dollars in billions

Development funding	**2012**	**2013**	**2014**	**2015**	**2016**	**Total**
Air Force (CTOL)	$1.4	$1.2	$0.9	$0.6	$0.4	**$4.5**
Navy (CV)	0.7	0.7	0.7	0.6	0.5	**$3.2**
Marine Corps (STOVL)	0.7	0.7	0.7	0.6	0.5	**$3.2**
U.S. total	**$2.7**	**$2.7**	**$2.3**	**$1.8**	**$1.3**	**$10.8**
Procurement funding						
Air Force (CTOL)	$3.8	$4.1	$5.6	$6.5	$8.5	**$28.5**
Navy (CV)	1.8	2.5	2.8	3.3	2.9	**13.2**
Marine Corps (STOVL)	1.3	1.3	1.4	2.0	2.9	**9.0**
U.S. total	**$6.9**	**$7.9**	**$9.8**	**$11.8**	**$14.3**	**$50.7**
Procurement Quantities						
Air Force (CTOL)	19	24	40	50	70	**203**
Navy (CV)	7	12	14	19	20	**72**
Marine Corps (STOVL)	6	6	8	12	18	**50**
U.S. total	**32**	**42**	**62**	**81**	**108**	**325**

Source: GAO analysis of fiscal year 2012 President's Budget.

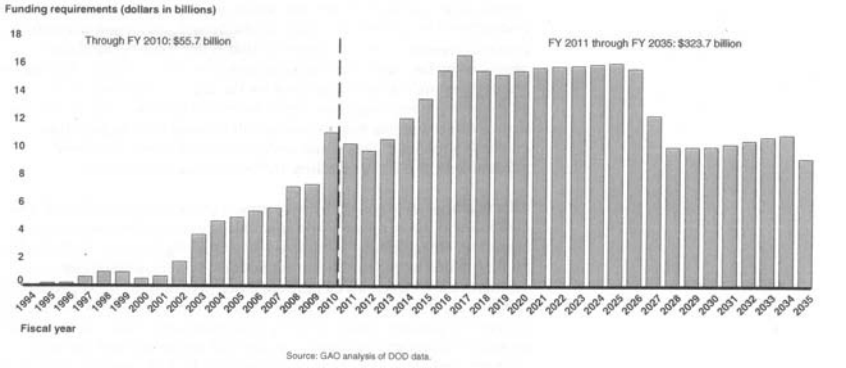
Note: Numbers may not add due to rounding.

At the time of our review, DOD did not yet know the full impact from restructuring actions on future procurement funding requirements beyond this 5-year period. Cost analysts were still calculating the net effects from deferring the near-term procurement of 246 aircraft to future years and from lowering the annual rate of increased procurement. After a Nunn-McCurdy breach of the critical cost growth threshold and DOD certification, the most recent milestone must be rescinded, the program restructured to address the cause of the breach, and a new acquisition program baseline must be approved that reflects the certification approved by the milestone decision authority. The Secretary has not yet granted new milestone B approval for the JSF nor approved a new acquisition program baseline; officials expect to do so next month. We expect future funding requirements will be somewhat higher than currently projected. This could reduce the quantities considered affordable by the United States and allies, further driving up unit costs.

Affordability—in terms of the investment costs to acquire the JSF, the continuing costs to operate and maintain it over the life-cycle, and its impact on other defense programs—is a challenging issue. Including the funding added by the restructuring actions, system development cost estimates have increased 64 percent since program start. (Appendix III summarizes the increases in target prices and major cost drivers for the air system and primary engine development contracts.) Also, the estimated average unit procurement price for the JSF has about doubled since program start and current forecasts indicate that life-cycle costs will be substantially higher than the legacy aircraft it replaces. Rising JSF costs erode buying power and may make it difficult for the United States and its allies to buy and sustain as many aircraft as planned.

Going forward, the JSF will require unprecedented demands for funding in a period of more austere defense budgets where it will have to annually compete with other defense and nondefense priorities for the discretionary Federal dollar. Figure 1 illustrates the substantive annual development and procurement funding requirements—almost $13 billion on average through program completion in 2035. This reflects the program's estimate at the time of the fiscal year 2012 budget submission. As discussed earlier, defense cost analysts are still computing the long-term procurement funding requirements reflecting the deferral of aircraft to future years.

Figure 1: JSF Annual Development and Procurement Funding Requirements (April 2011 Estimate)



PROGRESS IN ACHIEVING THE JSF PROGRAM'S 2010 GOALS WAS MIXED

The JSF program established 12 clearly stated goals in testing, contracting, and manufacturing for completion in calendar year 2010. It had mixed success, achieving 6 goals and making varying degrees of progress on the other 6. For example, the program exceeded its goal for the number of development flight tests but did not deliver as many test and production aircraft as planned. Also, the program awarded its first fixed-price contract on its fourth lot of production aircraft, but did not award the fixed-price engine contract in 2010 as planned. Table 2 summarizes JSF goals and accomplishments for 2010.

Table 2: JSF Progress on Stated Goals for 2010

Key event	Achieved in 2010?	Status
Complete 400 development flight tests	Yes	Completed 410 test flights
First vertical landing of STOVL variant	Yes	Achieved March 2010
Carrier variant first flight	Yes	Achieved June 2010
Autonomic logistic information system is operational	Yes	Began limited operations July 2010
Training for 125 maintenance personnel completed	Yes	Trained 138 maintenance personnel
Award contract for fourth aircraft production lot	Yes	Awarded contract November 2010
Eleven test aircraft delivered to test sites	No	Delivered eight aircraft
Flight test rate of 12 flights per aircraft per month demonstrated	No	Achieved flight test rate of 2 to 8 per month
At least 3 aircraft delivered to Eglin Air Force Base	No	None delivered, expected mid-2011
Begin flight training operations at Eglin Air Force Base	No	Expected September 2011
Block 1.0 software delivered to flight test	No	Delivered limited capability November 2010 with full capability expected June 2011
Award contract for fourth engine production lot	No	Awarded May 2011

Source: GAO analysis of DOD data.

Although still hampered by the late delivery of test aircraft to testing sites, the development flight test program significantly ramped up operations in 2010, accomplishing 3 times as many test flights as the previous 3 years combined. The Air Force CTOL variant significantly exceeded the annual plan while initial limited testing of the Navy's CV variant was judged satisfactory, below plans for the number and hours of flight but ahead on flight test points[4] flown. The Marine Corps' STOVL, however, substantially underperformed in flight tests, experienced significant down times for maintenance, and was challenged by several technical issues unique to this variant that could add to its weight and cost. The STOVL's problems were a major factor in the Secretary's decision to give the STOVL a 2-year period to solve engineering issues, assess impacts, and inform a future decision as to whether and how to proceed with this variant. Table 3 summarizes 2010 flight test results for each variant.

Table 3: Flight Test Performance in 2010

	Conventional takeoff and landing variant	Short takeoff and vertical landing variant	Carrier variant	Total
Flight tests				
Actual	171	212	27	**410**
Planned	112	251	31	**394**
Difference	59	(39)	(4)	**16**
Flight test hours				
Actual	290	286	41	**617**
Planned	202	409	56	**667**
Difference	88	(123)	(15)	**(50)**
Flight test points flown				
Actual	1373	1924	496	**3793**
Planned	1064	2438	270	**3772**
Difference	309	(514)	226	**21**

Source: GAO analysis of DOD data.

PROGRAM HAS STILL NOT FULLY DEMONSTRATED A STABLE DESIGN AND MATURE MANUFACTURING PROCESSES AS IT ENTERS ITS FIFTH YEAR OF PRODUCTION

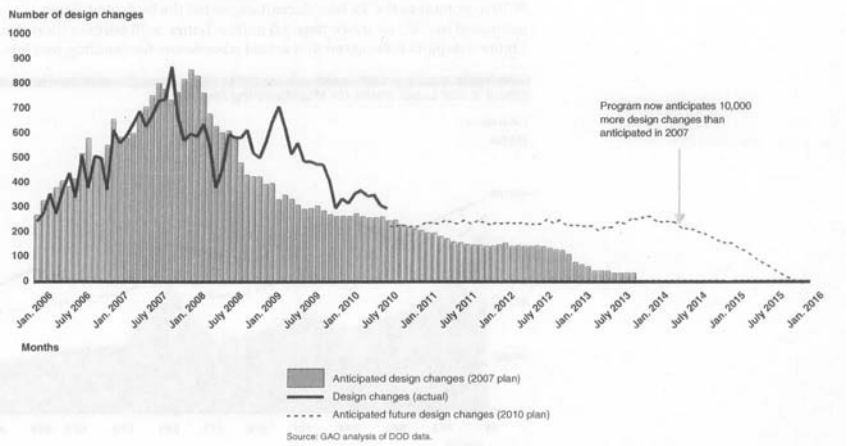
After completing 9 years of system development and 4 years of overlapping production activities, the JSF program has been slow to gain adequate knowledge to

[4] Flight test points are specific, quantifiable objectives in flight plans that are needed to verify aircraft design and performance.

ensure its design is stable and the manufacturing process is ready for greater levels of annual production. The JSF program still lags in achieving critical indicators of success expected from well-performing acquisition programs. Specifically, the program has not yet stabilized aircraft designs—engineering changes continue at higher than expected rates long after critical design reviews and well into procurement. Engineering drawings are still being released to the manufacturing floor. More changes are expected as testing accelerates. Also, manufacturing cost increases and delays in delivering test and production aircraft indicate a need for substantial improvements in factory throughput and performance of the global supply chain.

Engineering drawings released since design reviews and the number and rate of design changes exceed those planned at program outset and are not in line with best practices. Critical design reviews were completed on the three aircraft variants in 2006 and 2007 and the designs declared mature, but the program continues to experience numerous changes. Since 2007, the program has produced 20,000 additional engineering drawings, a 50-percent increase in total drawings and about five times more than best practices suggest. In addition, changes to drawings have not yet decreased and leveled off as planned. Figure 2 tracks and compares monthly design changes and future forecasts against contractor plans in 2007.

Figure 2: Monthly Design Changes for JSF Aircraft



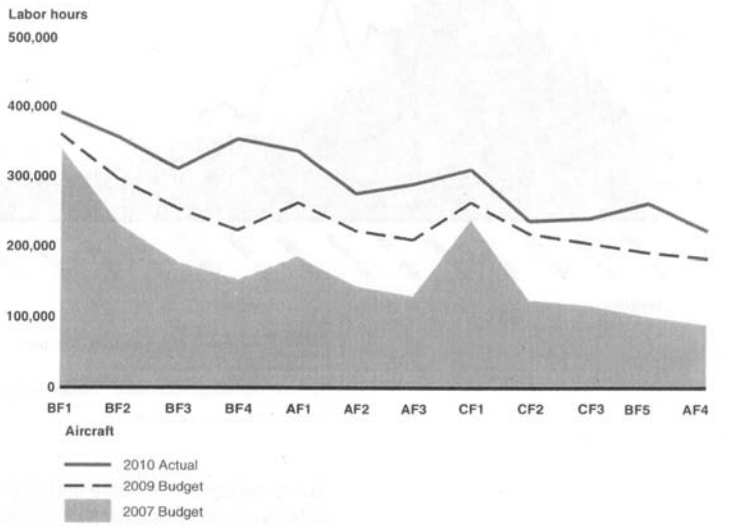
Source: GAO analysis of DOD data.

The monthly rate in 2009 and 2010 was higher than expected and the program now anticipates more changes over a longer period of time—about 10,000 more changes through January 2016. With most of development testing still ahead for the JSF, the risk and impact from required design changes are significant. In addition, emerging concerns about the STOVL lift fan and drive shaft, fatigue cracks in a ground test article, and stealth-related issues may drive additional and substantive design changes.

Manufacturing and delivering test jets took much more time and money than planned. As in prior years, lingering management inefficiencies, including substantial out-of-station work[5] and part shortages, continued to increase the labor needed to manufacture test aircraft. Although there have been improvements in these factors, final acceptance and delivery of test jets were still delayed. Total labor hours required to produce the test aircraft increased over time. The cumulative actual labor hours through 2010 to complete the 12 test aircraft exceeded the budgeted hours estimated in 2007 by more than 1.5 million hours, a 75 percent increase. Figure 3 depicts forecasted and actual labor hours for building test jets.

[5] Out-of-station work occurs when manufacturing steps are not completed at its designated work station and must be finished elsewhere later in production. This is highly inefficient, increasing labor hours, causing delays, and sometimes quality problems.

Figure 3: JSF Labor Hours for Manufacturing Test Aircraft



Source: GAO analysis of DOD data.

DOD began procuring production jets in 2007 and has now ordered 58 aircraft on the first four low-rate initial production lots. The JSF program anticipated the delivery of 14 production aircraft through 2010, but none were delivered during that period. Delivery of the two production jets ordered in 2007 has been delayed several times since the contract was signed and the first aircraft was just delivered this month. The prices on each of the first three cost-reimbursable production contracts have increased from the amounts negotiated at contract awards and the completion dates for delivering aircraft have been extended over 9 months on average. We are encouraged by DOD's award of a fixed-price incentive fee contract for lot 4 production and the prospects for the cost study to inform lot 5 negotiations, but we have not examined contract specifications. Accumulating a large backlog of jets on order but undelivered is not an efficient use of Federal funds, tying up millions of dollars in obligations ahead of the ability of the manufacturing process to produce.

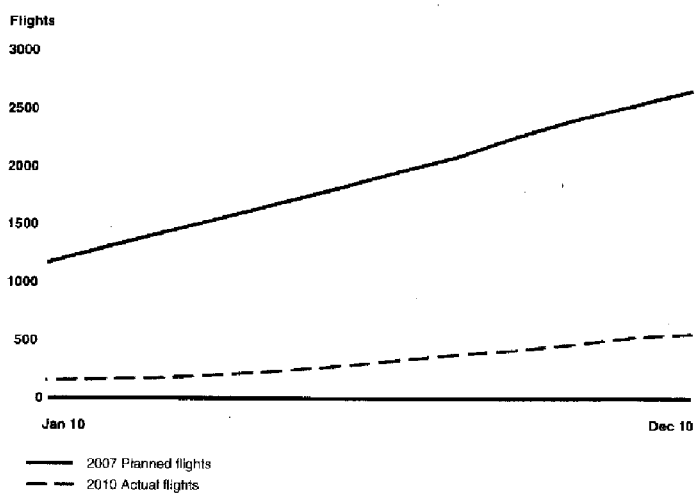
The aircraft and engine manufacturers now have significantly more items in production flow compared to prior years and are making efforts to implement restructuring actions and recommendations from expert defense teams assembled to evaluate and improve production and supply operations. Eight of 20 key recommendations from the independent manufacturing review team have been implemented as of September 2010. Until improvements are fully implemented and demonstrated, the restructuring actions to reduce near term procurement quantities and establish a more achievable ramp rate are appropriate and will provide more time to fully mature manufacturing and supply processes and catch up with aircraft backlogs. Improving factory throughput and controlling costs—driving down labor and material costs and delivering on time—are essential for efficient manufacturing and timely delivery to the warfighter at the increased production rates planned for the future.

TESTING HAS BEEN SLOW AND HAS NOT DEMONSTRATED THAT THE AIRCRAFT WILL WORK IN ITS INTENDED ENVIRONMENT

Since the first flight in December 2006, only about 4 percent of JSF capabilities have been completely verified by flight tests, lab results, or both. The pace of flight testing accelerated significantly in 2010, but overall progress is still much below plans forecasted several years ago. Furthermore, only a small portion of the extensive network of ground test labs and simulation models are fully accredited to ensure the fidelity of results. Software development—essential for achieving about 80 percent of the JSF functionality—is significantly behind schedule as it enters its most challenging phase.

Development flight testing was much more active in 2010 than prior years and had some notable successes, but cumulatively still lagged behind previous expectations. The continuing effects from late delivery of test aircraft and an inability to achieve the planned flying rates per aircraft substantially reduced the amount and pace of testing planned previously. Consequently, even though the flight test program accelerated its pace last year, the total number of flights accomplished during the first 4 years of the test program significantly lagged expectations when the program's 2007 baseline was established. Figure 4 shows that the cumulative number of flights accomplished by the end of 2010 was only about one-fifth the numbers forecast by this time in the 2007 test plan.

Figure 4: Actual JSF Flight Tests Completed through 2010 Compared to the 2007 Plan



Source: GAO analysis of DOD data.

By the end of 2010, about 10 percent of more than 50,000 planned flight test points had been completed.[6] The majority of the points were earned on airworthiness tests (basic airframe handling characteristics) and in ferrying the planes to test sites. Remaining test points include more complex and stringent requirements, such as mission systems, ship suitability, and weapons integration that have yet to be demonstrated.

The JSF test program relies much more heavily than previous weapon systems on its modeling and simulation labs to test and verify aircraft design and subsystem performance. However, only 3 of 32 labs and models have been fully accredited to date. The program had planned to accredit 11 labs and models by now. Accreditation is essential to validate that the models accurately reflect aircraft performance and it largely depends upon flight test data to verify lab results. Moreover, the ability to substitute ground testing for some flight testing is unproven. Contractor officials told us that early results are providing good correlation between ground and flight tests.

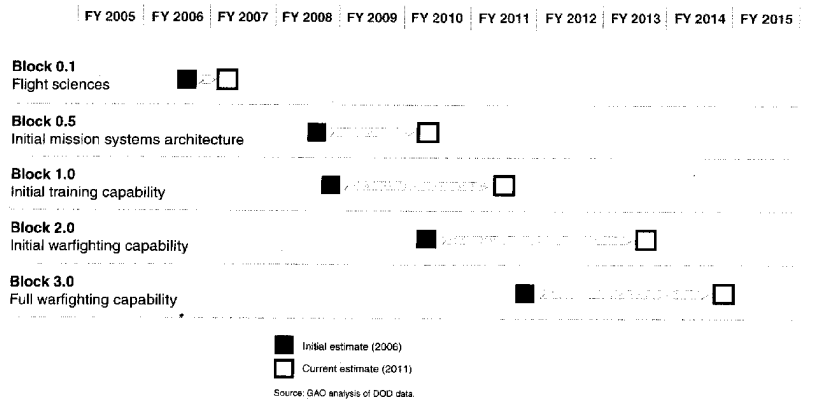
Software providing essential JSF capability is not mature and releases to the test program are behind schedule. Officials underestimated the time and effort needed to develop and integrate the software, substantially contributing to the program's overall cost and schedule problems and testing delays, and requiring the retention of engineers for longer periods. Significant learning and development work remains before the program can demonstrate the mature software capabilities needed to meet warfighter requirements. The JSF software development effort is one of the largest and most complex in DOD history, providing functionality essential to capa-

[6] According to program officials completion of a test point means that the test point has been flown and that flight engineers ruled that the point has met the need. Further analysis may be necessary for the test point to be closed out.

bilities such as sensor fusion, weapons and fire control, maintenance diagnostics, and propulsion. JSF has about 8 times more on-board software lines of code than the F/A–18E/F Super Hornet and 4 times for than the F–22A Raptor. While good progress has been reported on the writing of code, total lines of code have grown by 40 percent since preliminary design review and 13 percent since the critical design review. The amount of code needed will likely increase as integration and testing efforts intensify. A second software integration line added as part of the restructuring will improve capacity and output.

Delays in developing, integrating, and releasing software to the test program have cascading effects hampering flight tests, training, and lab accreditation. While progress is being made, a substantial amount of software work remains before the program can demonstrate full warfighting capability. The program released its second block, or increment, to flight test nearly 2 years later than the plan set in 2006, largely due to integration problems. Each of the remaining three blocks—providing full mission systems and warfighting capabilities—are now projected to slip more than 3 years compared to the 2006 plan. Figure 5 illustrates the actual and projected slips for each of the 5 software blocks in delivering software to the test program.

Figure 5: Slips in Delivering Software to Flight Test



Schedule delays require retention of engineering staff for longer periods of time. Also, some capabilities have been moved to future blocks in attempts to meet schedule and mitigate risks. Uncertainties pertaining to critical technologies, including the helmet-mounted display and advanced data links, pose risks for more delays.

CONCLUDING REMARKS

The JSF program is at a critical juncture—9 years in development and 4 years in limited production–but still early in flight testing to verify aircraft design and performance. If effectively implemented and sustained, the restructuring DOD is conducting should place the JSF program on a firmer footing and lead to more achievable and predictable outcomes. However, restructuring comes with a price—higher development costs, fewer aircraft received in the near term, training delays, prolonged times for testing and delivering the capabilities required by the warfighter, and impacts on other defense programs and priorities. Reducing near-term procurement quantities lessens, but does not eliminate the still substantial and risky concurrency of development and production. Development and testing activities will now overlap 11 years of procurement. Flight testing and production activities are increasing and contractors are improving supply and manufacturing processes, but deliveries are still lagging. Slowed deliveries have led to a growing backlog of jets on order but not delivered. This is not a good use of Federal funds, obligating millions of dollars well before the manufacturing process can deliver aircraft.

We agree with defense leadership that a renewed and sustained focus on affordability by contractors and the government is critical to moving this important program forward and enabling our military services and our allies to acquire and sus-

tain JSF forces in needed quantities. Maintaining senior leadership's increased focus on program results, holding government and contractors accountable for improving performance, and bringing a more responsible management approach to the JSF to "live within its means" may help limit future cost growth and the consequences for other programs in the portfolio. The JSF acquisition demands an unprecedented share of the DOD's future investment funding. The program's size and priority are such that its cost overruns and extended schedules must either be borne by funding cuts to other programs or else drive increases in the top line of defense spending; the latter may not be an option in a period of more austere budgets. Given the other priorities that DOD must address in a finite budget, JSF affordability is critical and DOD must plan ahead to address and manage JSF challenges and risks in the future.

Chairman Levin, Ranking Member McCain, and members of the Senate Armed Services Committee, this completes my prepared statement. I would be pleased to respond to any questions you may have.

GAO CONTACTS AND ACKNOWLEDGMENTS

For further information on this statement, please contact Michael Sullivan at (202) 512–4841 or sullivanm@gao.gov. Contact points for our Office of Congressional Relations and Public Affairs may be found on the last page of this statement. Individuals making key contributions to this statement are Bruce Fairbairn, Charlie Shivers, Julie Hadley, Dr. W. Kendal Roberts, LeAnna Parkey, and Matt Lea.

Appendix I: Changes in Reported JSF Program Cost, Quantities, and Deliveries

	October 2001 (system development start)	December 2003 (replan)	March 2007 (approved baseline)	April 2010 (initial program restructure)	June 2010 (Nunn-McCurdy)
Expected quantities					
Development quantities	14	14	15	14	14
Procurement quantities (U.S. only)	2,852	2,443	2,443	2,443	2,443
Total quantities	**2,866**	**2,457**	**2,458**	**2,457**	**2,457**
Cost estimates (then-year dollars in billions)					
Development	$34.4	$44.8	$44.8	$50.2	$51.8
Procurement	196.6	199.8	231.7	277.5	325.1
Military construction	2.0	0.2	2.0	0.6	5.6
Total program acquisition	**$233.0**	**$244.8**	**$278.5**	**$328.3**	**$382.5**
Unit cost estimates (then-year dollars in millions)					
Program acquisition	$81	$100	$113	$134	$156
Average procurement	69	82	95	114	133
Estimated delivery and production dates					
First operational aircraft delivery	2008	2009	2010	2010	2010
Initial operational capability	2010-2012	2012-2013	2012-2015	2012-2016	TBD
Full-rate production	2012	2013	2013	2016	2016

Source: GAO analysis and DOD data.

Note: Does not reflect cost and schedule changes from additional restructuring actions announced since June 2010.

Appendix II: Prior GAO Reports on JSF and DOD Responses and Subsequent Actions

GAO report	Est. development cost & length, unit cost[a]	Key program event	Primary GAO message	DOD responses and actions
2001 GAO-02-39	$34.4 billion 10 years $69 million	Start of system development and demonstration approved.	Critical technologies needed for key aircraft performance elements are not mature. Program should delay start of system development until critical technologies are mature to acceptable levels.	DOD did not delay start of system development and demonstration stating technologies were at acceptable maturity levels and will manage risks in development.
2005 GAO-05-271	$44.8 billion 12 years $82 million	The program undergoes re-plan to address higher than expected design weight, which added $7 billion and 18 months to development schedule.	We recommended that the program reduce risks and establish executable business case that is knowledge-based with an evolutionary acquisition strategy.	DOD partially concurred but does not adjust strategy, believing that their approach is balanced between cost, schedule and technical risk.
2006 GAO-06-356	$45.7 billion 12 years $86 million	Program sets in motion plan to enter production in 2007 shortly after first flight of the non-production representative aircraft.	The program plans to enter production with less than 1 percent of testing complete. We recommend program delay investing in production until flight testing shows that JSF performs as expected.	DOD partially concurred but did not delay start of production because they believe the risk level was appropriate.
2007 GAO-07-360	$44.5 billion 12 years $104 million	Congress reduced funding for first two low-rate production buys thereby slowing the ramp up of production.	Progress is being made but concerns remained about undue overlap in testing and production. We recommend limits to annual production quantities to 24 a year until flying quantities are demonstrated.	DOD non-concurred and felt that the program had an acceptable level of concurrency and an appropriate acquisition strategy.
2008 GAO-08-388	$44.2 billion 12 years $104 million	DOD implemented a Mid-Course Risk Reduction Plan to replenish management reserves from about $400 million to about $1 billion by reducing test resources.	We believe new plan actually increases risks and DOD should revise the plan to address concerns about testing, use of management reserves, and manufacturing. We determine that the cost estimate is not reliable and that a new cost estimate and schedule risk assessment is needed.	DOD did not revise risk plan nor restore testing resources, stating that they will monitor the new plan and adjust it if necessary. Consistent with a report recommendation, a new cost estimate was eventually prepared, but DOD did not do a risk and uncertainty analysis that we felt was important to provide a range estimate of potential outcomes.

GAO report	Est. development cost & length, unit cost[a]	Key program event	Primary GAO message	DOD responses and actions
2009 GAO-09-303	$44.4 billion 13 years $104 million	The program increased the cost estimate and adds a year to development but accelerated the production ramp up. Independent DOD cost estimate (JET I) projects even higher costs and further delays.	Because of development problems, we stated that moving forward with an accelerated procurement plan and use of cost reimbursement contracts is very risky. We recommended the program report on the risks and mitigation strategy for this approach.	DOD agreed to report its contracting strategy and plans to Congress. In response to our report recommendation, DOD subsequently agreed to do a schedule risk analysis, but still had not done so as of February 2011. In February 2010, the department announced a major restructuring of the JSF program, including reduced procurement and a planned move to fixed-price contracts.
2010 GAO-10-382	$49.3 billion 15 years $112 million	The program was restructured to reflect findings of recent independent cost team (JET II) and independent manufacturing review team. As a result, development funds increased, test aircraft were added, the schedule was extended, and the early production rate decreased.	Because of additional costs and schedule delays the program's ability to meet warfighter requirements on time is at risk. We recommend the program complete a full comprehensive cost estimate and assess warfighter and IOC requirements. We suggest that Congress require DOD to prepare a "system maturity matrix" - a tool for tying annual procurement requests to demonstrated progress.	DOD continued restructuring actions and announced plans to increase test resources and lower the production rate. Independent review teams evaluated aircraft and engine manufacturing processes. As we projected in this report, cost increases later resulted in a Nunn-McCurdy breach. Military services are currently reviewing capability requirements as we recommended. The department and Congress are working on a "system maturity matrix" tool to improve oversight and inform budget deliberations.

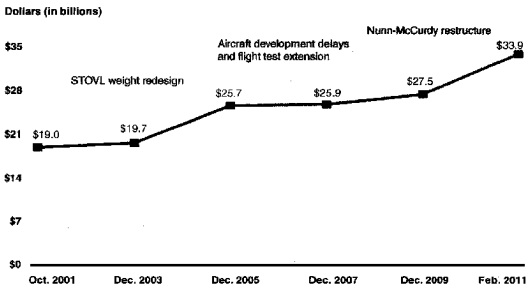
Source: DOD data and GAO analysis.

[a] Average procurement unit cost.

Appendix III: System Development Contracts Target Price Changes

Projected development costs for the air system and primary engine comprise nearly 80 percent of total system development funding requirements. Both contracts have experienced significant price increases since contract awards—79 percent and 69 percent respectively. Figures 6 and 7 depict the price histories for these contracts and the reasons behind major price increases.

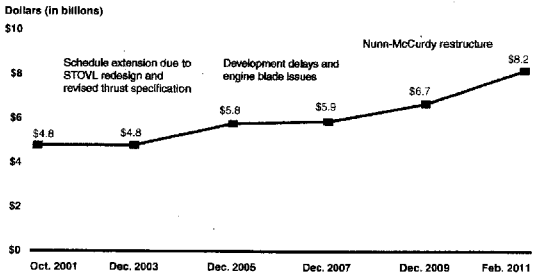
Figure 6: JSF Air System Development Contract Target Price Increases



Source: GAO analysis of DOD data.

Note: The February 2011 cost is not the contract target price, but the latest government estimate from the fiscal year 2012 defense budget request.

Figure 7: Primary Engine Development Contract Target Price Increases



Source: GAO analysis of DOD data.

Note: The February 2011 cost is not the contract target price, but the latest government estimate from the fiscal year 2012 defense budget request.

Related GAO Products

Joint Strike Fighter: Restructuring Places Program on Firmer Footing, but Progress Still Lags. GAO-11-325. Washington, D.C.: April 7, 2011.

Joint Strike Fighter: Restructuring Should Improve Outcomes, but Progress Is Still Lagging Overall. GAO-11-450T. Washington, D.C.: March 15, 2011.

Tactical Aircraft: Air Force Fighter Force Structure Reports Generally Addressed Congressional Mandates, but Reflected Dated Plans and Guidance, and Limited Analyses. GAO-11-323R. Washington, D.C.: February 24, 2011.

Defense Management: DOD Needs to Monitor and Assess Corrective Actions Resulting from Its Corrosion Study of the F-35 Joint Strike Fighter. GAO-11-171R. Washington D.C.: December 16, 2010.

Joint Strike Fighter: Assessment of DOD's Funding Projection for the F136 Alternate Engine. GAO-10-1020R. Washington, D.C.: September 15, 2010.

Tactical Aircraft: DOD's Ability to Meet Future Requirements is Uncertain, with Key Analyses Needed to Inform Upcoming Investment Decisions. GAO-10-789. Washington, D.C.: July 29, 2010.

Defense Acquisitions: Assessments of Selected Weapon Programs. GAO-10-388SP. Washington, D.C.: March 30, 2010.

Joint Strike Fighter: Significant Challenges and Decisions Ahead. GAO-10-478T. Washington, D.C.: March 24, 2010.

Joint Strike Fighter: Additional Costs and Delays Risk Not Meeting Warfighter Requirements on Time. GAO-10-382. Washington, D.C.: March 19, 2010.

Joint Strike Fighter: Significant Challenges Remain as DOD Restructures Program. GAO-10-520T. Washington, D.C.: March 11, 2010.

Joint Strike Fighter: Strong Risk Management Essential as Program Enters Most Challenging Phase. GAO-09-711T. Washington, D.C.: May 20, 2009.

Defense Acquisitions: Assessments of Selected Weapon Programs. GAO-09-326SP. Washington, D.C.: March 30, 2009.

Joint Strike Fighter: Accelerating Procurement before Completing Development Increases the Government's Financial Risk. GAO-09-303. Washington D.C.: March 12, 2009.

Defense Acquisitions: Better Weapon Program Outcomes Require Discipline, Accountability, and Fundamental Changes in the Acquisition Environment. GAO-08-782T. Washington, D.C.: June 3, 2008.

Defense Acquisitions: Assessments of Selected Weapon Programs. GAO-08-467SP. Washington, D.C.: March 31, 2008.

Joint Strike Fighter: Impact of Recent Decisions on Program Risks. GAO-08-569T. Washington, D.C.: March 11, 2008.

Joint Strike Fighter: Recent Decisions by DOD Add to Program Risks. GAO-08-388. Washington, D.C.: March 11, 2008.

Tactical Aircraft: DOD Needs a Joint and Integrated Investment Strategy. GAO-07-415. Washington, D.C.: April 2, 2007.

Defense Acquisitions: Assessments of Selected Weapon Programs. GAO-07-406SP. Washington, D.C.: March 30, 2007.

Defense Acquisitions: Analysis of Costs for the Joint Strike Fighter Engine Program. GAO-07-656T. Washington, D.C.: March 22, 2007.

Joint Strike Fighter: Progress Made and Challenges Remain. GAO-07-360. Washington, D.C.: March 15, 2007.

Tactical Aircraft: DOD's Cancellation of the Joint Strike Fighter Alternate Engine Program Was Not Based on a Comprehensive Analysis. GAO-06-717R. Washington, D.C.: May 22, 2006.

Defense Acquisitions: Major Weapon Systems Continue to Experience Cost and Schedule Problems under DOD's Revised Policy. GAO-06-368. Washington, D.C.: April 13, 2006.

Defense Acquisitions: Actions Needed to Get Better Results on Weapons Systems Investments. GAO-06-585T. Washington, D.C.: April 5, 2006.

Tactical Aircraft: Recapitalization Goals Are Not Supported by Knowledge-Based F-22A and JSF Business Cases. GAO-06-487T. Washington, D.C.: March 16, 2006.

Joint Strike Fighter: DOD Plans to Enter Production before Testing Demonstrates Acceptable Performance. GAO-06-356. Washington, D.C.: March 15, 2006.

Joint Strike Fighter: Management of the Technology Transfer Process. GAO-06-364. Washington, D.C.: March 14, 2006.

Tactical Aircraft: F/A-22 and JSF Acquisition Plans and Implications for Tactical Aircraft Modernization. GAO-05-519T. Washington, D.C: April 6, 2005.

Tactical Aircraft: Opportunity to Reduce Risks in the Joint Strike Fighter Program with Different Acquisition Strategy. GAO-05-271. Washington, D.C.: March 15, 2005.

Senator MCCAIN. How long, Mr. Sullivan, have you been tracking this program?

Mr. SULLIVAN. I have been tracking it on and off for probably 10 years, but solidly for probably the last 6 or 7 years.

Senator MCCAIN. Given that experience, what is your degree of optimism that the sustainment costs can be brought under control and the cost overruns can be brought under control? What is your overall assessment of the prospects?

Mr. SULLIVAN. What we have seen from GAO's perspective is for years what we thought were some fairly significant risks went unaddressed. For example, the Mid-Course Risk Reduction Program that took place in the mid-2000s we thought added more risk. It didn't reduce risk and, therefore, added more cost to the program.

Senator MCCAIN. You testified so before this committee?

Mr. SULLIVAN. Yes, we have. We made recommendations to DOD, beginning in 2001, when we were talking about technology maturity, we made many recommendations that they should reduce their ramp-up rate because they weren't ready to go to production.

Now all these things have come——

Senator MCCAIN. Home to roost.

Mr. SULLIVAN.—to pass, and probably more inefficiently than if it would have been planned better in the first place.

I would say with the beginning of the Nunn-McCurdy breach, and they came in and did the analysis, they have done a pretty good job of being a lot more candid. They have a lot more actual data to bring into it now.

Of course, it resulted in yet again another pretty significant cost increase, both to research, development, testing, and evaluation costs and procurement costs, and significant schedule delays. What we got in the last 15 months with this review that has gone on, and what Admiral Venlet referred to, is we have a lot more sense of the systems engineering knowledge that we need. We have reduced risk a lot, and they have an estimate now that at least it is an estimate.

Senator MCCAIN. Given your long experience, would you believe that perhaps alternatives need to be considered?

Mr. SULLIVAN. Alternatives should always be considered. That is a little bit out of my——

Senator MCCAIN. Yes, I understand.

Mr. SULLIVAN.—bailiwick. But yes, I think it is reasonable to assume that alternatives should always be considered, especially for our national security interests.

Senator MCCAIN. Mr. Burbage, Mr. Sullivan has just testified that they alerted Congress of these significant risks, which were unaddressed for 8 or 9 years. What is your response to that?

Mr. BURBAGE. Sir, the process on this program is complex. It is challenging. We have lots of independent looks at the program. We try to accommodate those independent looks as we can within the constraints that we operate in, and those are annual budgets and annual schedule constraints.

Can we accommodate all of them? No.

Senator MCCAIN. Annual budgets? You have exceeded your annual budgets by almost double.

Mr. BURBAGE. Sir, we have a set of requirements we are designing the airplane to meet. We mature that design as we go forward in time. We then bring the design into production. We then test the design.

We don't have full knowledge of how that is going to unfold. As it unfolds over time, we accommodate the different risks and challenges that come up.

The contract geometry is established upfront to accommodate the fact that there will be unknowns in this process, and we work our way through those.

Senator MCCAIN. The sad part about that is that we sit here, and contractors and DOD come over and tell us this is how much it is going to cost your taxpayers. Consistently, this isn't unique, we find cost overruns with no incentives to bring those cost overruns under control because they are cost-plus contracts. Nowhere in our economy do we have cost-plus contracts except in DOD, that I know of.

Yet, Lockheed Martin is doing pretty well. Do you recall what their profits were in 2010?

Mr. BURBAGE. No, sir, I don't.

Senator MCCAIN. Could you submit it for the record? I know that there has been a handsome return to the shareholders, but there hasn't been a handsome return to the taxpayers.

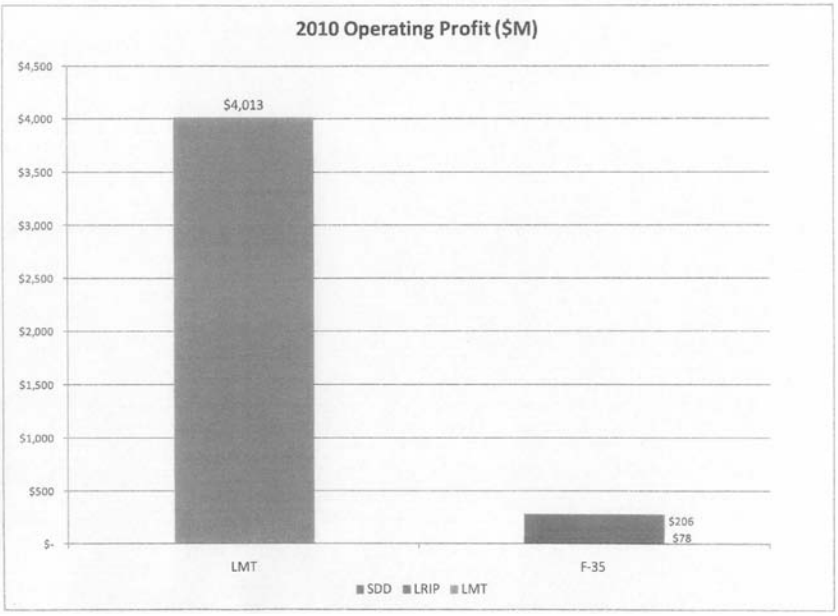
[The information referred to follows:]

The following information is provided in response to a request of the Senate Armed Services Committee to provide Lockheed Martin Corporation's consolidated operating results for 2010. This information is publically available data that has been filed with the U.S. Securities and Exchange Commission on Form 8-K dated April 26, 2011.

Consolidated Operating Results Year Ended December 31, 2010	In Millions of Dollars [1]	Percent of Net Sales
Net sales	$45,757	-
Operating profit	4,013	8.7
Earnings from continuing operations before income taxes	3,742	8.2
Federal income tax expense	1,151	2.5
Earnings from continuing operations	2,591	5.7

Note:

[1] Consolidated operating results for 2010, adjusted to reflect an immaterial change in revenue recognition methodology as of January 1, 2011, as reported on Form 8–K dated April 26, 2011.



Senator MCCAIN. If I convey a sense of frustration, it is because I have been a member of this committee, and I at least initially accepted the testimony of DOD and the program managers. Consistently, the GAO has come forward with testimony that would contradict that, and now we find ourselves in a situation where previous witnesses say that sustainment costs are unacceptable, and at the present rate, the weapon system is not affordable.

My question is, when you entered into the original contract with DOD, did you anticipate these kinds of cost overruns breach of Nunn-McCurdy?

Mr. BURBAGE. No, sir.

Senator MCCAIN. Admiral, since the 2-year extensive review of the program over the JSF has estimated it cost about 80 percent more than when the program started about 10 years ago, what can you tell the committee to give us confidence that the unsustainable cost growth we have seen in the program is now ending?

Admiral VENLET. Sir, the cost position in the situation of the program and Nunn-McCurdy was judged to be, as you said, 80 percent higher. That was on a path that was failed, basically. It did not have the realism in it. That is why the cost to bring this capability to bear was underplanned, both in content and in how it was estimated to be in price.

The hope for discipline going forward is it was a very serious commitment by DOD to commit these resources of this extra $4.6 billion, not an easy thing, not taken lightly. Very seriously understood by me, when I brought that recommendation forward.

I told Dr. Carter that it was my estimation that this change and adjustment to the program had an ability to absorb the learning that remains, the number of flight tests, and the years of continued

development that should because of that grounding in realism and refly rates, capacity to do software, resource the helmet issues that have been discussed, would have a high confidence of delivering within that timeframe and within that dollar amount.

It is not a given that it will. It requires to deliver particularly in the software area. From the day I got here until the day the program declares its development complete, software will be the highest risk and the most intense focus of the program.

In parallel with this planning with realism, and it must come, the cultural change to never lose that grasp on the systems engineering processes. If we stray from that, we will go back to the old ways, and we will not live to this plan. That is a determination that those here and those that follow us must not lose to deliver this program.

Senator MCCAIN. I just have two more quick questions, Admiral. One of them is why are the sustainment costs for this system so much higher than others, and what can be done about that?

Admiral VENLET. Yes, sir. In the sustainment costs, the striking estimate that we are facing right now is a buildup of factors that what we believe today about the size of the manpower that will be required to sustain this aircraft, the number that we will own, the number of hours per month that we will fly them, which goes into the fuel cost, the price of the aircraft drives the estimated——

Senator MCCAIN. The price of fuel is the same for every aircraft.

Admiral VENLET. Yes, sir. But the size of the fleet, 2,400 of these would be more than the F–18 fleet, the F–15 fleet.

Senator MCCAIN. You are saying that the F–18 sustainment costs are less because there are fewer of them?

Admiral VENLET. Only one factor, sir. I am going to complete the factors that are in the estimate now. My duty for the Service Chiefs and the Secretaries are to illuminate to them the consequences of those choices: how many that we have, where we bed them down, how many bases, how many support equipment sets, simulators that we need, the number of maintenance technicians we believe are going to be required.

My focus this year, if 2010 were the year we focused on the development program and the manufacturing plan, this is the year we were focusing on needs estimates and these parameters. I need to illuminate for those leaders what those drivers are and then bring them forward, with some choices to make those go down.

Senator MCCAIN. I would have hoped that since we are in the 10th year of this program that some of those decisions would have been made a long time ago.

My final question is what degree of confidence do you have that the Marine Corps version can get off probation?

Admiral VENLET. Sir, I have high confidence that the Marine Corps STOVL will succeed this period of scrutiny. Every technical issue is principally the propulsion system integration, that Dr. Carter spoke of. Every issue within our view today has an engineering solution to lead the STOVL to the air worthy, flight clearance for unmonitored operation by the fleet.

I have high confidence that we will get the STOVL to its initial sea trials before the end of this year. I have high confidence that we will be able to achieve a flight clearance from NAVAIR for a

conventional monitored mode of flight first while we prove out the engineering solutions I spoke about for the STOVL mode, and that will help the Commandant immensely, sir.

Senator MCCAIN. Thank you. I thank the witnesses for their patience.

Senator Chambliss.

Senator CHAMBLISS. Thanks, Senator McCain.

Mr. Sullivan, you said you think that looking at alternatives is always a good idea and in this case certainly is a good idea. Do you know whether or not the purchase of additional F–22s is being considered by DOD as an alternative to the problems we are experiencing here?

Mr. SULLIVAN. I don't think so, but I don't know that for sure.

Senator CHAMBLISS. What kind of alternative might be considered?

Mr. SULLIVAN. As Secretary Carter said, I am not sure that they believe that there are alternatives at this point.

Senator CHAMBLISS. Going back to Senator McCain's question to Admiral Venlet, I want to give you, Mr. Burbage and Mr. Sullivan, the opportunity to address this issue of the O&S costs. Let me first ask, do you disagree with Ms. Fox's statement that the O&S costs for the F–35 are higher than or less than the F–22, but equal and greater than the F–16 and the F/A–18?

Is that statement correct? If so, why is that the case, and what are we doing about that? Tom?

Mr. BURBAGE. Senator, thank you.

I would only begin the conversation by saying that we are given a very strict set of requirements at the beginning of the program to design an airplane that has increased reliability and addresses issues that have been occuring over the lifecycle of airplanes that have come before us. We have done that with the design.

We have also been asked to put forward a performance-based logistics concept, which is not legacy-based. Going between how the airplane is designed to operate, what we think it will actually do in the long-run, and how it will compare to legacy, is a very complex process. The estimates for O&S over the lifetime of the program go out to about 2065, and they are susceptible to how you set the ground rules and assumptions that underlie that.

The objective for all of us, and certainly the industry team this year, is to put a tight focus on that and try and see how we can, in fact, set those knobs correctly so that we get the right predictions of what the airplane is going to cost.

There is a very rigid menu of items that are included in the cost of the F–35 that are not included in the cost of legacy airplanes. It is very important to get an equal basis for comparison. Some of the sensationalized numbers that come out, the trillion dollar estimate and those kinds of things, are not comparable. They are very sensational, but they are not comparable to what it would cost to maintain a legacy-type airplane over that same length of time.

We are hard at work on those analyses right now and, hopefully, we will bring you a different story when we come back.

Senator CHAMBLISS. Mr. Sullivan?

Mr. SULLIVAN. Yes, the O&S costs on this program are going to be very challenging to figure out. One of the reasons right now is

that the program is still, in many ways, defining itself. The design, they are churning through a lot of design changes. That will continue as the test program progresses.

An important part of O&S cost is reliability, and there is always a friction between developing an aircraft and the amount of money you want to spend during the design of an aircraft and how much you are going to have to spend to maintain it.

So right now, on the JSF program, their reliability growth curve still looks pretty risky to us, but it is mostly because of unknowns and they need more information.

For example, if you looked at it in terms of mean flying hours between failure, the STOVL aircraft, and system-wide, they have a target of 4 flight hours mean time between any systemic kind of failure. Right now, they can only estimate that they are at about 0.4 of 1 hour.

The other aircraft are better than that, but they are all in some state of not quickly achieving what they need to achieve on a reliability growth curve. One of the important issues to track now is how well they come down that reliability growth curve. A lot of that depends on how much testing they can get done, what they find in that testing, what happens to the reliability of the design, and things like that.

O&S costs, in the end it is going to be very difficult to estimate them until they have data like that.

Senator CHAMBLISS. Admiral Venlet, there has been some reporting that the Navy is somewhat soft on the carrier version of the F–35. Can you commit to us today that the Air Force is 100 percent behind the purchase of this carrier version?

Admiral VENLET. Sir, I sit with the Service Chiefs at least once a month, and the Chief of Naval Operations is solidly 100 percent behind the carrier version of the F–35, as much as the Commandant is behind the F–35B, as much as General Schwartz is behind the F–35A, sir.

Senator CHAMBLISS. Thank you.

Lastly, Mr. Burbage and Mr. Sullivan, both of you have had extensive experience in the field of tactical aircraft. I would like for both of you to give your opinion as to the long-term performance of this aircraft. Is it going to be able to do what it is designed to do, and are we going to be able to get these costs under control?

Mr. Burbage?

Mr. BURBAGE. Yes, sir. The airplane has revolutionary capabilities. To go beyond just stealth, as Dr. Carter said earlier, it goes into the innovative avionics. The sense of situational awareness that the pilot will have, his ability to share that awareness with other pilots in his flight and with other sensors and other operations, that command-and-control-type activity is unprecented.

What is really unique is it is tri-Service and it is multi-national with our closest coalition allies. The ability to operate, forward deploy in long-term peacekeeping or combat operations as a joint Service coalition operation, significantly changes when this program gets introduced.

There is a cost associated with that. It is a cost that is not often addressed, but the cost of sustaining those long-term operations

with that kind of a force is another revolutionary change that is coming with the airplane.

My personal knowledge of the airplane's technical capabilities tell me that it is going to be exactly what it is designed to do.

Senator CHAMBLISS. Mr. Sullivan?

Mr. SULLIVAN. My experience is in reviewing performances on aircraft. Generally speaking, in the end, the United States always gets a top-flight performing aircraft. I don't have any doubt that, eventually, the JSF will be a very high-performing aircraft.

As I look at programs in the past, this program, as I said in my statement, I don't think they are out of the woods yet. There is still significant risk in stabilizing the design, getting the manufacturing costs down. I really think O&S costs and software are going to be the big challenges.

The software, to get the functionality that they need, the Block 3 software especially, is still going to be a huge challenge for this aircraft. The O&S costs are going to be the big challenge going forward because, as everyone knows, it has been stated here that that is 70 percent of your lifecycle costs on an aircraft.

Senator CHAMBLISS [presiding]. I guess I am it. Senator McCain has gone. [Laughter.]

Gentlemen, thank you very much.

As all of us have indicated here, this program has to be successful. We have a job of oversight, just like you have a job of making sure that you are addressing all of these issues. I sure do hope that when you come back next year, as we prepare for the authorization bill in 2012, you can come in with some positive reports about the success that we have had over the past 12 months.

Thanks for being here. Thanks for what you are doing for all of our Services that are going to utilize this valuable weapon system.

Mr. SULLIVAN. Thank you, Senator.

Senator CHAMBLISS. We are adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

F135/F136 BUSINESS CASE ANALYSIS

1. Senator LEVIN. Secretary Carter, last year, Deputy Secretary Lynn presented the committee with a business case analysis (BCA) that provided the $2.9 billion estimate of costs to complete the F136 development and make it ready for competition. He stated that, in net present value terms, the costs of the option to sole source the F135 and the costs of the option to continue with competition between the F135 and the F136 were a wash, or essentially equal.

With the F–35 procurement delays in the Future Years Defense Program (FYDP) of more than 100 aircraft and with the offer of the F136 contractor team to self fund the F136 development, why hasn't the business case shifted in favor of the competition option?

Dr. CARTER. As you note, the Department of Defense (DOD) has extensively studied the alternative engine business case. In 2007, DOD conducted a thorough comparative analysis of a single-source versus a competitive acquisition strategy for Joint Strike Fighter (JSF) engines in response to the 2007 National Defense Authorization Act. This study concluded that the net present-value comparison slightly favored a single-source strategy, but it also identified other considerations that might favor a competitive acquisition solution. The result was not compelling in either direction. In 2010, we updated the study, which resulted in similar conclusions.

The JSF program continues to evolve, and it is fair to question whether these larger program changes significantly impact the comparative analysis for the alternative engine. Our preliminary review is that some recent program changes (e.g., increasingly higher sunk costs) would tend to favor competition whereas other

changes (e.g., a later start date for when a theoretical competition would start) would tend to favor a single-source approach. In either event, our fundamental objection to the alternate engine remains the same: the long-term benefits of competition are speculative, difficult to quantify, and would not be realized until beyond the FYDP. Conversely, the short-term costs are real, quantifiable, and increasingly unaffordable.

We have been made aware that General Electric (GE) has offered to self-fund alternate engine development for some period of time. DOD's alternate engine cost estimate of $2.9 billion through the FYDP would be reduced by GE's self-funding decision. The $2.9 billion estimate included approximately $0.7 billion of alternate engine development work over the next 2 years. The estimate of the Director, Cost Assessment and Program Evaluation (CAPE), is based on the assumption that GE would conduct a fully staffed development and test qualification program. Furthermore, it was assumed that this work would be integrated with Lockheed Martin's overall development qualification schedule. If these operating assumptions were held constant, with the sole difference being that GE funded the activity and would not pass the cost back to the government via increased overhead rates or higher production prices, the $2.9 billion estimate would be reduced by approximately $0.7 billion.

We do not know, however, under what assumptions GE would operate as a self-funded program. The F–35 program is under a contract termination phase with GE regarding F136 development. Until that is defined, we cannot conclude that $0.7 billion would be reduced dollar-for-dollar from the $2.9 billion estimate. Furthermore, any presumed reductions are based on the supposition that GE would not pass these costs back to the government via increases to overhead or production prices.

PROPULSION COST INCREASES

2. Senator LEVIN. Admiral Venlet, since last year, the System Development and Demonstration (SDD) program cost has risen by $4.6 billion. Within that total, there have been reports that the propulsion system is responsible for more than $1.0 billion. How much of the $4.6 billion cost increase is related to the propulsion system?

Admiral VENLET. Of the $4.6 billion, $893 million is related to the propulsion system. The fiscal year 2012 President's budget submission included this amount in support of the JSF propulsion system over the fiscal year 2012–fiscal year 2016 FYDP. The additional funding was identified as necessary for program success during the Technical Baseline Review (TBR).

3. Senator LEVIN. Admiral Venlet, how much of that is real program cost growth versus increased costs that reflect extending the period of SDD execution?

Admiral VENLET. Of the $893 million added for propulsion system development over the fiscal year 2012–fiscal year 2016 FYDP, the estimated real "cost growth" portion is $485 million.

INDEPENDENT MANUFACTURING REVIEW TEAM—AFFORDABILITY

4. Senator LEVIN. Secretary Carter and Mr. Van Buren, last year, we noted that the Independent Manufacturing Review Team (IMRT) had observed that, on the JSF program, "Affordability is no longer embraced as a core pillar." What specific actions have you taken to restore affordability to the center of the program?

Dr. CARTER and Mr. VAN BUREN. DOD is committed to driving affordability into the F–35 JSF program. We are currently in the process of conducting a should-cost analysis, beginning with F–35 production. Results will inform the new program baseline as well as negotiations on the Low Rate Initial Production (LRIP) Lot 5 contract. With regard to engine affordability, the F–35 engine Joint Assessment Team (JAT) investigated F135 propulsion costs in 2010 and provided a should-cost objective. The propulsion team is in the process of implementing the JAT recommendations, with a focus on ensuring we make the necessary investments to achieve F135 cost reduction goals in the coming year. We are also conducting a full life-cycle cost BCA that will evaluate both the current sustainment strategy and potential alternatives to determine the best-value, long-term support solution for the program. The BCA will support the broader goals of increased affordability, transparency, predictability, and accountability for sustainment costs and performance. Additionally, we are formalizing potential operations and sustainment (O&S) cost reduction initiatives into targets, actionable tasks, and schedules under the Affordability Management Plan (AMP).

SHORT TAKEOFF/VERTICAL-LANDING PROBATION

5. Senator LEVIN. Secretary Carter, this year, you have slipped the F–35B by delaying 63 aircraft compared to last year's FYDP, and Secretary Gates announced that he was putting the F–35B on probation for at least the next 2 years. Has DOD defined the exit criteria that will allow the F–35B to be removed from probation, assuming it meets those criteria? If so, what are they?

Dr. CARTER. DOD has not defined specific exit criteria. Cost, schedule, and development progress need to be balanced against warfighter utility. The Commandant, U.S. Marine Corps, reviews the F–35B short takeoff and vertical landing (STOVL) progress monthly, separately from the monthly Service Acquisition Executive reviews of the F–35 program as a whole. This provides the individual focus required to balance cost, schedule, and development progress against warfighter utility. These reviews assess metrics ranging from affordability, weight growth, key STOVL performance requirements, technical performance measures, flight test status, and risk burn-down plans. These metrics provide a holistic view of the F–35B progress. None of them provide "black and white" decision criteria. These metrics, taken as a whole, will inform the Commandant, U.S. Marine Corps, and DOD on the continued F–35B progress at the end of the probation period.

The topics and metrics that are assessed include, but are not limited to, the following:

- Cost/Affordability/Earned Value Management (EVM): A review of Acquisition Procurement Unit Cost, Program Acquisition Unit Cost, Operations and Support costs, and EVM cost/schedule indices.
- Risk: Monthly assessment is conducted of "Program Risk," with explanations about each risk item, their interactions, and risk burn-down plans. Assessments include a review of the assumptions and environment used to determine the risk evaluations.
- F–35B Weight/Weight Growth: Weight assessments track each pound added to the airframe with an understanding of the underlying reasons for the growth. If there are trades that need to be made to mitigate weight growth, Navy senior leadership/warfighters are to be consulted.
- Key Performance Parameters (KPPs): A review of F–35B KPPs with a tracking/trending methodology and monthly discussions of concept of operations considerations that might help facilitate achievement of F–35 KPPs and program goals.
- Airframe Technical Performance Measurements: Assessments of reliability, maintainability, combat radius, and gross weight (with metrics that indicate the desired value(s), the current status, margin, and trends).
- F–35B Flight Test: A review of F–35B flight test data includes planned/scheduled test points to be flown versus achieved test points flown; scheduled test flights flown versus actual test flights flown (delineated by STOVL variant); and Clean-Wing Flight Envelope coverage (to assess the progress on the envelope cleared for flight as a result of developmental test and alignment with software delivery).

As these monthly reviews mature, the Navy will refine key F–35B metrics to enable DOD to make a decision on the F–35B STOVL variant probation status.

SUPPLY CHAIN MANAGEMENT

6. Senator LEVIN. Secretary Carter and Mr. Van Buren, one of the challenges the private sector has faced and continues to face is dealing with a new business model incorporating a much greater contribution of the global supply chain to build weapons systems. What steps have you taken to ensure that the contractor team becomes better at managing the global supply chain supporting the F–35 program?

Dr. CARTER and Mr. VAN BUREN. The F–35 Program Office is working to design, develop, and deliver the most cost-effective global-supply-chain solution that meets the needs of the warfighter; this will be a mix of private and public sector capabilities. The recently published DOD Product Support Manager (PSM) Guidebook, has provided the F–35 PSM with clarity on the role of the private-sector Prime Systems Integrator (PSI) contractor. This has helped ensure the PSI's role is fully understood and has allowed us to focus on the PSI's ability to integrate the various sources of support delivery across the breadth of F–35 contract performance outcomes. One of the enduring challenges of the PSM is ensuring we continue to harness organic capabilities while exploring the strengths of the private sector to ensure the F–35 can meet the required performance outcomes at the lowest risk and cost. The Program Office has initiated a life-cycle cost BCA, which will examine various private sector

and organic capabilities to determine how to deliver a prescribed level of performance in the most cost-effective manner. The BCA will provide findings by December 2011. Beyond this, the PSM is working with the PSI to ensure they have the requisite processes and capabilities in place to be able to execute their functions as well as having the necessary levers in place to be able to react to performance metrics from either private sector or organic capabilities.

F–35 LIFE CYCLE OPERATING AND SUPPORT COSTS

7. Senator LEVIN. Admiral Venlet, in my opening statement, I mentioned the new estimates of life cycle operating and support costs identified in the last Selected Acquisition Report (SAR) for the F–35, costs that apparently exceed $1.0 trillion. That is a large number. However, we need to understand the context within which DOD is making that estimate. What would be a comparable cost estimate for life cycle O&S costs for the fighter aircraft inventory that the F–35 is replacing?

Admiral VENLET. According to the F–35 JSF December 2010 SAR, the O&S costs over the life of the program of 2,443 aircraft for more than 50 years are roughly $1.0 trillion. The JSF Program Office developed the O&S cost estimate for the F–35. The JSF Program Office has not conducted a comparison of the life-cycle O&S costs for the fighter aircraft inventory the F–35 is replacing. However the CAPE organization is developing O&S cost estimates, broken out by variant, to assist the Services in a one-for-one comparison to legacy aircraft costs.

8. Senator LEVIN. Admiral Venlet, would it be roughly $1.0 trillion, more than that, or less than that?

Admiral VENLET. According to the F–35 JSF December 2010 SAR, the costs over the life of the program for O&S of 2,443 aircraft for more than 50 years are $1.005342 trillion.

9. Senator LEVIN. Admiral Venlet, what specific actions are you taking to reduce future O&S costs for the F–35 fleet?

Admiral VENLET. The JSF Program Office is focused on identifying the best-value solution for supporting the F–35 air system and is undertaking a number of initiatives to inform sustainment decisions in order to ultimately better control the through life O&S costs for the F–35 fleet. We are currently implementing an affordability strategy for which we are developing an AMP, which is focused on: reducing the costs of support products, e.g., support equipment, spare parts and training devices; base-lining requirements with the Services and leveraging increased efficiency opportunities provided by JSF; and addressing reliability and maintainability. The JPO is creating contract and pricing opportunities to reduce the cost of the JSF support products by seeking to leverage economic order quantity buys for spare parts in conjunction with production buys, and implementing pricing improvement curves that leverage learning opportunities. In creating a common sustainment baseline harnessing the F–35 support system design, the JPO is articulating the optimum level of infrastructure and products required to support operations of the global fleet. By optimizing the amount of equipment procured early on, the JPO is impacting life cycle O&S costs. The Program Office is actively managing the reliability and maintainability of systems/sub-systems and components. Where they fall short of meeting design specifications, the Program Office is implementing appropriate modifications that will help us control cost growth. The Program Office is also conducting a full life-cycle cost BCA that will evaluate both the current sustainment strategy and potential options to determine the best-value, long-term support solution for the program. This is scheduled for completion in December 2011. We will evaluate options for supply chain management, sustaining engineering, field operations support, and fleet management. We will also conduct a series of design reviews on sustainment elements—e.g., the supply chain—throughout 2011 and 2012 to verify the technical design and identify whether there are any opportunities for redesign that could reduce costs. As all of these cost reduction initiatives from the AMP, BCA, and design reviews are matured, the results will be incorporated into the program's lifecycle cost estimate and will ultimately be realized by the Services and international partners.

10. Senator LEVIN. Mr. Burbage, what is Lockheed Martin doing to try to reduce the government's O&S costs for the F–35 fleet?

Mr. BURBAGE. Affordable O&M and Total Life-Cycle Cost considerations were driven into the F–35 design from the beginning. The F–35 program was designed to capture powerful economies of commonality and scale. For the first time ever,

three distinct versions of the same aircraft, with a high degree of commonality, will serve the needs of three U.S. Services and multiple international countries. The economies of commonality include not only a common engine, mission system avionics, vehicle management systems, and manufacturing processes—but also a fully integrated and networked sustainment system. Aircraft share common parts, support equipment, and technical data, thereby also yielding long-term cost savings and best value for the customer.

The F–35 is the first aircraft development program to fully integrate the air system and the training and sustainment system from design inception. Supported primarily in a performance-based logistics environment, the result is greater reliability and unprecedented cost visibility.

The global sustainment system will meet the operational needs of more than 40 land bases, 20 ships, and 150 squadrons—capturing the benefits of economies of scale. At the same time, we are creating the first-ever joint and combined training system. Integrating pilot and maintenance training for multiple Services, while using the same software and hardware as the aircraft, provides faster training with greater fidelity and at lower cost. When extended to include our closest allies, the cost of conducting future long-term combat or peacekeeping operations is also dramatically reduced for all participating nations.

The Autonomic Logistics Information System (ALIS)—the infrastructure for data collection, data analysis, and decision support—ties together F–35 operational planning and prognostics and health management to enhance the worldwide fleet of aircraft. ALIS complements the decision-making process, matching customer metrics and dollars to resources in real time. F–35 sustainment is a total life-cycle system—a new paradigm for fighter aircraft support that dramatically simplifies maintenance and keeps the aircraft where it belongs—in the air.

Global sustainment products and processes are currently used in F–35 production and flight test, demonstrating their proof of factory-to-field commonality and confirming their cost and performance attributes.

Annual F–35 O&S cost estimates are developed from detailed grassroots product and service descriptions, including cost elements often buried in legacy programs as infrastructure costs. In contrast to higher-level, legacy-system-based parametric cost estimates, these detailed F–35 O&S estimates provide the foundation for conducting cost/benefit analyses and enabling informed decisions. Today, the primary total ownership cost debate is about ground rules and assumptions that define what costs are included in the accounting. As F–35 flying hours continue to increase, data fidelity and accuracy improve and overall uncertainty will be reduced. This information is fed back into the annual O&S cost estimates to generate even more accurate analyses, decision making, and enhanced management control over total ownership costs. No other program has had F–35's sustainment economies of commonality and scale and no other program conducts an annual cost review anywhere near the depth of the F–35.

DESIGN STABILITY

11. Senator LEVIN. Mr. Sullivan, your testimony says that, "After more than 9 years in development and 4 years in production, the JSF program has not fully demonstrated that the aircraft design is stable, manufacturing processes are mature, and the system is reliable." Are you seeing any trend data in the program that would indicate that the design changes are decreasing, the manufacturing processes are getting closer to stability, or that initial flight testing is showing any growth in reliability?

Mr. SULLIVAN. While the monthly volume of design changes is on a downward trend, the number of engineering drawings released to the manufacturing floor continues at higher rates and later in production than desired. The monthly rate in 2009 and 2010 was higher than expected and the program now anticipates more changes over a longer period of time—about 10,000 more changes through January 2016. The program projects a leveling off in monthly changes starting this year, but an up-tick in total numbers can be expected as testing accelerates and system development extends into 2018. DOD's lowering of the annual ramp rate and reduction in procurement acknowledges that manufacturing maturity and capacity are behind plans. The aircraft and engine manufacturers are making progress in implementing the recommendations of the independent review teams. The aircraft manufacturer has lately reported a decrease in out-of-station work, more efficient work stations, improved quality, increased parts availability, and reduced span times. While these signs are encouraging, aircraft and engines continue to be delivered late and at higher cost than estimated. While all three JSF variants are behind in their reli-

ability growth plans, Conventional Takeoff and Landing flight test results and pace are encouraging. With several key test events and an accelerated pace planned this year, more data on CV reliability should be available. Results from the STOVL's 2-year probation period should provide a better perspective on its reliability.

12. Senator LEVIN. Admiral Venlet, what metrics are you tracking to ensure that the program is making progress to address these concerns?

Admiral VENLET. On a monthly basis, the F–35 Joint Program Office (JPO) sends the congressional defense committees approximately 100 pages of charts containing metrics for the program. Included in the charts are metrics that track development progress (including software, system qualification, structural test, weight, and change management); flight test progress (including test points and cumulative flights); production (including engine and aircraft component parts delivery and assembly span); sustainment (including reliability, maintenance, and supplies); and the ALIS.

QUESTIONS SUBMITTED BY SENATOR CLAIRE MCCASKILL

JOINT STRIKE FIGHTER SUPPLIERS AND DELAYS

13. Senator MCCASKILL. Secretary Carter, looking out for small suppliers, one of the areas that greatly concern me is how the production delays, program restructures, and procurement problems affecting the hundreds of subcontractors and suppliers contributing to the JSF program. We have many suppliers in Missouri, for example, who are doing amazing work for this program.

Furthermore, these companies are often times three and four levels down on the contracting chain, but they've invested enormous amounts of capital in technology and personnel to compete for business. With each program setback these small businesses are expected to absorb financial losses and adjust to problems that, frankly, are miscalculations or even mismanagement. I am worried about small companies like Patriot Machine and Steelville Manufacturing when I hear about all these program delays.

What would you say to the suppliers and subcontractors facing these issues and how much does the program leadership take the downstream contractor and supplier issues into consideration when making drastic program changes?

Dr. CARTER. DOD recognizes the vital importance of subcontractors and suppliers not only for the F–35 program but for all DOD programs. On the F–35, more than 75 percent of F–35 components are manufactured by sub-tier suppliers. The F–35 JPO works with Lockheed Martin to conduct annual and incremental Production Readiness Reviews on the F–35 critical supply base. Part of these reviews is to identify potential impacts to sub-tier suppliers and guide program changes. At the DOD level, the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics is conducting a sector-by-sector, tier-by-tier evaluation of the defense industrial base with the objective of providing insights that will improve our acquisition strategies.

14. Senator MCCASKILL. Secretary Carter, what steps can you as a program manager and leader take to mitigate the financial ripples that result when the program undergoes significant changes like the recent restructure of the F–35B version?

Dr. CARTER. DOD recognizes that significant program changes, like our recent restructure of the F–35B STOVL variant, can cause adverse financial effects to suppliers. When DOD is forced to make major restructures to a program, the fundamental intent is to ensure the program remains successful. A successful program benefits the suppliers over the long-term. In the specific example of the F–35B restructure, the F–35 JPO worked with Pratt and Whitney to resequence the F–35B propulsion system deliveries and inserted spares procurements to try to, in the short-term, minimize as much as possible the effects of a reduced workload on suppliers.

FOREIGN PARTNERS

15. Senator MCCASKILL. Secretary Carter, according to the Government Accountability Office (GAO), our international partners are providing about $5.1 billion toward development, and foreign firms are part of the industrial base producing the JSF. I know that this concept has been a core pillar in the entire program, to manage cost, and, as I understand it, your funding requirements for the F–35 assume economic benefits from partner purchases in reducing unit costs for U.S. aircraft.

How, if at all, have all the problems with delays and testing affected the foreign partner component of the program?

Dr. CARTER. At the late May 2011 JSF Executive Steering Board meeting, the eight international partners expressed their ongoing support for the program, and none indicated a reduction in planned procurement.

16. Senator MCCASKILL. Secretary Carter, are they covering the extra costs for development, for example?

Dr. CARTER. The JSF partners provided funds consistent with the production, sustainment, and follow-on development (PSFD) MOU to address emergent JSF needs within the scope of follow-on development.

17. Senator MCCASKILL. Secretary Carter, how much of this slack, in unit cost for example, is being paid by American taxpayers to cover foreign countries' shares in the program?

Dr. CARTER. None. In accordance with the F–35 PSFD MOU, each F–35 international partner is responsible for paying all aircraft costs unique to that country as well as its fair share of common costs, up to the mutual agreed ceiling amounts in the MOU.

18. Senator MCCASKILL. Secretary Carter, can you give me an example of how much a country, like Canada or the United Kingdom, is paying for all of these delays and development costs and how much of the cost the United States is shouldering?

Dr. CARTER. The United States is paying for the increased costs associated with the SDD program. However, the JSF partners provided funds consistent with the PSFD MOU to address emergent JSF needs within the scope of follow-on development. In addition, the international partners will be responsible for paying for all cost increases to their production and sustainment programs associated with delays in the SDD program and the reduced U.S. aircraft production ramp, resulting from the recent restructure.

19. Senator MCCASKILL. Secretary Carter, given the global financial crisis, are all of the foreign partners still able and committed to weather the cost of the JSF?

Dr. CARTER. At the late May 2011 JSF Executive Steering Board meeting, the eight international partners expressed their ongoing support for the program and none indicated a reduction in planned procurement.

FISCAL COMMISSION RECOMMENDATIONS ON F/A–18S

20. Senator MCCASKILL. Secretary Carter, what do you think about the recommendation from the President's Fiscal Commission and other similar proposals to essentially substitute the F/A–18s and F–16s for about half of the Air Force and Navy's planned buys of the F–35? They say this change could save about $9.5 billion. I have often noted we can get 80 percent of the F–35's capability for a fraction of the cost by buying the most advanced F/A–18 aircraft, something the Navy has largely acknowledged. Now the Fiscal Commission is making a similar recommendation.

Dr. CARTER. While substituting F/A–18 and F–16 aircraft for F–35 aircraft would save money, it would do so at the expense of providing DOD the 5th generation force structure required to address projected access threats. DOD's tactical aircraft force structure requirements and plans provide an appropriate balance to fight our current wars and address the projected threats of the future.

21. Senator MCCASKILL. Secretary Carter, have you considered adopting the Fiscal Commission's option, and if not, why?

Dr. CARTER. This specific option has not been considered because it does not meet our force structure requirements. If I understand it correctly, this option would require either further extending the service life of existing aircraft or purchasing 1990s designs well into the future. Neither option is attractive.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

MILITARY CONSTRUCTION SUPPORT FOR THE F–35

22. Senator MCCAIN. Mr. Van Buren, given the long lead-time for environmental reviews and military construction (MILCON) required to support the JSF, the Serv-

ices are in the process of completing environmental studies and constructing facilities now to support the arrival of the JSF at various installations over the next 2 years. Based on your understanding of the current production and delivery schedules for the different variants, will any of the environmental studies or MILCON projects planned by the Services be completed either early- or late-to-need?

Mr. VAN BUREN. Currently, the Services have not identified any early- or late-to-need concerns for environmental studies or MILCON to support the JSF. However, as F–35 procurement schedules are adjusted, the Services will continue to evaluate and adjust their plans accordingly in order to support the planned delivery dates of the JSF.

Air Force: Based on adjustments to F–35A procurement included in the fiscal year 2012 budget, the Air Force is reevaluating the F–35A aircraft delivery schedules to include proper timing or infrastructure investments. Environmental Impact Statements (EIS) to support these investments are in progress.

Navy: The infrastructure at Eglin Air Force Base to support the Fleet Replacement Squadron (FRS), such as Academic Training Center (ATC) and hangars, are in place. Only minor investments remain to support increased maintenance throughput and refurbish some existing infrastructure. The EIS will evaluate the impact of basing seven JSF squadrons and one FRS in a single west coast location to replace F/A–18C. The JSF west coast EIS is estimated to be completed by 2013 and will inform future presidential budget submissions.

Marine Corps: MILCON projects necessary to support Marine Corps JSF operations have been identified, preliminary project plans drafted, and are adequately programmed to align with the appropriate need dates for occupancy and use by the squadrons as they transition from the AV–8B and F/A–18 aircraft. In 2010, the Marine Corps completed two EISs for both east and west coast F–35 basing which resulted in a SECNAV Record of Decision in December 2010. The Marine Corps will commence basing the F–35 a MCAS Yuma, AZ in 2012 followed by MCAS Beaufort, SC in 2014; MCAS Miramar, CA in 2019; and MCAS Cherry Point, NC in 2021.

23. Senator MCCAIN. Mr. Van Buren, please provide your assessment of the Services' plans for environmental studies and MILCON to support the planned delivery dates of the JSF.

Mr. VAN BUREN. The Services continue to evaluate and adjust plans accordingly based on adjustments to F–35 procurement. Each Service will provide the required environmental studies and MILCON plans to support the planned delivery dates of the JSF.

SHARING DEVELOPMENTAL COSTS

24. Senator MCCAIN. Secretary Carter, please explain, comprehensively, how you intend to ensure that Lockheed Martin will appropriately share in the increased cost of completing development of the JSF.

Dr. CARTER. Relative to the SDD program, DOD incentivizes Lockheed Martin to meet program needs by selectively applying fee to the accomplishment of key schedule objectives of the restructured SDD effort. Further, cost control will be incentivized with significant portions of fee earnable only with successful completion of development.

25. Senator MCCAIN. Admiral Venlet, with production costs increasing and preliminary O&S cost estimates higher than expected, both attributable to issues associated with developing the JSF, please explain how the program intends to have Lockheed Martin share in continued development of the JSF, through completion.

Admiral VENLET. Relative to the SDD program, DOD incentivizes Lockheed Martin to meet program needs by applying fees to the accomplishment of key schedule objectives of the restructured SDD effort. Cost control will be incentivized with significant fees deferred until the completion of development-unearned fee will not be awarded.

NEW COST-CONTROL INITIATIVES

26. Senator MCCAIN. Secretary Carter, you have explained how you will bring to bear should-cost analysis on the JSF program to drive costs down on developing and producing JSF aircraft. Please explain how you intend to use other elements of your Better Buying Power initiative similarly, in particular, adjusting progress payments to incentivize performance and promoting real competition in the program through the subsystem level and tiers of subcontractors.

Dr. CARTER. Implementation of the Better Buying Power policy initiative has resulted in the F–35 program's increased emphasis on affordability and incorporation of should-cost target goals. Increased emphasis on affordability and obtaining greater efficiency in spending resulted in the initiative to transition to fixed-price contracts sooner than originally planned. The LRIP Lot 4 contract was negotiated at a fixed-price, reducing risk to the government and providing a better value to the taxpayers for that lot of aircraft procurement, as well as all future buys. The Director, Defense Pricing, is leading the F–35 should-cost effort. The initial focus of that effort is negotiating the LRIP Lot 5 contract with increased emphasis on a reasonable allocation to the contractor of the cost-risk associated with achieving the capability configuration specified in the contract, providing an increased incentive to the contractor to control and reduce that risk.

One of the initiatives articulated in my Better Buying Power memorandum is to incentivize productivity and innovation in industry. Relative to the F–35 SDD program, DOD is now incentivizing Lockheed Martin to meet program needs by applying fee to the accomplishment of key schedule objectives of the restructured SDD effort. Cost control will be incentivized with significant fee deferred until the completion of development.

In terms of promoting real competition on the F–35, more than 75 percent of F–35 components are manufactured by sub-tier suppliers. The F–35 JPO works with the prime contractor to conduct annual and incremental Production Readiness Reviews on the F–35 critical supply base. At the DOD level, we are conducting a sector-by-sector, tier-by-tier evaluation of the defense industrial base with the objective of providing insights that will improve our acquisition strategies. The F–35 Acquisition Strategy, currently in review and staffing for approval, includes plans for competitive contracting for future development, production, and sustainment efforts including: follow-on development; breakout of elements from the baseline production and sustainment supply chain; and off-ramps to an entirely government-managed solution for sustainment. All such efforts will be evaluated to ensure they meet the best interests of DOD.

RELIABILITY—OPERATING AND SUPPORT COSTS

27. Senator MCCAIN. Secretary Carter, about two-thirds the total cost of a major weapon system over its entire lifecycle goes to O&S. Poor reliability can lead to very high O&S costs. Those systems have to be reliable. But, last June, Director, Operational Test and Evaluation (DOT&E) Gilmore issued a memo raising grave concerns that weapon systems coming out of DOD's design and development efforts are not proving reliable. This could be a serious issue with JSF, which may end up being extremely costly to operate and maintain. In March 2011, your principal deputy issued directions intended to immediately enhance reliability in the acquisition process. Please explain exactly how the JSF program is complying with DOD's recent direction on measuring, improving reliability, and maintainability. Answer in terms of having both reliability growth plans for production aircraft and documentation of the plans and methods of measuring progress.

Dr. CARTER. The F–35 Program Office has a Reliability and Maintainability (R&M) program that follows the direction outlined in my March 21 memorandum, "Directive-Type Memorandum 11–003—Reliability Analysis, Planning, Tracking, and Reporting." A key element of the overall R&M approach is a robust reliability-growth program, the goal of which is to ensure that the delivered air vehicle meets the required reliability levels on or before system maturity. System maturity is defined as 200,000 flight hours for the air system, with a minimum of 50,000 flight hours per variant across the entire inventory. Reliability growth planning began in the early stages of the SDD by building growth models for the various components and systems on the aircraft. Reliability growth tracking against actual performance commenced in December 2009 with the start of flight testing on BF–1, the first production representative F–35 aircraft, and will continue until system maturity is achieved. This activity is focused on identifying any low-reliability systems and components to enable the Program Office to target resources and efforts to implement corrective actions that can be incorporated into the fleet and into production as early as possible.

28. Senator MCCAIN. Secretary Carter, given the increase in production costs and the cost of ownership acknowledged to be higher than predicted, has DOD begun to re-look at high-low mixes for all Services, not just the Navy, with continued Hornet purchases? If not, please explain when this might be done.

Dr. CARTER. As with every other aspect of the budget, DOD will review the tactical air (TACAIR) force structure as part of the fiscal year 2013 budget review. As the F–35 is fielded over the decade and beyond, the Services will have a mix of fifth and fourth generation fighters. At this time, neither extending the lives of current inventory aircraft nor purchasing significant numbers of 1990s vintage designs is an attractive option for DOD.

29. Senator MCCAIN. Secretary Carter and Mr. Sullivan, how much of a canard is concurrent development in high-risk programs?

Dr. CARTER. Concurrent development presents challenges for any program, especially those that would be classified as high risk. Concurrent development requires that careful attention be paid to the progress of the development program and test phase of the program, as the low-rate production phase is entered. Efforts to mitigate the risks associated with concurrency should be exercised as appropriate. The risk associated with concurrency should be avoided unless there is a strong case for entering production as early as possible, either in response to an emerging threat or to replace unsustainable inventory, for example.

Mr. SULLIVAN. Some level of concurrency can be beneficial to a program in order to maintain efficiencies; however, in the JSF's case, the level of concurrency between development and production was inappropriate and added to inefficiencies. Our extensive body of work on major defense acquisition programs has amply demonstrated the negative consequences from undue concurrency or overlap of development, testing, and production activities. This is now being manifested by way of significant design changes late in the JSF program. While we note some gradual improvement in recent years regarding the total defense portfolio, most programs still proceed through acquisition phases with less knowledge than best practices suggest, placing them at higher risk for cost growth and schedule delays. This approach typically leads to a highly concurrent environment in which system development starts with immature technologies, testing begins before the design is stable, and production ramps up before testing has demonstrated that the design meets requirements and is producible. This can lead to higher costs, lengthy development times, costly rework, and late deliveries to the warfighter. Best practices and current DOD acquisition guidance recommend that complex weapon system programs instead adopt a more evolutionary acquisition strategy, developing, and procuring new systems incrementally to help achieve better program outcomes and deliver new capabilities to the warfighters sooner.

30. Senator MCCAIN. Secretary Carter, from the JSF program, what have we learned and are we really learning about highly concurrent development, test, and production?

Dr. CARTER. A highly concurrent development, test, and production program introduces a great deal of challenges and risks. In the JSF program, we are proceeding with LRIP aircraft with a design baseline that is still being updated based on feedback from the development and test program. We were able to capture some of these changes in the factory flow. Other changes will have to be incorporated as post-delivery modifications. Qualification of all the aircraft mission components is not complete, which will drive additional retrofits. We will mitigate these as much as possible by continuing to use components that are safe and replace them as preferred spares. The development and testing of software in time to meet aircraft production requirements has also been challenging.

On the other hand, the concurrent program will deliver combat capability several years earlier than a serially planned program. Concurrency has increased our ability to keep JSF suppliers viable and avoid major restart activities. Although concurrency does not solve issues associated with Diminishing Manufacturing Sources, it does reduce it.

Achieving the right level of concurrency risk in the JSF program continues to be a challenge. The changes made to the JSF program in the fiscal year 2012 budget reduced concurrency, but we continue to monitor concurrency risk closely.

31. Senator MCCAIN. Secretary Carter, is this strategy really paying benefits in affordability and cost of ownership, both with respect to this program and to similar major defense acquisition programs with high development risk or unproven critical technologies?

Dr. CARTER. Concurrency risk is assessed on a case-by-case basis when DOD approves acquisition strategies for major defense acquisition programs. The initial F–35 acquisition strategy, signed in 2000, approved a highly concurrent development, test, and procurement program. At that time, concurrency risk was considered low due to the improvements in aircraft design and manufacturing processes, as well as

increased investment and reliance on modeling and simulation in testing. Additionally, concurrency risk was considered acceptable due to the Services' requirement to replace aging and costly legacy tactical aircraft with 5th-generation capability. Due to schedule slips since that time, DOD has reviewed the progress of the development and test phase and made adjustments to the procurement ramp to mitigate the risk associated with concurrency. The reduced production ramps will lower the costs associated with concurrency modifications. Buying fewer aircraft prior to the end of testing will ensure that fewer aircraft will require change modifications. Cost of ownership, however, is relatively unaffected by a concurrent development program. More than two-thirds of the total costs are tied to the fact that DOD plans to buy more than 2,000 F–35 aircraft and operate them for the next 50-plus years.

32. Senator McCain. Dr. Gilmore, last June, you issued a memo raising grave concern that weapon systems coming out of DOD's design and development efforts not proving reliable. This, of course, could be a serious issue with JSF, which may end up being extremely costly to operate and maintain. In March 2011, Secretary Carter's principal deputy issued direction on measuring and improving reliability and maintainability.

From your perspective, please explain exactly how the JSF program is complying with that direction. Please answer in terms of having reliability growth plans for production aircraft, as well as documentation of the plans and methods of measuring progress.

Dr. Gilmore. The prime contractor produced a reliability growth plan in 2006, which is now invalid. The 2006 plan includes projections of overall reliability growth for each variant by aggregating projected growth for aircraft subsystems and components including mission systems, vehicle systems, airframe, low observable features, and propulsion. However, the 2006 plan is based on aircraft deliveries and flying hours that were not achieved and that have been significantly changed during the recent TBR of the program. The 2006 plan needs to be updated to reflect the post-TBR schedule and expected flying hours. The reliability growth in the 2006 plan was projected to achieve the required reliability levels at maturity, which is defined as a total of 200,000 flight hours across all variants with no less than 50,000 flight hours for each variant. The program office has instituted a reliability measurement and management process that includes methods for measuring progress using data collected from both government- and contractor-conducted testing. This process is tracking flight hours flown between component failures occurring on the aircraft currently being flown at the test centers. The collected data are being used to make decisions regarding aircraft configuration changes, particularly in vehicle systems. This measurement process has also highlighted the need to improve the availability of spare parts and tools for use by the test centers' maintenance staff, which were increased during the last year. However, the updated reliability growth plans and management processes are not yet fully specified by the government. The recent draft of the program's acquisition strategy update did not include the requisite provisions for reliability and maintainability growth planning. The measures of suitability (including reliability) and associated demonstrations specified for operational testing contained in the latest Test and Evaluation Master Plan (TEMP) are adequate; however, the TEMP contains no mention of reliability growth measurement or management during developmental test and evaluation. The TEMP and acquisition strategy should be updated and made consistent with DOD's most recent direction regarding reliability growth, as should the program's plans for executing the remainder of developmental testing.

33. Senator McCain. Dr. Gilmore, are you comfortable with how those procedures have been implemented and how your reliability concerns are being addressed with respect to the JSF program? Please explain your answer.

Dr. Gilmore. The program needs to update governing documents in accordance with the direction to assure they are consistent with the restructuring of the program and provide processes for incorporating observed flight test data into reliability growth models. Specifically, the Reliability Growth Plan, dated 2006, needs to be updated and the new acquisition strategy and TEMP required for Milestone B need to be updated to document the program's plans to execute reliability improvement activities. During the past 9 months, the program has improved fly rates of test aircraft by addressing some reliability issues and increasing spare parts availability, thus indicating its ability to discover problems with and improve component reliability and aircraft availability. The data collection and analysis process, the ability to project the effects of actions taken to improve reliability, and a process to nominate candidate actions to achieve reliability improvements exist. However, the program's experience thus far in implementing this process has been with a rel-

atively small amount of flight hours and performance data obtained from and benefitting a relatively small number of aircraft. Additionally, the process so far has focused almost entirely on the aircraft platform because mission systems flight tests are just now beginning in earnest. In the coming 12 to 24 months, data analysis requirements will greatly increase; mission systems components will become a greater consideration; and more operating locations will be added as sources of performance data collection, which makes data collection consistency more difficult to maintain. The program will need to be prepared to adjust the process it uses to analyze and nominate candidate changes to improve reliability as the volume and types of data available increase. As more data and needed changes accumulate, the Services may be challenged to budget for all of the reliability improvements needed for a growing number of production aircraft.

34. Senator McCain. Dr. Gilmore, with directions having been issued, what improvements, if any, are warranted at this point that can help ensure that reliability and maintainability of major systems are measured and improved?

Dr. Gilmore. We need to assure that programs consistently comply with the policy guidance, including providing the detailed descriptions of reliability growth planning and testing they will execute in their acquisition strategies, system engineering plans, and TEMPs. We need to assure that programs are provided the budgetary resources required to execute those plans, and that the inclusion of such plans in contractors' responses to requests for proposals is mandated and valued during source evaluation and selection. During program reviews conducted by the Defense Acquisition Board (DAB), we need to compare the program's actual execution of reliability growth activities with its plans. We need to assure programs conduct independent measurements of reliability under operationally realistic conditions at logical points during development and early production. Actual observed performance needs to be assessed in comparison with projected performance and used to revise growth projections, allowing programs to execute the needed changes to their plans and budgets. Those data will also enable operational commanders to adjust their plans for employing weapons systems consistent with the weapons' actual reliability and availability.

35. Senator McCain. Admiral Venlet, please explain what, if anything, the JSF program is doing now/can do, this early in development/production, to help ensure that the JSF program's O&S costs will ultimately be affordable?

Admiral Venlet. The JSF Program Office is focused on identifying the best-value solution for supporting the F–35 air system and is undertaking a number of initiatives to inform sustainment decisions in order to ultimately better control the through life O&S costs for the F–35 fleet. We are currently implementing an affordability strategy for which we are developing an AMP, which is focused on: reducing the costs of support products, e.g., support equipment, spare parts, and training devices; base-lining requirements with the Services and leveraging increased efficiency opportunities provided by JSF; and addressing reliability and maintainability. The JPO is creating contract and pricing opportunities to reduce the cost of the JSF support products by seeking to leverage economic order quantity buys for spare parts in conjunction with production buys, and implementing pricing improvement curves that leverage learning opportunities. In creating a common sustainment baseline harnessing the F–35 support system design, the JPO is articulating the optimum level of infrastructure and products required to support operations of the global fleet. By optimizing the amount of equipment procured early on, the JPO is impacting life cycle O&S costs. The Program Office is actively managing the reliability and maintainability of systems/subsystems and components. Where they fall short of meeting design specifications, the Program Office is implementing appropriate modifications that will help us control cost growth. The Program Office is also conducting a full life-cycle cost BCA that will evaluate both the current sustainment strategy and potential options to determine the best-value, long-term support solution for the program. This is scheduled for completion in December 2011. We will evaluate options for supply chain management, sustaining engineering, field operations support, and fleet management. We will also conduct a series of design reviews on sustainment elements—e.g., the supply chain—throughout 2011 and 2012 to verify the technical design and identify whether there are any opportunities for redesign that could reduce costs. As all of these cost reduction initiatives from the AMP, BCA, and design reviews are matured, the results will be incorporated into the program's life cycle cost estimate and will ultimately be realized by the Services and international partners.

36. Senator MCCAIN. Admiral Venlet, if you envision a comprehensive management approach to ensuring that these costs come down over time, please describe that approach and any relevant milestones.

Admiral VENLET. Our management approach to drive down O&S costs consists of two main efforts. The first is intense management focus and implementation of contractual mechanisms to pressure Lockheed Martin and Pratt & Whitney to reduce the unit recurring flyaway (URF) cost increases for the LRIP aircraft buys. Our top O&S cost driver, depot level repairables, is highly sensitive to URF price increases, and therefore any reductions in URF will drive down O&S costs. Our second management effort involves the formalization of potential O&S cost reduction initiatives into potential targets, actionable tasks, and schedules under the AMP. The AMP will be a single document to capture the O&S reduction activities. These include: opportunities to reduce the sustainment hardware costs; opportunities to reduce cost through targeted improvements in reliability and maintainability of components; and opportunities to reduce costs through a full Service implementation of the JSF common-support solution. The AMP is scheduled to be delivered in October 2011 and will form the basis for future JSF Program Objective Memorandum budget submissions.

37. Senator MCCAIN. Mr. Sullivan, what are we learning about highly concurrent development, test, and production from the JSF program?

Mr. SULLIVAN. The JSF's poor cost and schedule performance to date can in large part be traced to its single-step acquisition strategy to develop and acquire full combat capabilities on a very aggressive, risky schedule with substantial concurrency across technology development, design, testing, and production activities. We are now in the 10th year of development with most testing still before the program, yet are negotiating the fifth production lot. The recent restructuring reduced near-term procurement and added test resources. These actions reduce, but do not eliminate, the risks from concurrency. According to the revised schedule, DOD plans to purchase 545 aircraft in 11 annual lots by the end of system development. This total does not include the substantial number of aircraft ordered by the international partners during this same period.

38. Senator MCCAIN. Mr. Sullivan, is this strategy really paying benefits in affordability and cost of ownership, both with respect to this program and to similar major defense acquisition programs with high development-risk or unproven critical technologies?

Mr. SULLIVAN. Affordability—both in terms of the investment costs to acquire the JSF and the continuing costs to operate and maintain it over the life-cycle—is at risk. A key tenet of the JSF program from its inception has been to deliver an affordable, highly common fifth generation aircraft that could be acquired by the warfighters in large numbers. Rising aircraft prices erode buying power and make it difficult for the United States and its allies to buy as many aircraft as planned. Quantity reductions could drive additional price increases for future aircraft. Further, while DOD is still refining cost projections for operating and supporting future JSF fleets, cost forecasts have increased as the program matures and more data becomes available. Current JSF life-cycle cost estimates are considerably higher than the legacy aircraft it will replace; this has major implications for future demands on military operating and support budgets and plans for recapitalizing fighter forces. DOD leadership stated that the JSF program lost focus on affordability and that restoring and maintaining that focus is paramount to improving program outcomes.

Historically, acquisition programs with highly concurrent schedules and unproven critical technologies are at greater risk of cost problems than programs with less overlap of development and production. Moving forward in development and testing with unproven technologies risks later cost increases and schedule delays due to excessive design changes. Making substantial production investments before technologies have been demonstrated and the design is stable can require costly retrofit of already built aircraft and additional production line investments. In contrast, achieving a high degree of technology maturity by the start of system development is an important indicator of future success, demonstrating a good match between warfighters' requirements and available resources of knowledge, time, and money.

Regarding the JSF, system development began in 2001 with none of the eight critical technologies mature. Ten years later, five technologies are now considered mature and three are nearing maturity. Significant development risks remain as the program integrates and tests these technologies. The JSF program is still very early in demonstrating aircraft design and testing to verify it works as intended. As of December 2010, about 4 percent of JSF capabilities have been completely verified

by flight tests, lab results, or both. In addition, emerging technology and design concerns about the helmet-mounted display, advanced data links, lift fan engine, outer mold lines, and others add to challenges and could drive further cost increases.

CORROSION

39. Senator MCCAIN. Dr. Gilmore, according to a recent report on corrosion specific to the F–22 Raptor and F–35 JSF programs, OT&E is accomplished in most cases in corrosively benign environments due to, for example, the location of the major test centers. Any exposure to moderate or severe corrosive environments during testing tends to be limited in duration. By contrast, once fielded, military systems operate in corrosive environments.

Therefore, to help ensure corrosion and material degradation do not become a limiting factor during the useful service life of a weapon system, does your office currently consider corrosion, environmental severity, and duration in determining the adequacy of test and evaluation plans? Please explain.

Dr. GILMORE. Yes. DOT&E considers the need to evaluate corrosive effects that can occur during operational use when advising on the adequacy of developmental test and when approving operational test plans. Measures of reliability and maintainability capture defects, maintenance, and/or inspection time needed to identify and correct corrosion if it occurs during operational test. In the case of the F–35, the operational test agencies will operate aircraft for 3 to 5 years, depending on the variant, prior to the initial operational test and evaluation (IOT&E), providing data on corrosion under a number of conditions, including from aircraft employed at the training center at Eglin AFB, Florida, over a period of approximately 4 years prior to IOT&E. The F–35 operational test master plans include maritime deployments and a cold weather environment deployment, in addition to open air trials conducted at the western U.S. ranges. While these deployments will take less than a month in their individual durations, they will be designed to provide data on the response of the weapon system, and the impact to the maintenance force, in a variety of environments. Our final IOT&E report will also use data obtained from climatic laboratory testing and aircraft materials testing that the program office is conducting as part of developmental testing.

40. Senator MCCAIN. Dr. Gilmore, we have been seeing major corrosion issues on the F–22 Raptor. Has the F–35 Corrosion Prevention and Control Plan been updated with lessons learned from corrosion prevention and control for the F–22 Raptor aircraft?

Dr. GILMORE. As is acknowledged in last year's Corrosion Evaluation Team report on F–22 and F–35 aircraft, the F–35 program has included lessons learned from the F–22 program in developing the F–35's design and planning for corrosion prevention and control. Features to prevent and control corrosion incorporated in the F–35 include the following: gap filler that is less galvanically dissimilar from aluminum than used in the F–22; reduced use of conductive gap fillers; use of alternatives to conductive paint; providing sufficient internal drainage systems; elimination of aluminum honeycomb; inclusion of fiberglass barriers at composite/aluminum interfaces; and conducting more operationally representative verification and qualification tests. I understand the program office is currently updating its Corrosion Prevention and Control Plan for completion by the end of August 2011. In May 2011, the program office also updated its F–35 Corrosion Prevention and Management documentation, which defines the procedures and management processes needed to avoid and track functional impairment due to corrosion.

41. Senator MCCAIN. Dr. Gilmore, do you know if the program intends to specify that responsibility for management of the ALIS must link with the Aircraft Structural Integrity Program (ASIP)? Please explain.

Dr. GILMORE. It is my understanding that ALIS is being designed to provide direct linkage with the JSF ASIP and that the ASIP experts are currently working with ALIS developers to provide the appropriate tools to identify and control corrosion during operational use. While the current release of ALIS does not provide these tools, future releases planned before the end of development will enable appropriate personnel to use ALIS to track all required inspections and maintenance generated as a result of ASIP analysis and findings. These tools and processes will be part of the end-to-end verification of autonomic logistics systems conducted prior to and during IOT&E.

42. Senator McCAIN. Dr. Gilmore, do you know if the program intends to ensure that those officials are involved in developing ALIS and are capable of receiving and analyzing the information to support the ASIP sustainment activity? Please explain.

Dr. GILMORE. My understanding is that ALIS personnel would not directly analyze the information for ASIP sustainment, but provide tools and data to support ASIP analysis and actions for the appropriate unit-level and service-level offices. The intention is that the squadron-level data captured within ALIS will be stored within an enterprise data system and made accessible to authorized users/stakeholders for further ASIP analysis. However, I cannot yet conclude that all that is necessary (e.g., training, tools, instructions) to take advantage of the large amount of ALIS data, including ASIP data, is built or under construction. It is my understanding that the program office is reviewing this as part of the upcoming sustainment review. The product will be subject to end-to-end verification of autonomic logistics systems prior to and during IOT&E.

STATUS OF FLIGHT TESTING

43. Senator McCAIN. Admiral Venlet and Mr. Sullivan, please characterize how much we know today from flight tests in the context of the total flight test program?

Admiral VENLET. The F–35 flight test program has yielded several positive findings at this point in the total flight program. As of June 12, we have completed approximately 16 percent of the total planned testing to the end of the Systems Development and Demonstration (SDD) and would characterize our knowledge as being at an appropriate level and commensurate with how much testing is complete. The flight test program for this aircraft is focusing on four main areas: Radar Cross Section (RCS), Flight Qualities (FQ), Performance, and Mission Systems. We know that the RCS meets expectations. We know that the FQs are adequate and that the jet behaves predictably—easy to fly and land. Vertical flight is not a challenge. Performance meets expectations. The jet is experiencing wing roll issues to the level predicted by wind tunnel testing. Flight control modifications have improved but have not yet cured this wing roll off. Mission systems are still immature with most of the software development yet to come, making us less knowledgeable in this area.

Mr. SULLIVAN. The JSF program is still very early in demonstrating aircraft design and testing to verify it works as intended and will meet warfighter requirements. As of December 2010, about 4 percent of JSF capabilities have been completely verified by flight tests, lab results, or both. Early flights tested basic airframe handling and airworthiness characteristics. Initial flight tests of a fully integrated aircraft to demonstrate full mission systems capabilities and weapons delivery is now not expected until 2015, 3 years later than planned. Flight test progress has been hampered by the late delivery of test assets, STOVL variant technical problems, and delays in developing, integrating, and releasing software to the test program. Software development—essential for achieving about 80 percent of the JSF functionality—is significantly behind schedule as it enters its most challenging phase. Furthermore, only 3 of 32 ground test labs and simulation models critical to complement and, in some cases, substitute for flight tests, are accredited to verify and ensure the fidelity of results.

44. Senator McCAIN. Admiral Venlet and Mr. Sullivan, what percentages of the total flight test now planned have we experienced so far?

Admiral VENLET. As of June 12, the Flight Test Program has accomplished 8,977 of a total planned 57,488 test points for a total program percentage of 16 percent. The program overall is 14 percent ahead of the plan (8,977 of a planned 7,870 test points).

Unique Test Points	F–35A	F–35B	F–35C	Mission [1] Systems	Total
Cumulative To Date	3,138	4,415	1,424	[1] 463	8,977
Total Planned at end of SDD	14,141	21,862	15,155	6,330	57,488
Approximate Percent Complete	22	20	9	7	16

[1] Mission Systems cumulative-to-date test points are a subset of the variant totals.

Mr. SULLIVAN. Through 2010, the development flight test program has executed about 7 percent of the total flights planned. This is based on the restructured plan that added about one-third more test flights to the previous plan. For 2011, officials plan to fly more than double the number of flight tests in 2010. If executed as planned, almost 20 percent of the total flights will have been flown through the end of 2011.

45. Senator MCCAIN. Admiral Venlet and Mr. Sullivan, in the remaining tests, what are the areas of suspected risks or of key importance to proving combat capability?

Admiral VENLET. Those items of key importance to providing combat capability with the F–35 include: maturing the air vehicle and mission systems software; ensuring Vertical Landing Bring Back thresholds are met; and developing, testing, and producing a combat-capable helmet.

Mr. SULLIVAN. Key risk areas include:

- Flight testing a fully integrated aircraft to demonstrate full mission systems capabilities and weapons delivery is of key importance in proving combat capability but, as discussed in question 43, initial flight testing is not expected to begin until 2015.
- Software development, integration, and its release to test program comprises a major risk area. Software provides 80 percent of JSF's functionality essential to capabilities such as sensor fusion, weapons, and fire control, maintenance diagnostics, and propulsion. Software capabilities are developed, tested, and delivered in five blocks, or increments. Several blocks have already grown in size and taken longer to complete. Continued delays would further impact flight testing and design maturation efforts.
- Deficiencies in the helmet-mounted display (HMD) are causing officials to develop a second helmet while trying to fix the first model. In recent testimony, the DOT&E stated that the HMD is integral to the F–35 mission systems architecture and the concept of operations. In addition, he noted that, if the program has to utilize a conventional helmet design instead of the HMD, this would involve significant modifications to the current cockpit design.
- Both the STOVL and CV variants have important ship suitability and sea trials scheduled in 2011. STOVL tests are dependent on first clearing the vertical-landing envelope.

MODIFICATION ISSUES

46. Senator MCCAIN. Admiral Venlet and Mr. Sullivan, given the amount of change in the configuration and composition of the three F–35 variants and the extension of SDD, please characterize the amount of modifications needed to bring the early lots of production aircraft up to the final SDD capability and configuration?

Admiral VENLET. If the Services decide to bring the early lots of production aircraft up to the final SDD capability and configuration (Block 3 with 8,000-hour life), then the modifications required will include aircraft hardware and software retrofits as well as propulsion modifications.

These modifications include both capability upgrades (retrofit to Block 3) and concurrency Engineering Change Proposals (such as STOVL FS–496 Bulkhead and Conventional Takeoff and Landing Forward Root Rib) to bring the aircraft up to full SDD capability and configuration.

The number of modifications needed will vary across lots and depend on the delivered configuration of each aircraft and engine. The majority of these changes, however, will likely be unit-level incorporations that can be performed on an opportunistic basis with minimal impact to aircraft availability. Structural changes, however, will require beyond unit-level capabilities.

To mitigate the number of modifications required, the Program Office is currently pursuing a multi-pronged approach: incorporating fixes into production as early as possible; continually refining engineering analyses; developing inspection requirements in lieu of modifications; and investigating the use of preferred spares. Also, when modifications are unavoidable, we are packaging multiple modifications together to minimize aircraft downtime.

Mr. SULLIVAN. The Office of the Secretary of Defense's (OSD) CAPE office estimates modification costs of $1.4 billion: $550 million to bring early lots of production aircraft to the Block 3 configuration and $850 million for concurrent design changes required due to discovery during testing. We remain concerned about the prospect for additional future costs as DOD is procuring large quantities of aircraft amid continuing design changes and delays in development testing and software integration. We note that the program may procure more than 300 aircraft before a fully integrated system begins development flight tests and more than 500 aircraft by the end of operational testing. Based on prior system acquisitions, significant modifications and retrofits to already produced aircraft could be expected as a result of discoveries during flight tests.

47. Senator McCAIN. Admiral Venlet and Mr. Sullivan, what, if any, are the big or difficult modifications that we know about now? Are there any in the queue that we haven't yet finalized?

Admiral VENLET. We are currently aware of six big or difficult aircraft or engine modifications. For the STOVL variant, we have identified the need for two structural modifications (FS–496 Bulkhead and Forward Root Rib), one capability modification (Auxiliary Air Inlet Door), and two engine modifications (Screech Reduction and the Liftfan Driveshaft). For the Conventional Take Off and Landing variant, we have also identified the need for the Forward Root Rib and the Screech Reduction modifications, as well as a further engine equipment modification to the Dual Vane Fuel Pump System.

Mr. SULLIVAN. As we noted in our response to question #45, HMD problems may require substantial modifications to the current helmet (or development of an alternate helmet) and also to the cockpit, data displays, and mission systems.

Outer mold lines are another concern. Defense Contract Management Agency officials noted difficulties in manufacturing outer mold lines, resulting from tight tolerance specifications and multiple manufacturing methodologies among different JSF parts suppliers. Inability to meet the outer mold line requirements could have major impacts on stealth requirements and capabilities. This issue is not expected to be resolved until 2015, after over 200 aircraft will have been procured. This significantly raises the potential impact of any required modifications to meet specifications.

48. Senator McCAIN. Admiral Venlet, are the modifications that are needed due to concurrency calculated in the total program costs?

Admiral VENLET. The modification kits, and associated labor, needed due to concurrency were not included in the fiscal year 2012 President's budget request; however, they are included in the current Program Office and Office of the Director, CAPE, Independent Cost Estimate (ICE) that will be used for Milestone (MS) B recertification. The CAPE's ICE will be included in the December 2011 SAR as well as the Acquisition Program Baseline to be approved at the MS B DAB review.

49. Senator McCAIN. Admiral Venlet, to what extent do the Services have to fund these concurrency-caused modifications with production funding?

Admiral VENLET. We are seeing current modifications on the aircraft in the areas of structural life, limited parts changes, and non-safety related design changes. With the exception of the safety-related design changes, the Services have the opportunity to decide whether to incorporate the other categories of modifications within their aircraft. The Services are part of the change management process where the configuration changes are reviewed and assessed. If the modification is approved, production funding will be used to incorporate into the impacted aircraft. To mitigate the long-term impact, the JSF program is using every opportunity to reduce the number of modifications required. The program is incorporating fixes into production as early as possible, continually refining engineering analyses, developing inspection requirements, and investigating the use of preferred spares.

Lockheed is not responsible to pay for the modification costs. DOD pays for them with procurement appropriations. The timing of when the modifications are incorporated depends upon the criticality of each modification. If a modification is critical because of service life implications or impacts a critical capability used in training, then the modification is planned for early incorporation. Other modifications may be incorporated at a later time.

MARINE CORPS' JOINT STRIKE FIGHTER SHORT TAKEOFF/VERTICAL-LANDING DESIGN

50. Senator McCAIN. Admiral Venlet, with regard to the Marine Corps' STOVL JSF, how confident are you that the current design, plus the known and future modifications, produce enough vertical lift to overcome the weight of the aircraft, plus weapons and fuel, to operate as planned?

Admiral VENLET. My confidence is increasing as the F–35B flight test program has progressed through key maturity milestones in the first half of 2011. In the past 6 months, the STOVL test program has completed the majority of hot gas ingestion testing and an environmental structural load survey across STOVL domain. Additionally, the Naval Air Station Patuxent River flight team has completed the spectrum of vertical landings (112 VLs as of June 1, 2011) required as entry condition for the first LHD ship trial (aircraft weight, sink rate, crosswinds). With a significant portion of the STOVL discovery now known and the Lockheed Martin/Pratt & Whitney design team identifying additional weight reduction opportunities, I am

cautiously optimistic in the ability of the integrated F–35B weight/thrust program to meet the Vertical Landing Bring Back Key Performance Parameter requirement.

RESTORING CONFIDENCE BY DELIVERING ON TIME

51. Senator MCCAIN. Admiral Venlet and Mr. Burbage, as of today, taxpayers have invested about $56 billion on the JSF program. To date, the program has been in development for 10 years and in production for 4 years. Yet only 9 of 12 developmental aircraft intended for flight testing have been delivered. Three are still hung up, although they were supposed to be delivered in 2009, meaning they are about 21 months late. While the first two production aircraft were delivered within the past few weeks, they too were long overdue. I understand that 16 production aircraft are scheduled for delivery in 2011 and that all of them have weight on their landing gear at Fort Worth. With 7 months left this year, Lockheed Martin will have to produce those aircraft at a rate of about two per month. What conclusions, if any, should Congress draw about this program, and Lockheed Martin's ability to build at higher rates needed to keep unit costs affordable, if it doesn't deliver those 16 production jets on time by the end of the year?

Admiral VENLET. Of the 16 production aircraft scheduled for delivery by the end of 2011, two (AF–6 and AF–7) have been delivered, and four (AF–8, AF–9, AF–10, AF–11) are expected by the end of July. Furthermore, 11 of 12 development flight test aircraft have been delivered. The last SDD aircraft, BF–5 has already flown seven times in Fort Worth and is undergoing final preparations for delivery. The eight remaining production aircraft scheduled for delivery by the end of 2011 are advancing through final assembly, field operations, and flight line at a pace that we believe supports deliveries in 2011. Each of the aircraft scheduled for delivery this year requires an individual flight certification, placing a large proportion of non-production work onto the critical path for delivery of these aircraft. This is atypical—the production critical path will normally be dependent on the aircraft build—and is due to the fact that early developmental and production flight clearances are very specific to unique aircraft configurations. As the weapon system matures via qualification and test, the flight clearance process will improve over a continuum between now and the LRIP 8 (2014) timeframe when we will be in a more steady state flight certification process as the number of changes diminishes and aircraft configuration stabilizes. Therefore, any conclusions drawn from deliveries in 2011 should take into account the full spectrum of activities necessary to deliver these aircraft, with an understanding of how they differ from the expected future production line.

Mr. BURBAGE. As an update, all 12 of our developmental flight test aircraft have been delivered into active testing and 11 of the 12 have been delivered to the Air Force and Navy Flight Test facilities. The last SDD aircraft, BF–5 was retained in Fort Worth to conduct engine testing of the first production configured engine. This testing was required to allow formal acceptance of the first two production airplanes in May. BF–5 has flown seven times in Fort Worth and is undergoing final preparations for delivery to Patuxent River in June. The first two LRIP aircraft (AF–6/7) have been delivered to Edwards AFB, have been reclassified as SDD aircraft as directed by the TBR and are already contributing to the SDD flight test program. Of the 12 LRIP 2 aircraft, 9 have been delivered to the flightline. The first two LRIP 2 aircraft (AF–8/9) have flown and have completed all acceptance flights by the government.

Following DD 250 acceptance expected in the near-term, both aircraft will ferry to Eglin AFB to start the buildup of the 33rd Fighter Wing aircraft, which will enable Ready for Training declaration at the F–35 Integrated Training Center this fall. Seven of the remaining 10 airplanes in LRIP 2 have been delivered to the Fort Worth flightline and three aircraft are in final assembly. These aircraft will quickly go through the same acceptance flight procedure and DD 250 process as the first two LRIP 2 aircraft. Initial LRIP 3 aircraft are already on wheels on the factory floor and rolling toward final assembly.

Despite significant development challenges in the past, the path ahead is clearly opening in 2011. Increased deliveries of aircraft will occur and continue to grow in number for the remainder of 2011 and into 2012. Lockheed Martin will continue to work in close coordination with the industry and government F–35 team to stabilize development to reduce concurrency risks, continue to increase production rates, and lower both production costs and projected long-term O&S costs for the F–35 program.

52. Senator MCCAIN. Admiral Venlet and Mr. Burbage, is this program sustainable if it can't deliver aircraft at a rate higher than one or two a month after 4 years in production?

Admiral VENLET. The production program is not sustainable if it does not produce at rates higher than one or two per month in the future. However, the production part of the JSF program is currently transitioning from a development-centric production model—where each jet has a unique test mission, instrumentation, and configuration—to a repetitive manufacturing production model where three variants of aircraft are continuously produced from a single value stream. The current production delivery schedule has the program delivering at a rate of four per month in summer 2012. At various stages in the value stream, such as Wing, Center Fuselage, and Forward Fuselage, the program is already performing at rates higher than one or two per month in preparation for deliveries at a rate of four per month in 2012.

Mr. BURBAGE. The F–35 program has been delayed with early development and production challenges. However, beginning in 2010 and continuing in 2011, the program has demonstrated significant progress in all areas of development and production. The program has produced and delivered 11 of the 12 original SDD aircraft to the test sites and is well into LRIP production (a 13th aircraft was added in 2010 and will be delivered in 2012). The last SDD aircraft, BF–5 was retained in Fort Worth temporarily to conduct production engine testing in support of delivery of the first two production airplanes. The airplane is undergoing final preparations for delivery to Patuxent River in June. Based on that recent performance, we believe the program does have the capability to sustain increased production at higher rate and by summer 2012, we are on track to deliver aircraft at a rate of 4 aircraft per month, 48 aircraft per year.

The IMRT chartered by OSD recently reported that they have confidence F–35 can ramp-up to 48 to 60 aircraft a year with no issues, and to higher rates with completion of planned supply chain, manufacturing system, and affordability actions, to name a few. The U.S. Government and partners are investing $5.7 billion in production non-recurring tooling and technical assistance for the global supply chain, much of which is already in the pipeline. Lockheed Martin has invested over $1 billion in new production facilities alone. New factories for composites, wire harnesses, major assemblies, machining, and avionics are opening up each year as F–35 recapitalizes an industrial base thinned by 2 decades of reduced aircraft procurement. F–35 is incorporating the latest in lean production concepts including a moving final assembly line and pull flow from supplier to factory. In addition, the Italians have approved funding for a major Final Assembly and Check-Out facility that will ultimately produce 24 to 48 aircraft per year with low rate deliveries starting in the 2014 timeframe. No other fighter program has had the level of early investment throughout production tooling, facilities, and the global supply chain to drive affordability and lower ramp-up risks.

The F–35's common manufacturing processes and parts, advanced digital design tools, and assembly methods help achieve the program's goals of affordability, quality, and assembly speed. Lessons learned from development aircraft production have been incorporated into production aircraft to increase efficiency and reduce cost. By using industry-standard engineering and manufacturing technologies to ensure precise assembly, the concurrent production of all three variants is steadily moving toward full-rate production. The tri-variant final assembly activity in Fort Worth is experiencing a world class learning curve and we have reduced the cost of the airplane 50 percent over the first four production lots.

53. Senator MCCAIN. Admiral Venlet and Mr. Burbage, under what circumstances would it be appropriate to go back to a more aggressive ramp-up before Lockheed Martin has demonstrated that it actually can deliver JSF jets on time, as needed, and on budget?

Admiral VENLET. A return to aggressive production ramping prior to acquiring the evidence of technical maturity—available as a result of test program outcomes—would be premature. The extension of the SDD phase, and the subsequent reduction in production quantities in the fiscal year 2012 President's budget request, allows the JSF program to maintain a balanced exposure to concurrency risks as both development and production continue.

Mr. BURBAGE. Having just completed the TBR and subsequent OSD adjustments to the program, we agree with the JPO that the current program is realistic, has resilience, and embraces the fundamentals of system acquisition. We also agree with DOD's desire to balance increases in the production rate with risks of concurrency by holding the rate steady in 2011 and 2012 and then following a ramp rate of 1.5 starting in 2013. We remain concerned that the rate decreases from 35 aircraft to

32 aircraft from 2011 to 2012. The decrease in aircraft before initiating the 1.5 ramp rate has a cost impact and places risk to our supply base. All of our suppliers have anticipated a continuous increase in production and have made investments in manufacturing capacity to accommodate that growth. We look forward to the opportunity to demonstrate the ability to increase the production rate as currently programmed if substantial progress is clearly demonstrated by the manufacturing team in the future. As a reference, late this year we will be starting assembly at 4 per month and by summer 2012, we are on track to deliver aircraft at a rate of 4 aircraft per month, 48 aircraft per year.

MARINE CORPS' VERSION OF JOINT STRIKE FIGHTER ON PROBATION

54. Senator MCCAIN. Admiral Venlet, with your assistance, Secretary Gates placed the F–35B on probation for 2 years. I know you have been putting together a set of criteria to determine a way forward for the STOVL design. In your view, exactly how does F–35B get off of probation?

Admiral VENLET. In my view, the F–35B will have to show improvements in several areas to get off of probation. The F–35B will have to demonstrate test successes in unmonitored flight. It will have to perform well during the ship trials, which are scheduled to begin this fall. Design improvements need to be developed, integrated, and flown to demonstrate mature STOVL capability. With the incorporated changes, the F–35B will also have to demonstrate progress toward meeting its key performance parameters.

55. Senator MCCAIN. Admiral Venlet, is the probation period in fact for 2 years or could probation be ended sooner? If so, please explain how.

Admiral VENLET. The planned probation period is for 2 years. After the allotted 2-year time span, DOD's leadership will reassess the overall technical progress to make an informed decision about how to proceed with F–35B development and production. There is potential for the F–35B probation to end prior to the 2-year deadline. If the STOVL program continues the positive progress seen through the first half of this year, demonstrates the ability for unmonitored flight, progresses in the ship trials, and incorporates the design improvements for STOVL capability, there is potential for the technical maturity to be demonstrated in less than 2 years. When the program has demonstrated elements of STOVL technical maturity, the JSF Program Office and the U.S. Marine Corps report the requested data to the Secretary of Defense.

56. Senator MCCAIN. Admiral Venlet, why shouldn't the program be broken-up?

Admiral VENLET. The core concept behind the JSF program is to leverage commonalities across all aircraft variants in all phases of development, production, and sustainment. If three independent programs were established, we would lose the benefits of common management as well as lose the benefits derived from economies of scale in the global logistics system.

57. Senator MCCAIN. Admiral Venlet, Secretary Gates' putting the Marine Corps' version of JSF on a 2-year probation cleared the way for the Air Force's and Navy's versions (the A and C models) to move ahead. That seems to acknowledge that these are now three different aircraft. Now that testing is well underway and procurement has started, why shouldn't we break these three models into different programs so they can be managed scrupulously?

Admiral VENLET. The core concept behind the JSF program is to leverage commonalities across all aircraft variants in all phases of development, production, and sustainment. If three independent programs were established, we would lose the benefits of common management as well as lose the benefits derived from economies of scale in the global logistics system.

58. Senator MCCAIN. Mr. Sullivan, I am sure you would agree that Secretary Gates' putting the STOVL on probation isn't just a word play; it should mean something to Lockheed Martin and the JSF program, and invoke a specific course of action, not just business as usual. What is your view of what needs to be done for the STOVL to get off probation?

Mr. SULLIVAN. As we recommended in our recent report, DOD should formally establish criteria for the STOVL probation period and take additional steps to sustain individual attention on STOVL-specific issues. This will provide a framework for DOD leadership to manage to and sustain focus. DOD concurred with this recommendation. While establishing criteria will provide a scorecard of progress, the

STOVL variant will, at minimum, need to demonstrate better flight test availability and lift fan performance.

END-OF-THE-YEAR EXPECTATIONS

59. Senator MCCAIN. Admiral Venlet and Mr. Burbage, isn't it true that, before the end of the year, we will have sufficient actual cost data to know the projected cost for the 32 jets in the block of jets that we most recently entered into a contract for, the LRIP, Block 4 (IV)?

Admiral VENLET. Yes. By the end of 2011, the work on LRIP IV will be approximately 47 percent complete, and the JSF program office will have sufficient cost data to provide a more accurate projection for the cost-to-complete of the LRIP IV contract.

Mr. BURBAGE. We will begin to see some actual cost data come in by the end of 2011; at that time, approximately 47 percent of the work on the LRIP IV contract will be complete. Further, as the actual cost data continues to come in during the major subcomponent build cycles, we will continue to refine the estimate to complete for the LRIP IV contract.

60. Senator MCCAIN. Admiral Venlet and Mr. Burbage, will this data be sufficient for us to see either a deviation or an alignment between the LRIP IV's actual costs and the revised cost baseline that we're going to get for the program later this month?

Admiral VENLET. Yes. Once the cost baseline is established at the DAB review and sufficient LRIP IV cost data has been collected, the program office will be able to identify any possible deviations.

Mr. BURBAGE. Yes, as we refine the cost estimate based on actual costs data for LRIP IV we will be able to identify deviations or alignments on cost.

61. Senator MCCAIN. Admiral Venlet and Mr. Burbage, because LRIP IV is a fixed-price-type contract, so that, for the first time in the program's history, Lockheed Martin could seriously be on the hook for major overruns, will we know by the end of the year whether the program is on or off track?

Admiral VENLET. By the end of 2011, the work on the LRIP IV will be approximately 47 percent complete, and the JSF Program Office will have sufficient cost data to provide a more accurate projection for the cost to complete the LRIP IV contract.

Mr. BURBAGE. Yes, by the end of 2011 the work on LRIP IV will be approximately 47 percent complete and we will have sufficient cost data to provide a more accurate projection for the cost to complete of the LRIP IV contract.

Yes, again as we refine the cost estimate based on sufficient actual costs data for LRIP IV we will be able to identify whether the program remains on track to know whether cost saving initiatives already in-work will have the desired effect.

FIFTH-GENERATION CAPABILITY

62. Senator MCCAIN. Mr. Sullivan, in your view, what can currently be said now about the documented performance of JSF in the areas that make it the 5th-generation strike-fighter, with low observability, fused mission systems, electronic attack, and weapons integration?

Mr. SULLIVAN. At this point in the program, relatively little can be concluded regarding JSF performance in these critical areas. The test program is still very early in demonstrating that the aircraft will work as intended. Testing at this point has been concentrated on basic flying capabilities. Development and testing for these more advanced fifth generation capabilities has slipped because of continued software delays and technological maturation problems. Software, in particular, is a pacing item for the development of these areas. The program cannot start flight testing a particular capability until the respective software block is delivered to the test program. Software blocks 2 and 3 (which provide initial and full warfighting capability) have slipped 3 years beyond earlier estimates. Some capabilities also were moved to future blocks in attempts to meet schedule and mitigate risks. For example, full data missions systems were deferred from block 2 to block 3.

PAYMENT OF FEES

63. Senator MCCAIN. Admiral Venlet, please provide a history of all fees that have been paid to Lockheed Martin to date in connection with SDD, and separately with

respect to LRIP, in the JSF program, both as dollar amounts and as a percentage of total available fee.

Admiral VENLET. Response provided in the charts below.

[Deleted.]

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

NAVY VERSUS AIR FORCE TACTICAL AIRCRAFT GAP

64. Senator CHAMBLISS. Ms. Fox, you note in your statement that: "the Air Force is expected to experience a shortfall between 40 to 100 aircraft due to [the F–35] cost increase. However, the shortfall of 40 to 100 aircraft in relation to the 2,000 aircraft they are supposed to receive is seen as manageable. The Navy however has greater concern with a larger shortfall . . . They have invested in a service life extension plan for 150 F–18 aircraft." I note that DOD has also requested procurement of additional F–18s to address this shortfall.

Please provide the data and rationale for the size of the Air Force's and Navy's shortfalls in tactical aircraft and explain why the Air Force's shortfall can be addressed without procuring additional aircraft and why, on the other hand, the Navy's shortfall requires procuring additional aircraft. If necessary, please provide a classified response.

Ms. FOX. The Air Force does not need to buy additional aircraft because many of its legacy aircraft—the F–16 in particular—will remain in service longer than originally expected. The Air Force plans to extend its 397 early block F–16s (Block 25/30/32) to reach 8,000 actual flying hours, up from 6,800 hours. This extension mainly requires a modest cost wing skin modification. The larger impact in mitigating the Air Force fighter attack shortfall is in implementing a service life extension program (SLEP) for a portion of its 640 late block F–16 (Block 40/50), anticipated to increase service life from 8,000 to 10,000 actual hours. Sustainment and SLEP will allow early block F–16s to remain in the fleet until the early 2020s, and allow late block F–16s to remain in the fleet until the early 2030s. The net result of the most recent projections of legacy aircraft lifespan and the F–35 procurement ramp associated with the 2012 President's budget drop the Air Force shortfall down to between 40 and 100 aircraft. This shortfall is relative to a 2,000 total aircraft inventory. Air Force and CAPE agree that this shortfall is manageable and no additional aircraft need to be procured.

The Navy needs to buy additional aircraft because its shortfall is relatively larger and it has fewer legacy aircraft suitable for a service life extension compared to the Air Force. Prior to any major mitigation steps the Navy shortfall was projected to peak at 177 aircraft in 2017. A combination of measures such as high flight hour inspections and SLEP for 150 F/A–18A–D aircraft and accelerated transition of F/A–18E/Fs using peacetime attrition aircraft reduced the shortfall to approximately 100 aircraft in 2018. The restructuring of the F–35 program in the 2012 President's budget increased the shortfall above 100 aircraft, so additional measures were needed. With an open production line available, Secretary Gates added 41 F/A–18 E/Fs to the President's budget 2012 FYDP. These aircraft, combined with the additional nine aircraft added by Congress in 2011, reduce the shortfall to about 50 aircraft, relative to an inventory demand of about 1,080 aircraft. The Navy assesses and CAPE agrees that this shortfall level is manageable.

ALTERNATIVES TO F–35

65. Senator CHAMBLISS. Secretary Carter, in your response to a question at the hearing regarding DOD's Nunn-McCurdy certification process for the F–35 program, when discussing alternatives DOD considered to the F–35 program, you mentioned that DOD considered and rejected several alternatives. However, you did not include the F–22 as one of the alternatives that DOD considered.

During DOD's Nunn-McCurdy certification process for the F–35 program, did DOD consider procuring additional F–22s as an alternative to continuing the F–35 program? Why or why not?

Dr. CARTER. As part of the F–35 Nunn-McCurdy review, DOD assessed whether there were alternative aircraft to the F–35 that provided acceptable capability to meet the joint military requirement at lower cost. The analysis assessed the F–22, F–15E, F–16 Block 52/60, and F/A–18E/F. The analysis compared the options on the basis of survivability, basing, lethality, and networking, and also went beyond existing programs to examine potential upgrades to alternative aircraft airframes, weapons, sensors, and communications networks.

66. Senator CHAMBLISS. Secretary Carter, if you did consider additional F–22 procurement as an alternative, please explain why that alternative was not adopted.

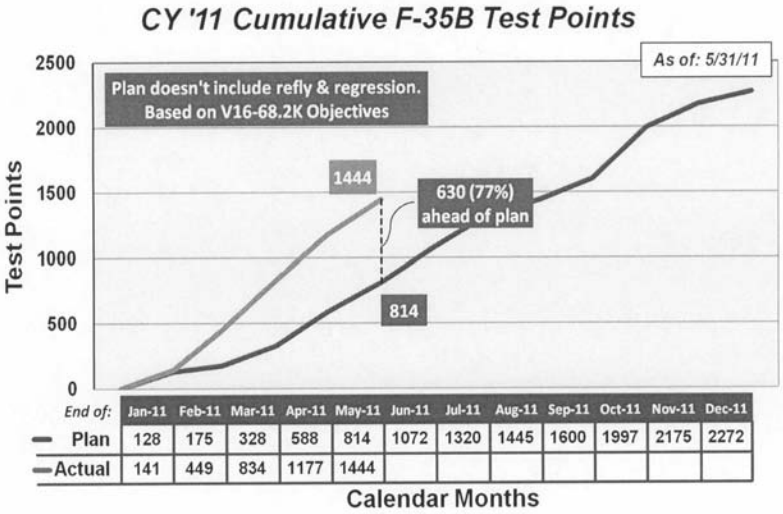
Dr. CARTER. The analysis determined that the F–22 lacked the sensors and weapons to meet the required lethality against ground targets. With extensive upgrades, the F–22's capability against ground targets could be improved, but potential design limitations, technical risk, lack of basing flexibility, and high cost eliminated it as an acceptable alternative.

QUESTIONS SUBMITTED BY SENATOR LINDSEY GRAHAM

F–35B SHORT TAKEOFF/VERTICAL-LANDING FLIGHT TEST PROGRESS

67. Senator GRAHAM. Admiral Venlet, would you please provide an update on the F–35B, or STOVL variant, flight test progress since the January efficiencies announcement that put it on probation?

Admiral VENLET. Progress in testing of the F–35B has improved significantly in 2011. The Program Office is tracking three near-term milestones as we work toward improved performance: completion of the Ready-For-Training (RFT) test points for conventional mode operations on F–35B; completion of the RFT test points for STOVL mode operations; and test points required for the first flight test on the landing ship. The chart below shows progress ahead of plan since the beginning of the year, and F–35B is on track to execute the first deployment to the ship this October and complete the year ahead of plan.



End of:	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
Plan	128	175	328	588	814	1072	1320	1445	1600	1997	2175	2272
Actual	141	449	834	1177	1444							

STEALTH PERFORMANCE REQUIREMENTS

68. Senator GRAHAM. Admiral Venlet, is each of the variants meeting their stealth performance requirements?

Admiral VENLET. The F–35 stealth requirements are multifaceted and designed to achieve mission effectiveness against specific threats while executing the Joint Operational Requirements Document defined Mission Areas. There are two key performance parameters associated with RF signature performance. We have dynamically measured the Conventional Take Off and Landing variant and verified the defined levels have been met. Measurements are planned on the carrier and STOVL variants toward the end of calendar year 2011.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

AFFORDABILITY AND COST

69. Senator CORNYN. Ms. Fox, affordability is an underlying and vital premise of the F–35 program. In your opinion, what can be done in the near-term to help drive down program costs and ensure an efficient rate of production, so that the F–35 does not become unaffordable?

Ms. FOX. For an aircraft production program in the longer-term, cost reduction is primarily a function of quantity. As production processes stabilize and more are produced, unit costs will decrease as a result of natural production efficiencies. In the shorter-term, however, this is not necessarily the case. If production quantities ramp up too quickly, there can be upward pressure on price. If planes are produced before production processes stabilize or if planes are being produced and then later require retrofits to reflect changes from a concurrent development program, unit costs will increase.

As the JSF development program has been extended, the program has actively tried to find the sweet spot in a production ramp. This is the production rate which maintains stability in the production work force but does not overcommit to a rate that exposes the government to costly retrofits or a production flow that is subject to stagnation and backlog.

I believe that the program, with the actions it has taken over the past year, has developed a firm and reasonable baseline for the execution and completion of its development qualification program. The key will be to let the development program execute with a stable requirements baseline. During this timeframe, DOD will continue to fine-tune the production ramp in order to achieve the sweet spot balance discussed above. Congress and our international partners should view any short-term procurement adjustments within this context.

The CAPE cost estimates for the procurement price have largely been stable. Our current estimate for APUC is within 2 percent of our APUC estimate at the time of the Nunn-McCurdy cost breach. There is shorter-term cost pressure resulting from such things as concurrent development and maturing production processes; however, long-term projections are stable and reflect the fundamental fact that unit costs will come down as the program stabilizes and efficient procurement quantities are realized.

70. Senator CORNYN. Ms. Fox, the recent SAR projected a significant increase in costs for O&S over the lifetime of the F–35 program. Please describe what underlying assumptions changed in this SAR from previous SARs.

Ms. FOX. The most recent SAR (dated December 31, 2010) reflects total lifecycle costs exceeding $1 trillion in then-year dollars, which is approximately 10 percent higher than the costs reported in the 2009 SAR. The SAR reflects Program Office estimates. These costs projections are the by-product of operating 2,443 aircraft over a 30-year lifecycle. CAPE is currently completing its lifecycle cost estimate in support of a major DAB milestone review and our estimate is consistent with Program Office cost estimates. This is the CAPE's first estimate of full lifecycle costs since the original program baseline was established in 2002.

The primary drivers in the estimate are the costs of depot level reparables, fuel consumption, operating personnel, and lifecycle management personnel. Depot level reparables are a function of the reliability of aircraft components and how expensive it is to repair those components in depot when they fail. Fuel consumption is a function of the engine's specific fuel consumption and operating hours. Operating personnel cost is a function of how many people the Services assign to operate and maintain the planes at a squadron level. Finally, lifecycle management costs are a function of the number of contractor and government personnel assigned to manage the program from day-to-day over the program's entire life.

Our estimates are based on the best information available from the contractor (for depot level reparables, specific fuel consumption, and lifecycle management) and from the Services (for operating personnel and flying hours that drive depot and fuel costs). We balance this information by benchmarking projected costs for this platform against costs realized in comparable legacy platforms. As more information becomes available and as operating conditions become refined, our estimates for lifecycle will be refined accordingly. It is important to note that the JSF is a technically advanced platform with complexities driven by stealth, thrust, and other operating requirements. Collectively, these are significant cost drivers. There is an attendant operational benefit, however, in that JSF will deliver unprecedented fifth generation capabilities that will allow the United States and our allies to continue to maintain dominance in airpower.

71. Senator CORNYN. Ms. Fox, if development and production of the F–35 were discontinued, what would be the costs of O&S for the fleet of aircraft the F–35 was intended to replace over the same period evaluated in the SAR?

Ms. FOX. The answer to this question requires further analysis. The existing fleet has already started to ramp down to reflect natural aircraft retirements and the introduction of the F–35 fleet. If F–35 development and procurement were discontinued, the Services would have to fundamentally reassess their requirements and reconsider the need to introduce capability block upgrades and SLEPs to offset the significant loss of capability that JSF would provide. These requirements would have to be better defined before O&S costs could reasonably be projected. Historically, it has been the case that operating and support costs have remained at relatively constant levels after adjusting for inflation. This means that the Services adjust their aircraft inventory, operational requirements, and flying-hour programs to fit within existing budget resources vice seeking additional resources for operations that may involve sizeable cost growth.

72. Senator CORNYN. Mr. Burbage, what investments have been made in the development and design of the F–35 to reduce O&S costs over the life of the program?

Mr. BURBAGE. Affordable O&M and Total Life-Cycle Cost considerations were driven into the F–35 design from the beginning. The F–35 program was designed to capture powerful economies of commonality and scale. For the first time ever, three distinct versions of the same aircraft, with a high degree of commonality, will serve the needs of three U.S. Services and multiple international countries. The economies of commonality include not only a common engine, mission system avionics, vehicle management systems, and manufacturing processes—but also a fully integrated and networked sustainment system. Aircraft share common parts, support equipment, and technical data, thereby also yielding long-term cost savings and best value for the customer.

The F–35 is the first aircraft development program to fully integrate the air system and the training and sustainment system from design inception. Supported primarily in a performance-based logistics environment, the result is greater reliability and unprecedented cost visibility.

The global sustainment system will meet the operational needs of more than 40 land bases, 20 ships, and 150 squadrons—capturing the benefits of economies of scale. At the same time, we are creating the first-ever joint and combined training system. Integrating pilot and maintenance training for multiple Services, while using the same software and hardware as the aircraft, provides faster training with greater fidelity and at lower cost. When extended to include closest allies, the cost of conducting future long-term combat or peacekeeping operations is also dramatically reduced for all participating nations.

The ALIS—the infrastructure for data collection, data analysis, and decision support—ties together F–35 operational planning and prognostics and health management to enhance the worldwide fleet of aircraft. ALIS complements the decision-making process, matching customer metrics and dollars to resources in real time. F–35 sustainment is a total life-cycle system—a new paradigm for fighter aircraft support that dramatically simplifies maintenance and keeps the aircraft where it belongs—in the air.

Global sustainment products and processes are currently used in F–35 production and flight test, demonstrating their proof of factory-to-field commonality and confirming their cost and performance attributes.

Annual F–35 O&S cost estimates are developed from detailed grassroots product and service descriptions, including cost elements often buried in legacy programs as infrastructure costs. In contrast to higher-level, legacy-system-based parametric cost estimates, these detailed F–35 O&S estimates provide the foundation for conducting cost/benefit analyses and enabling informed decisions. Today, the primary total ownership cost debate is about ground rules and assumptions that define what costs are included in the accounting. As F–35 flying hours continue to increase, data fidelity and accuracy improve and overall uncertainty will be reduced. This information is fed back into the annual O&S cost estimates to generate even more accurate analyses, decisionmaking, and enhanced management control over total ownership costs. No other program has had F–35's sustainment economies of commonality and scale and no other program conducts an annual cost review anywhere near the depth of the F–35.

73. Senator CORNYN. Mr. Burbage, it is my understanding that Lockheed Martin's projected average flyaway cost for the F–35A over the life of the program is approximately $65 million in 2010 dollars. This is roughly the same price of today's comparably equipped F–16 or F/A–18. However, DOD is projecting the average price per

F–35 aircraft to exceed $100 million. Can you explain the discrepancy between the current Lockheed Martin cost estimate and DOD's cost estimate for the aircraft?

Mr. BURBAGE. The $100 million is an average for all variants in then year dollars. The Lockheed Martin quoted price of $65 million is for the F–35A variant in 2010 dollars. When you compare the DOD and Lockheed Martin estimate in current year economics, Lockheed Martin is approximately 5 percent less than the DOD estimate for the F–35A. In future year dollars, the difference is less than 1 percent. The reason for this is the difference in annual escalation/de-escalation factors for the aerospace and defense industry and general Office of Management and Budget economy rates.

74. Senator CORNYN. Mr. Burbage, does the use of common avionics, sensors, engines, and software reduce overall costs during the life of the program?

Mr. BURBAGE. Yes, the use of common avionics, sensors, software, and a single engine between the three F–35 variants significantly reduces the overall costs during the life of the program. When you sit in the cockpit of any of the airplanes, you cannot tell the difference—same cockpit, same engine, same flight controls, same sensors and software. This enables new ways of thinking about joint, coalition operations and capturing large economies of commonality and scale across the tri-Service, nine-nation partnership. The alternative would be to develop separate solutions for each of the aircraft variants driven by design requirements for each specific U.S. Service or international customer. The cost for following that path would be prohibitively expensive for not only the initial procurement costs but also equally more expensive for each modernization upgrade in the future as those upgrades occur.

The F–35's next generation sensor suite represents an unprecedented capability for multi-role aircraft, collecting and distributing vast amounts of data, thereby creating greater situational awareness and enabling other capabilities throughout any battle space.

INTERNATIONAL PARTNERS AND ALLIES

75. Senator CORNYN. Secretary Carter, does DOD believe the announcement earlier this year, that the F–35 program would be restructured, will impact when or how many aircraft our international partners will ultimately buy?

Dr. CARTER. All partner nations' future procurement plans were discussed at the May 2011 Joint Executive Steering Board (JESB). No formal changes were made to the JSF Production, Sustainment, and Follow-on Development (PSFD) Memorandum of Understanding (MOU) Annex A, which is the document used by the program for production planning. However, the United States and the eight international partners retain the right to make future changes to their production plans in accordance with the provisions of the PSFD MOU that govern the production aspects of the program.

76. Senator CORNYN. Ms. Fox, how important is international participation in controlling costs of the F–35 program?

Ms. FOX. International participation is one of several important factors that are important to controlling F–35 costs. The most significant effect is through quantities purchased by international partners. The more JSFs that are produced, the lower unit costs will be because of production process efficiencies. Last year, CAPE estimated that the absence of international quantities would raise unit prices to the United States by approximately 5 percent. A more subtle benefit results from the incentive of program affordability. Increases to unit costs dampen international support. This serves as a strong incentive for the program to control costs. We also recognize that partner countries are actively supporting the development of production capabilities in their nations because this helps them establish a foundation of world-class production. As these investments are made, costs to the United States are controlled since these international facilities provide additional capacity to produce U.S. requirements thus reducing the need for investments in the United States.

FLIGHT TEST PROGRAM

77. Senator CORNYN. Dr. Gilmore, it is my understanding that the flight test program has shown improvement this year, with a significantly increased number of flight sorties for the F–35B STOVL variant. I understand that the STOVL variant has accomplished more than 90 vertical landings this year alone, compared to 10 in all of last year. How significant is it for the STOVL variant to hit this important milestone at this point?

Dr. GILMORE. A total of 110 vertical landings have been accomplished by the test team as of the end of May 2011. Of these, 64 were flown to satisfy the requirements for beginning L-Class Amphibious Ship integration testing and fleet pilot training. Of these 64 vertical landings, 46 were flown either as build-ups in preparation for scored events, re-fly/system regression testing, and/or test pilot checkout events. It is significant that the test team has completed this testing in the time allotted by the TBR and roughly in accordance with the Review's expectations for progress. However, more testing in STOVL modes is needed in both flight test and in the hover pit to provide the information needed to evaluate the aircraft's Vertical Lift Bring Back requirement. More STOVL mode testing will also be required before the final designs for the fixes needed to correct some of the discoveries made thus far during STOVL flight test can be determined and implemented in production aircraft (such as fixes for the roll-posts and the auxiliary air inlet doors). All STOVL-mode testing completed so far has been with the first flight release engines; subsequent testing may be required using the initial service release engines. Finally, the STOVL mode flight envelope explored during flight test conducted to date is only a portion of the full envelope needed operationally.

78. Senator CORNYN. Dr. Gilmore, please comment on the progress of the overall flight test program since Secretary Gates' efficiencies announcement earlier this year.

Dr. GILMORE. Over the last 6 months, the program delivered five more flight test aircraft, and the first two production aircraft, to the flight test centers. Flight rates have improved for the STOVL and Conventional Takeoff and Landing (CTOL) aircraft as compared to last year. The final test aircraft, expected to be delivered by the end of last month, had not been delivered as of June 21 but is expected to arrive at the flight test center soon. The STOVL variant flight rate has improved from last year's average of approximately four sorties per aircraft per month to approximately eight sorties per aircraft per month against a plan of five sorties per aircraft per month.

In the area of flight sciences testing, the test team has accomplished STOVL mode testing on four test aircraft, an improvement over the single aircraft available for this testing last year. Completing needed modifications to test aircraft (e.g., stronger STOVL auxiliary air inlet doors), adding test aircraft, increased staffing at the flight test center, an increase in the envelope available for flight test, and improvements to parts supply and maintainability have all contributed to this improvement in the pace of flight testing. The flight rate of CTOL test aircraft also continues ahead of the post-TBR planned rate. In the last 2 months, the 3 flight sciences test aircraft have averaged approximately 11 sorties per month against a plan of 9 sorties per aircraft per month. The single carrier variant aircraft at the flight test center continues to fly at about the planned pace. Flight sciences testing of the carrier variant aircraft is in the very early stages of flight envelope expansion. Constraints on available flight sciences test points have challenged the program. For all variants, the ability to open envelope and make productive use of the achievable pace of flight testing is dependent on: completing analysis and/or modifications to relieve aircraft operating limitations (e.g., clearance to greater structural loads, higher maximum speed), incorporating additional instrumentation, design changes, and changes to control laws. Flight test results during transonic flight and maneuvers with elevated g-forces have resulted in the need to change control laws in the vehicle systems software to address undesirable roll-off, side-slip, and yawing in CTOL and STOVL aircraft. More flight test and analyses are needed to characterize and resolve the handling qualities problem in the STOVL aircraft. The program also continues to make progress addressing problems with the following STOVL aircraft components that enable vertical lift operations: auxiliary air inlet doors, roll posts, lift fan shaft, and clutch.

In the area of mission systems flight test, efforts in the last 6 months have focused on completing the regression testing of fixes to the problems discovered last year with Block 0.5 and completing the developmental test needed to support the fielding of the portion of the Block 1 capabilities that will enable initial pilot training later this year. Block 1 flight test execution and integration of final software elements is slightly behind the current post-TBR plan. Approximately 40 percent of original Block 1 test points have been deferred to the next block, Block 2, because of aircraft limitations in the Block 1 configuration. There is likely to be at least a 1-month to 2-month delay in completing flight testing of the remaining available Block 1 capability, which is currently planned to conclude in October of this year.

The potential exists for a further delay, because in order to meet this year's goals, flight test productivity must be significantly greater in terms of mission systems flight rate and test point completion than has been the case during the last year

of mission systems flight test. Successful development and integration of the helmet mounted display system has presented one of the more significant challenges to mission systems flight test. Problems include integration of the night vision capability, symbology jitter, and latency. These stem in turn from problems with camera hardware, insufficient computer processing power, inaccurate head position tracking, and poor helmet fit, complicated by vibration-inducing airframe buffet experienced at high angles-of-attack in some dynamic maneuvering regimes. The program is pursuing a dual path to resolve the technical issues and provide a system that will enable flight test to proceed and meet operational mission needs. One path is to mature the original helmet mounted display system by the end of SDD Block 3 development. The alternate path is to integrate a technically mature, existing helmet mounted display system that addresses the symbology stability issues but requires an additional night vision system (such as existing night vision goggles) for night combat capability. This alternate path, however, does not fulfill the original design requirement for displaying Distributed Aperture System full-spherical field-of-view imagery on the pilot's visor. It might, however, meet basic mission needs.

79. Senator CORNYN. Secretary Carter, how would you characterize the program's overall test flight performance this year to date?

Dr. CARTER. The F–35 flight test program has yielded several positive findings at this point in the total flight program. As of June 2011, they have completed approximately 16 percent of the total planned testing to the end of the SDD. They would characterize our knowledge as being at an appropriate level and commensurate with how much testing is complete. The flight test program for this aircraft is focusing on four main areas: Radar Cross Section, Flight Qualities, Performance, and Mission Systems. We know that the Radar Cross Section meets expectations. We know that the Flight Qualities are good—in other words, it is a nice flyer. The jet behaves predictably—easy to fly and easy to land. Vertical flight is not a challenge. Performance meets expectations. The jet is experiencing wing roll issues to the level predicted by wind tunnel testing. Flight control modifications have improved but not yet cured this wing roll off. Mission systems are still immature with most of the software development yet to come, making us less knowledgeable in this area.

80. Senator CORNYN. Admiral Venlet and Mr. Burbage, how did you discover the crack issue with the F–35B STOVL, and have you tested a fix and evaluated the other two variants for any similar bulkhead issues?

Admiral VENLET. The FS–496 bulkhead crack was found during the STOVL ground durability test. The test article is currently being repaired to test the production-representative redesign on one side and the retrofit design for current flying aircraft on the other side. These modifications will be completed prior to the restart of the STOVL durability test, currently scheduled for the first quarter of fiscal year 2012. During the root cause investigation, it was discovered that the design flaw existed to a lesser extent on the carrier and CTOL FS–496 bulkheads. For the CTOL and carrier, the production redesigns will be minor machining changes to the existing design. The retrofit of CTOL and carrier flying aircraft variants will involve minor machining of the trunion fitting to blend out sharp corners requiring approximately 1 week at the field sites. The retrofit operation has already been completed on several aircraft, and the instructions and requirements are well-understood.

Mr. BURBAGE. While undergoing fatigue testing on the F–35B ground test plane, our engineering staff found cracks in the Fuselage Station 496 (FS 496) bulkhead—a major structural part weighing about 300 pounds. The cracks were found after the plane had been subjected to the equivalent of about 1,500 hours of flight time. The airplane's structural components are designed to last at least 8,000 hours. The cracks were found in a special inspection after engineers discovered air leaking from a wingbox fuel tank.

The F–35B 496 bulkhead was switched from titanium to aluminum during the STOVL Weight Action Team (SWAT) review. The F–35A and F–35C variants 496 bulkheads are still titanium. The design discovery is being addressed by thickening the bulkhead for the F–35B production aircraft and by local blending on assembled aircraft (all three variants). Blending involves machining smoother curves on bends and corners in two small areas of the bulkhead to eliminate stress concentrations and prevent cracks from starting. In addition, for the F–35B aircraft already produced, a modification to install metal doublers to the bulkhead is required to fly beyond 1,500 hours and restore full life. Testing is expected to resume in the fourth quarter 2011 on the F–35B ground test aircraft once modifications have been incorporated. Similar features were identified through analytical investigation on the CTOL and carrier designs and corrective actions are being implemented. No cracking has yet occurred on these variants. Testing for the F–35A has begun, and the

blend modification is scheduled to be performed at the end of first lifetime The blend operation for F–35C ground test aircraft will be completed prior to test start in March 2012.

81. Senator CORNYN. Admiral Venlet and Mr. Burbage, how much weight, if any, will you have to add back on to the aircraft to fix the F–35B bulkhead cracks?

Admiral VENLET. The F–35B FS–496 production redesign will add approximately 7.8 pounds. The retrofit for current flying aircraft is more intrusive and will add approximately 80 pounds.

Mr. BURBAGE. Approximately 8 pounds of additional weight has been added to the redesigned 496 bulkhead. Starting with BF–24, the redesigned bulkhead is already in-flow on the production line. For the STOVL aircraft produced prior to BF–24, steel structural strengtheners weighing approximately 80 pounds will be added to the existing bulkhead.

MANUFACTURING/PRODUCTION LINE

82. Senator CORNYN. Mr. Burbage, it is my understanding that the JSF IMRT concludes that, at this time, the production line and supply chain are mature enough to build 48 to 60 aircraft per year. This equates to four to five aircraft per month. Does Lockheed Martin agree with this assessment?

Mr. BURBAGE. Yes, we agree with the IMRT assessment. We will be starting assemblies late this year at 4 per month and 1 year from today, we will be delivering aircraft at a rate of 4 aircraft per month, 48 aircraft per year.

The IMRT chartered by OSD recently reported that they have confidence F–35 can ramp-up to 48 to 60 aircraft a year with no issues, and to higher rates with completion of planned supply chain, manufacturing system, and affordability actions, to name a few. The U.S. Government and partners are investing $5.7 billion in production non-recurring tooling and technical assistance for the global supply chain, much of which is already in the pipeline. Lockheed Martin has invested over $1 billion in new production facilities alone. New factories for composites, wire harnesses, major assemblies, machining, and avionics are opening up each year as F–35 recapitalizes an industrial base thinned by two decades of reduced aircraft procurement. F–35 is taking our proven one/day F–16 mass production experience and adding the latest in lean production concepts including a moving final assembly line and pull flow from supplier to factory. In addition, the Italians have approved funding for a major final assembly and check-out facility that will ultimately produce 24 to 48 aircraft per year with low rate deliveries starting in the 2014 timeframe. No other fighter program has had the level of early investment throughout production tooling, facilities, and global supply chain to drive affordability and lower ramp-up risks.

The F–35's common manufacturing processes and parts, advanced digital design tools, and assembly methods help achieve the program's goals of affordability, quality, and assembly speed. Lessons learned from development-aircraft production have been incorporated into production aircraft to increase efficiency and reduce cost. By using industry-standard engineering and manufacturing technologies to ensure precise assembly, the concurrent production of all three variants is steadily moving toward full-rate production.

EXTRA ENGINE

83. Senator CORNYN. Secretary Carter, the F136 extra engine program continues to be an area of concern for many Members of Congress, including myself, though it seems to be on life support at the moment. I believe that restarting the extra engine program will result in added costs, likely increasing the price of each F–35 aircraft to the American taxpayers. In your opinion, is it likely that those increased costs will decrease the number of F–35 aircraft that our military can purchase over the life of the program?

Dr. CARTER. Increased costs for the F–35 could potentially result in a decrease in the number of F–35 aircraft that our military can purchase over the life of the program. An affordable F–35 is of critical importance, particularly in the austere fiscal environment we currently face and the projections for reduced budgets.

84. Senator CORNYN. Secretary Carter and Admiral Venlet, due to the limited space aboard Navy ships, it is vital to consider the size and weight of equipment that is brought on board. Yet some are still fighting for development of the F136. If Federal funding of F136 development resumes in the future, it is possible that

the Navy might eventually be forced to carry two different engines and the accompanying support equipment aboard its aircraft carriers, instead of just one set. In light of this, what challenges might an extra engine cause on an aircraft carrier, where space and weight are limited?

Dr. CARTER and Admiral VENLET. The JSF engine is the largest tactical fighter engine in size and overall logistics footprint in the history of DOD. In comparison to legacy F/A–18 E/F (Model F414), the F135 engine is approximately twice the size of the Super Hornet F414 engine. While the performance of the F135 engine brings significant performance gains and warfighting advantages, it presents logistical challenge for all of the Services—particularly for the Navy and Marine Corps who operate in already constrained spaces aboard L-Class and CVN ships.

The implementation of two JSF engines onboard aircraft carriers is suboptimal due to increased operational Logistics Foot Print (LFP). Proposed LFP concept of operations will challenge the available hangar deck space. This is mainly due to the JSF engines being too large to fit in the aviation bulk storage or jet shop (either F135 or F136). The LFP problem is compounded with both F135 and F136 engines afloat on the same ship, as each engine has unique support equipment and tools effectively doubling the LFP required for these items. Spotting and supporting two engines will negatively affect hangar bay aircraft spotting and maintenance operations.

[Whereupon, at 12:43 p.m., the committee adjourned.]

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