

**DEPARTMENT OF DEFENSE AUTHORIZATION FOR
APPROPRIATIONS FOR FISCAL YEAR 2013 AND
THE FUTURE YEARS DEFENSE PROGRAM**

HEARINGS

BEFORE THE

**COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE**

ONE HUNDRED TWELFTH CONGRESS

SECOND SESSION

ON

S. 3254

TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEAR 2013 FOR MILITARY
ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CON-
STRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF
ENERGY, TO PRESCRIBE MILITARY PERSONNEL STRENGTHS FOR
SUCH FISCAL YEAR, AND FOR OTHER PURPOSES

PART 3

READINESS AND MANAGEMENT SUPPORT

MARCH 21 AND MAY 10, 2012



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**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2013 AND THE FUTURE YEARS DEFENSE
PROGRAM**

WEDNESDAY, MARCH 21, 2012

U.S. SENATE,
SUBCOMMITTEE ON READINESS AND
MANAGEMENT SUPPORT,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

**MILITARY CONSTRUCTION, ENVIRONMENTAL, AND
BASE CLOSURE PROGRAMS**

The subcommittee met, pursuant to notice, at 10:09 a.m. in room SR-232A, Russell Senate Office Building, Senator Claire McCaskill (chairman of the subcommittee) presiding.

Committee members present: Senators McCaskill, Nelson, Shaheen, and Ayotte.

Majority staff members present: Peter K. Levine, general counsel; Jason W. Maroney, counsel; John H. Quirk V, professional staff member; and Russell L. Shaffer, counsel.

Minority staff members present: Paul C. Hutton IV, professional staff member; and Lucian L. Niemeyer, professional staff member.

Staff assistants present: Mariah K. McNamara and Brian F. Sebold.

Committee members' assistants present: Ryan Ehly, assistant to Senator Nelson; Jason Rauch, assistant to Senator McCaskill; Patrick Day and Chad Kreikemeier, assistants to Senator Shaheen; and Brad Bowman, assistant to Senator Ayotte.

**OPENING STATEMENT OF SENATOR CLAIRE McCASKILL,
CHAIRMAN**

Senator McCASKILL. I think it is always a good sign to have a hearing on military readiness and for me to look up from my notebook and see three women. That is great.

This hearing will come to order.

You are outnumbered, sir.

Mr. YONKERS. I am honored to be here.

Senator McCASKILL. In good company.

We will begin the hearing on readiness and management support that we will have today. I will give a brief opening statement, give Senator Ayotte a chance for an opening statement, and then we will look forward to your testimony.

The Subcommittee on Readiness and Management Support meets this morning to hear testimony on the fiscal year 2013 budget request for the Department of Defense (DOD) installations and environment. At today's hearing, we will hear from our witnesses on their request for military construction (MILCON) and environmental programs for fiscal year 2013.

I would like to begin by welcoming the members and say how much I look forward to working with you on this year's National Defense Authorization Act (NDAA). It has been a pleasure working with Senator Ayotte. Her sharp focus and dedication to readiness and management issues has been exceptional, and I really enjoy our partnership on this subcommittee.

I would also like to thank our witnesses for rearranging their schedules to appear today. It is important for us to have this hearing as early in the congressional budget process as possible so we can have a full and frank discussion of the President's request that informs this year's defense authorization bill, and we appreciate your help in enabling us to do that.

Last year, this subcommittee identified approximately \$1.7 billion in programs that could be eliminated or deferred in the MILCON and environment accounts, approximately 10 percent of the President's budget request. While I cannot promise we will find similar savings in this fiscal year, I do not believe there is anything DOD is doing that we cannot do better, and I do not believe that there is any part of the budget that can be off limits as we look for savings. I will be looking at every area of this subcommittee's jurisdiction again this year as we attempt to cut duplicative projects and programs, increase management efficiencies, and reduce waste.

Overall, the President's budget request for MILCON and family housing is \$11.2 billion in fiscal year 2013, as compared to \$13 billion authorized in last year's NDAA based on the President's budget request of \$14.7 billion.

DOD is certainly getting the message that the fiscal environment is extremely tight and we were pleased to see a renewed focus on tip-of-the-spear projects that directly support the warfighter. However, there are a number of projects and decisions reflected in the budget request that raise questions and we look forward to a discussion about them.

Accompanying the budget is a request by Secretary Panetta, Secretary of Defense (SECDEF), for two additional rounds of base realignment and closure (BRAC) authority in fiscal years 2013 and 2015. In making this request, the SECDEF noted that while the BRAC process is controversial, it is the only effective way to achieve needed infrastructure savings made available by DOD force structure reductions.

While I applaud DOD's desire to find responsible places to achieve savings, there is one area where there is absolutely no room for compromise this year and that is BRAC. I will not support the request for a BRAC process to be carried out in 2013. Government auditors have not yet completed a final analysis of the recently completed 2005 BRAC round. Congress needs to understand completely our planned force structure, including our overseas force posture, before we consider a new round of BRAC.

The impact BRAC has on communities around the country and some in my home State is extraordinary. I will not support a process that is casual or one that is rushed before we fully comprehend whether or not this task is clearly in the best interest of the American taxpayers and our national security.

DOD has a long way to go before it proves to me that these initial criteria have been met.

The Government Accountability Office (GAO) has an ongoing mandate to study and report on BRAC. Their most recent analysis shows that the one-time implementation cost for BRAC 2005 grew from \$21 billion, as originally estimated by the BRAC commission, to approximately \$35 billion, an increase of 53 percent.

The news is even worse when we look at estimated savings. The original estimation of net annual recurring savings of \$4.2 billion with 20-year net present value savings of \$36 billion are now, according to a review of the fiscal year 2011 BRAC 2005 budget submission, the most recent study by GAO, shows that BRAC 2005 now will have a net annual recurring savings of \$3.8 billion, a 9.5 percent decrease and a 20-year net present value savings of \$9.9 billion, a 73 percent reduction over previously estimated savings.

In short, what we have here is increased up-front costs and reduced savings. This is unacceptable. We must learn from BRAC 2005. The up-front costs were much higher than anticipated and the net savings were too much lower than anticipated.

Current GAO analysis shows that we will not even recoup our upfront costs until 2018, 5 years later than originally estimated. Even more galling is the fact that 77 out of 182 commission recommendations, or 42 percent, will not pay back at all in the 20-year period.

We cannot afford to do this again. Given all of the downward pressures on the defense budget, the amount of top line eaten up by the up-front costs of a BRAC would be catastrophic to other accounts. There is nothing that has been shown to me or I believe the Senate Armed Services Committee (SASC) that would indicate that we can avoid the catastrophic upfront costs in a new BRAC, and until there is some demonstration of that, I cannot support a BRAC.

The 2005 BRAC round was unlike previous rounds of BRAC, and I believe some of those differences contributed to its reduced efficiency and I fear we have not learned our lesson. The 2005 round had three overarching goals: transform the military, foster jointness, and reduce excess inventory. Previous rounds were primarily focused on achieving savings by reducing excess inventory. I support the concept of revising and updating our force structure and force lay-down to meet current challenges. However, I have grave concerns about using the 2005 BRAC model as a means to do so, especially since we do not yet have a clear vision of our force posture as we draw down in the Middle East.

At this time, DOD is continuing to study and deliberate on its preferred force posture in Europe and the Pacific. Force posture decisions like these come with associated costs, and those costs are often first apparent in MILCON accounts. Too often, when we look back on failed projects and programs, we see that the analysis and decisionmaking on the front end was deficient, and I do not believe

we have completed the requisite analysis to support future rounds of BRAC.

There are other areas in which we can do better and should do better. For example, the budget request includes funding for a new cadet dormitory at West Point as a cost to the taxpayers of almost \$200 million. I understand the unique attributes of West Point but fail to understand why the academy has not done a better job managing its student population to avoid the overcrowding cited as a reason for this very expensive project.

The budget request includes funding for the second increment of a project associated with the Guam realignment, valued at \$25.9 million, despite DOD's failure to satisfy requirements contained in last year's defense authorization bill. This committee has been clear that no further funding will be provided until DOD meets those requirements.

The Air Force has instituted a deliberate pause in their MILCON program and has reduced its request from \$1.36 billion last year to \$388 million in fiscal year 2013. At first glance, this is a cause for celebration. I applaud the Air Force's fiscal restraint. However, I have become very concerned that this realignment of budget top line to other accounts will have significant consequences for future year MILCON requests. The money was not saved. The money was just shifted.

The President's budget request also includes just under \$4 billion for defense environmental programs, down slightly from last year's request but still representing a solid commitment to important environmental programs which ensure compliance with environmental rules, management of natural resources on installations, protection of our bases and training ranges, and cleanup of legacy contamination.

The biggest piece of the environmental budget is, as with past years, the environmental restoration program to clean up contamination at bases, current and former, including unexploded ordnance and discarded military munitions. These environmental hazards must be addressed and resolved aggressively and we will be interested in hearing from our witnesses on how they plan to keep pressing towards meeting these cleanup challenges.

DOD must also continue to look for ways to trim costs associated with environmental protection while not sacrificing environmental stewardship. Ultimately, it must remain the goal of the military departments to work to maintain the balance between environmental protection on one hand and military readiness on the other, and to do so in an era of increasing fiscal constraints.

I would like to applaud the witnesses for their various commitments to energy efficiency at our installations. Using energy from reliable and renewable sources ensures that missions are accomplished, strategic risk to our military is reduced, the cost to our taxpayers is lessened, and our national security is ultimately improved.

I would also like to commend the Army for working with this subcommittee to recalibrate their long-range plan for all Army ammunition plants and arsenals, not just for Lake City Ammunition Plant. By following a comprehensive investment strategy that enhances the work environment, improves safety, and modernizes

these critical installations, we can do a better job of enabling the dedicated men and women who support our warfighters.

We have a great deal to discuss today. I look forward to your testimony and a lively discussion that will follow not only today, but throughout the year.

I now turn to Senator Ayotte for any opening remarks she may have.

STATEMENT OF SENATOR KELLY AYOTTE

Senator AYOTTE. Thank you, Madam Chairman, and thank you, Senator Nelson. I thank you for calling this hearing, Madam Chairman, for the 2013 budget request for military installations and environmental programs.

It has been a real pleasure to work with Senator McCaskill and I look forward to working with you again this year. Thank you for your leadership. I think we have been a really strong team in dealing with our Nation's military readiness in this committee and also strong stewards of taxpayers' dollars.

I want to thank our witnesses for continuing to manage a full range of installation, environment, and energy programs for your respective departments through difficult times. Many of these programs are facing declining budgets with difficult choices that require an honest assessment of the risk for our military members and their families. You all deserve our gratitude and appreciation for your dedication.

As we consider the budget request for this year for installation and energy programs, as well as the administration's request for authority to conduct two more rounds of BRAC, we must ensure that the critical missions and core responsibilities of DOD are preserved in a very difficult budget environment. We must continue to ensure that every taxpayer dollar provided to DOD is used to meet a valid military need or shortfall.

DOD has proposed a budget for 2013 that includes \$11.2 billion for installation programs, which is \$3.5 billion, or 25 percent, less than last year's request. The investments proposed for facility recapitalization are 41 percent lower than last year. The Air Force request for MILCON and family housing this year is the lowest since the 1970s. An accompanying \$7.3 billion request for the sustainment of facilities is 6 percent less than DOD's annual goal and the lowest year to date. Accounts for base operating support are also down.

In addition, the Services have proposed deferrals of MILCON and facility maintenance over the next 5 years under the guise of efficiency to save billions of dollars. I am not sure how putting off bills is going to be counted as an efficiency if eventually we have to pay those bills.

On the topic of facility sustainment, I would like the witnesses to describe how the models used to determine the minimal level of funding for each installation accounts for the unique features of that installation. Locations like the service academies, hospitals, and historic forts are in some cases over 170 years old and have an estimated 150 to 180 percent higher cost to sustain each facility on the installation because of their age. These bases must account for requirements imposed by the local historical preservation offices

for repairs to facilities that are listed or eligible for the National Registry of Historical Places. I would like to know how the Services account for these additional requirements in the estimates that you have provided us.

In total, this year's budget request for installations increases risks. Risks at our installations and ranges that continue to support the operational and training needs for our military members. The risk is greater for our members of the Guard and Reserve. The MILCON request for the Army National Guard is 30 percent lower than 2011. The MILCON request for the Air National Guard is even worse, 78 percent lower than 2011.

While the administration proposes to cut at least 8 Army brigades, 20,000 marines, and numerous Air Force squadrons, the budget's proposed investments in renewable energy projects and non-DOD items in my view are at an all-time high. There are \$51 million to be transferred to local school districts to pay for repairs that have historically been paid for by local communities. \$119 million is requested for water lines, regional public health laboratories, and mental health facilities to serve local civilian beneficiaries with no military association at a time when the need for mental health services for our Active Duty members and veterans and their families is greater than ever. This is on top of hundreds of millions of dollars invested in biofuel refineries, net zero installations, and synthetic fuels purchased at \$26 a gallon.

We are faced with \$487 billion in defense cuts, and I know that this is a number that was handed to you by Congress and not one that you came up with yourselves.

We are also facing the potential of another \$492 billion in defense cuts. It is \$600 billion if you include interest savings if sequestration is allowed to occur in 2013. The SECDEF has said that if sequestration occurs, it would inflict severe damage to our national defense for generations.

Let me just say upfront that I am deeply concerned about this. I want to hear from our witnesses what they think will be the impact if sequestration goes forward, and I am cosponsoring a bill to stop this from happening to DOD.

We need to get a better understanding of how DOD has assessed its risk to meet its core mission of national security in light of the budget numbers that you have been handed.

The President's budget also includes a request for Congress to authorize two BRAC rounds in 2013 and 2015 which the chairman has discussed. Having just completed the 2005 BRAC round, I share the views expressed by Senator McCaskill. I do not believe that Congress should authorize additional BRAC rounds at this time for the following reasons.

First, DOD is reviewing military force posture overseas in Europe and in Asia and developing plans that will not be finalized in the near future, and we need to know what those plans are. Those plans will have a direct impact on bases in the United States. Initiating another BRAC round before those overseas plans are finalized would be premature.

Second, the budget request is proposed to slash 125,000 of our forces. It does not make sense to initiate a BRAC round before end strength reductions have been implemented especially when the

pace and perhaps even the size of these reductions may change. The Pentagon asserts that this is important to retain the ability to reverse these end strength reductions in the future. We have heard that from each of our military leaders, reversibility. But we cannot reverse a BRAC decision. Preserving the option of reversibility must include preserving the bases already in place for these troops.

Third, it is clear that a BRAC round, as Senator McCaskill outlined in detail, may not be a sound fiscal decision at this point. We have already seen that the 2005 BRAC round, as Senator McCaskill has already laid out, cost so much more than was estimated. The total cost of BRAC decisions were estimated in 2005 to be \$21 billion, and according to GAO, the actual round of BRAC cost taxpayers \$14 billion more, \$35 billion. The unfortunate part is we are not going to see the savings from the 2005 BRAC round until around 2018 or 2019, 13 or 14 years down the line.

In short, I do not believe we can justify spending tens of billions of dollars within the DOD budget in the short term to fund more BRAC rounds for returns that may take decades to materialize and when we are not even sure that we are going to be able to have the money to pay in the short term, as Senator McCaskill outlined and that DOD can absorb these costs. I am very, very concerned about where we are.

I also would like to hear details regarding defense sequestration, overseas force posture, and the size of our forces. All of these are unknowns and yet we are asking for a BRAC round right now.

We have many issues to cover in this hearing. We need to know how DOD plans to determine domestic bases for the basing of new weapons systems, including the F-35 and the KC-46 tanker. It would be very important for us to know those decisions, and those decisions would have a significant impact on BRAC decisions as well.

Finally, we need to hear DOD's revised plan for realignment of the U.S. Marines on Okinawa and the relocation of 8,700 marines and their families on other locations including Guam. The way forward on this complex issue is as uncertain as ever with negotiations currently taking place between our Government and Japan. Before we spend another dollar of either U.S. taxpayer funds or those already provided by the Government of Japan, DOD needs to comply with the provisions of the NDAA for Fiscal Year 2012 to include a review of an independent study on our U.S. military force posture in the Pacific region.

I thank you, Senator McCaskill, for this hearing. Thank you for your leadership, and I look forward to hearing the testimony of our witnesses today. Thank you.

Senator MCCASKILL. Thank you.

Senator Nelson, would you like to say anything briefly before we begin?

Senator NELSON. No. I will defer to the questions. Thank you.

Senator MCCASKILL. Thank you.

Our witnesses today are Dr. Dorothy Robyn, the Deputy Under Secretary of Defense; the Honorable Katherine Hammack, Assistant Secretary of the Army; the Honorable Jackalyne Pfannenstiel, Assistant Secretary of the Navy; and the Honorable Terry Yonkers, Assistant Secretary of the Air Force.

We will begin our testimony this morning with Dr. Robyn.

STATEMENT OF DR. DOROTHY ROBYN, DEPUTY UNDER SECRETARY OF DEFENSE FOR INSTALLATIONS AND ENVIRONMENT

Dr. ROBYN. Thank you, Chairman McCaskill, Ranking Member Ayotte, Senator Nelson. Thank you for the opportunity to testify on the President's budget for MILCON and environmental programs.

Let me touch on three issues: MILCON and family housing, our request for two new BRAC rounds, and environment and energy.

So as to say more about BRAC in response to your opening statements, let me say less in my opening statement about our MILCON budget. You summarized the key numbers. Let me just point out what we are not asking money for.

We are not asking money for family housing here in the United States. That is because we have now privatized nearly all of our 200,000 units of military family housing. Using the power of the commercial market, we leveraged a \$3 billion investment by DOD to generate \$27 billion worth of high-quality, well-maintained homes which have done an enormous amount to improve the quality of life for military families. It is an extraordinary success story, the most successful reform my office has carried out, and it is something we should be looking to do much more broadly.

Let me turn to BRAC. We need another BRAC round, ideally two. The math is straightforward. Force reductions produce excess capacity. Excess capacity is a drain on resources. BRAC is the only way that we can realign our infrastructure with our strategy.

For the record, let me summarize the savings from BRAC. If you had Bob Hale sitting here, he would tell you that BRAC is probably the single most effective thing DOD has ever done in terms of producing greater efficiency and savings. It is enormously important.

The first four BRAC rounds generated a total of \$8 billion in annual recurring savings. The total savings to date from the first four rounds is \$100 billion. For the BRAC 2005 round, the annual recurring savings is \$4 billion although because, as you point out, the payback period is 9 years, we will not see net savings until 2018. The total of \$8 billion and \$4 billion represents the additional costs DOD would incur each year for base operating support personnel and leasing costs had we not had BRAC. This is the equivalent to what DOD would spend to buy 300 Apache attack helicopters, 124 Super Hornets, or 4 *Virginia*-class submarines.

Now, let me respond on the 2005 round in particular. It is not the right comparison. Unlike the first four BRAC rounds, which paid off in a relatively short period of time, the 2005 round was not about savings and eliminating excess capacity. Carried out in a post-September 11 environment when DOD was at war, it was about transforming installations to better support the warfighter. The Army in particular used BRAC 2005 to carry out major transformational initiatives such as the modularization of brigade combat teams (BCT). Let me quote Dr. Craig College, the Deputy Assistant Chief of Staff for Army Installation Management. "The urgency of war drove the Army to leverage BRAC 2005 as the tool to integrate several critical transformational initiatives which, if implemented separately, might have taken decades to complete."

The initial estimated cost did go up, and in the question and answer, I can speak to that.

In short, the 2005 round took place during a period of growth in the military and it reflected the goals and needs of that time. The focus was on transforming installations to better support forces as opposed to saving money and space. So it is a poor gauge of the savings DOD can achieve through another BRAC round. The prior BRAC rounds represent a better gauge of such savings.

Finally, let me talk about energy and the environment. We are requesting, as you said, \$4 billion for environmental programs, and my statement details our progress and our goals with respect to cleanup and pollution prevention. Separately I describe our four-part installation energy strategy which is designed to reduce our \$4 billion a year facility energy bill and at the same time make our installations more resilient to the prospect of grid disruption. You will hear from my colleagues about the wonderful strides we are making.

Let me highlight one common theme: technology. Technology has been DOD's comparative advantage for 200 years going back to Eli Whitney and interchangeable machine-made parts for musket production. It is what we do. Although we tend to talk about technology and DOD's technological innovation in the context of weapons systems and combat operations, it is every bit as important to harness that advantage for what we are trying to do with respect to both the environment and energy. Let me give you an example.

A decade ago, the two environmental technology programs I oversee took on a challenge, developing technologies that could discriminate between scrap metal and hazardous unexploded ordnance (UXO); in other words, distinguishing between beer cans and bombs. Current cleanup technologies lack that ability. They have a 99.99 percent false positive rate. So you have to dig up everything. As a result, our estimated cost for UXO cleanup is \$14 billion.

Remarkably, 10 years of investment by these two organizations has yielded technology that can distinguish bombs from beer cans with a very high degree of reliability, and in the year since I first told you about this, last year, we have accelerated our live-site demonstrations of the technology, and no less important, we are working with the UXO cleanup firms, with State regulators, and with the DOD contracting community to make them comfortable with what is a fundamentally new approach to UXO cleanup. We think this can save billions of dollars in UXO cleanup costs.

Similarly, our facility energy strategy should, above all, exploit DOD's extraordinary strength as a technological innovator. To illustrate, 3 years ago my office created the Installation Energy Test Bed, run by the same folks who addressed the UXO problem. The rationale is similar. In the energy area, as in the environmental area, emerging technologies offer a way to significantly reduce DOD's cost and improve its performance. But because of fundamental market failures, these technologies are very slow to get to the market. The valley of death is very wide, if you will, when it comes to energy technologies, particularly those for retrofit of buildings.

As the owner of 300,000 buildings, it is in DOD's direct self-interest to help overcome the barriers that inhibit innovative technologies from being commercialized and deployed on our installations. We do this by using our installations as a distributed test bed to demonstrate and validate the technologies in a real-world, integrated building environment. By centralizing the risk and distributing the benefits of new technology to all DOD installations, the test bed can provide a significant return on DOD's investment. There are a number of other ways in which we can leverage and are leveraging advanced technology to further our facility energy strategy.

In sum, the two themes I want to hit, the management of installations and related energy and environmental issues are two of the most business-like activities DOD carries out. We should be taking full advantage of market mechanisms and competition, and we should be leveraging our extraordinary talent for driving technological change.

Thank you, and I look forward to your questions.
[The prepared statement of Dr. Robyn follows:]

PREPARED STATEMENT BY DR. DOROTHY ROBYN

Chairman McCaskill, Senator Ayotte and distinguished members of the subcommittee: Thank you for the opportunity to present the President's fiscal year 2013 budget request for the Department of Defense (DOD) programs to support installations, facility energy and the environment. My testimony covers four topics: international and domestic basing, including the Department's request for authorization of two new rounds of Base Realignment and Closure (BRAC); our management of the built environment, including the programs that support military construction, family housing, and sustainment and recapitalization; our strategy for managing facility energy to reduce costs and improve installation energy security; and our management of the natural environment, including the programs that support environmental conservation and restoration, environmental technology and compatible development.

I. THE GLOBAL PICTURE: INTERNATIONAL AND DOMESTIC BASING

To project power globally, the Department must have the right mix of forces and facilities at strategic locations. My office supports the Department's strategic security objectives by ensuring that decisions about basing of troops and facilities are the product of joint planning and rigorous analysis. We also seek to reduce our installation footprint wherever possible.

Rebasing Marines from Okinawa to Guam

The United States is rebalancing its global posture to reduce its presence in certain regions and enhance it in others. As the recent U.S.-Japan joint statement made clear, the United States and Japan are strongly committed to strengthening our robust security alliance, which is dedicated to the security of Japan and to the maintenance of peace and security in the Asia-Pacific region. The United States has conducted a strategic review of its defense posture in Asia in order to achieve a more geographically distributed, operationally resilient and politically sustainable force structure. Japan has welcomed this initiative.

Based on that review, the development of Guam as a strategic hub, with an operational Marine Corps presence including marines relocated from Okinawa, remains an essential part of the Alliance's Asia-Pacific Strategy. The United States and Japan have begun official discussions to adjust our plans as set forth in the 2006 Realignment Roadmap. In particular, we propose to delink the movement of marines to Guam and the resulting land returns south of Kadena from progress by Japan on the Futenma Replacement Facility (FRF) near Camp Schwab. We remain committed to mitigating the impact of U.S. forces on Okinawa and to construction of the FRF as the only viable way forward. That said, we believe the two sides must invest in the Futenma facility in the near-term, to ensure both safety and combat readiness.

The President's fiscal year 2013 budget request includes \$51 million for construction to support the Marine relocation to Guam. Our request includes another \$139.4 million for Guam civilian infrastructure to address population growth there, of which \$106.4 million is for Guam water and wastewater infrastructure capital improvements such as water treatment plant modifications, supply well improvements and provision of backup power at wastewater pump stations.

Base Realignment and Closure

After a decade of war the United States is at a strategic turning point. With changes in strategy come changes—in this case reductions—in force structure. Simply stated, the cuts in force structure that we are implementing must be accompanied by cuts in supporting infrastructure, including military bases. Absent a process for closing and realigning bases, the Department will be locked in a status quo configuration that does not match its evolving force structure, doctrine and technology. Given the high cost of our infrastructure, moreover, if we retain bases that we do not need, we will be forced to cut spending on forces, training and modernization.

Overseas Basing Review

The Department's request for additional rounds of BRAC comes at a time when we are looking aggressively at where we can close bases overseas—particularly in Europe. (Although domestic closures require legislative authority, overseas closures do not.)

We have already made significant reductions in our European footprint. Since 2003, the Department has returned more than 100 sites in Europe to their respective host nations, and we have reduced our personnel by one-third. Between fiscal year 2012 and fiscal year 2015 the Army alone will close 23 additional sites as previously announced.

With the recently announced force structure changes in Europe, we can do more to consolidate our infrastructure with the goal of reducing long-term costs while still supporting our operational requirements and strategic commitments. First, we can reduce the number of discrete installation sites we maintain in Europe. We have more than 300 such sites—ranging from small communications posts to robust Main Operating Bases—of which about 200 house most of our activities. Second, we can eliminate excess support infrastructure such as warehouses, administrative space and housing. The infrastructure located off-base presents a particularly attractive target for consolidation. Third, we can take advantage of the capacity made excess by force structure changes to accommodate new functions.

My office has undertaken the first step in this process: we are working with the EUCOM theater commander, his component commanders and Service leadership here in Washington to measure the capacity of all of our European installations. This inventory will allow us to analyze how much capacity can be shed and where. With the goal of long-term cost reduction, we will assess the costs and savings of each proposed action and identify those with the highest payback. We anticipate having preliminary options for the Secretary to review by the fall.

Domestic Basing: The Need for BRAC

Even a significant reduction of our footprint overseas will not achieve the needed cuts to overall infrastructure—hence our request for a parallel, BRAC process. It makes sense to look at our domestic and overseas bases at the same time, moreover, so that the two reviews can inform one another. The Department took this approach in 2004–2005, and it would be no less useful now given the major strategic realignment underway. Let me briefly summarize the case for BRAC.

First, the same strategic and fiscal factors that compel consolidation overseas require it here. In addition to the global posture shifts discussed above, we are shaping a joint force for the future that, while agile and technologically advanced, will be smaller and leaner across the board. The Army is reducing force levels by 72,000, the Marine Corp is resizing to 182,000 active Marines, and the Air Force is eliminating approximately 300 aircraft over 5 years. We are also delaying, restructuring and canceling modernization programs. To adjust to these strategic changes, and to eliminate the excess capacity that results from reductions in force structure, the Department will need to close and realign installations in the United States as well as Europe.

Moreover, the overhead cost to maintain, sustain and protect bases is high. In recent years we have spent about \$40 billion a year on facilities construction, sustainment and recapitalization. Other costs associated with operating military installations (e.g., air traffic control, religious services and programs; payroll support; personnel management; morale, welfare, and recreation services; and physical secu-

riety) have averaged about \$15 billion a year. If we retain bases that are excess to need, we will be forced to cut spending on forces, training and modernization.

Second, the statutory commission process provided by BRAC is the only fair, objective and proven method for eliminating excess domestic infrastructure and reconfiguring what remains. BRAC provides for a sound, thorough and transparent analytical process, based on a 20-year force structure plan developed by the Joint Staff; a comprehensive inventory of installations by the Department to ensure a thorough capacity analysis; and defined selection criteria that place priority on military value. The requirement to look at every installation means DOD must consider a broad range of approaches, not just the existing configuration; and the transparency of the process facilitates independent review by the commission and affected communities. Most important, the requirement that the President and Congress accept or reject the Commission's recommendations on an "all-or-none" basis insulates BRAC from political interference.

Third, the savings from BRAC are real and substantial. Of all the efficiency measures that the Department has undertaken over the years, BRAC is perhaps the most successful and significant. The first four rounds of BRAC (1988, 1991, 1993, and 1995) are producing a total of about \$8 billion in annual recurring savings, and the comparable figure for BRAC 2005 is \$4 billion. This amount (\$12 billion) represents the additional costs that the Department would incur every year for base operating support, personnel and leasing costs had we not had BRAC. These annual savings, or avoided costs, are equivalent to what the Department would spend to buy 300 Apache attack helicopters, 124 F/A-18E/F Super Hornets or 4 *Virginia* class submarines.

Understandably, some have questioned the specifics of our savings calculations, and critics have pointed to the 2005 round as evidence that BRAC does not produce the hoped for savings—or at least not in a reasonable timeframe. I will respond to these criticisms in more detail tomorrow when I testify before the House Armed Services Committee's Subcommittee on Readiness, but let me say this here: The 2005 round took place during a period of growth in the military, and it reflected the goals and needs of that time. Because the focus was on transforming installations to better support forces—as opposed to saving money and space—it is a poor gauge of the savings that the Department can achieve through another BRAC round. The prior BRAC rounds—which reduced capacity and paid off in 2 to 3 years—represent a better gauge of the savings potential of future BRAC rounds.

Joint Basing

A significant action under BRAC 2005 that my office has championed is the consolidation of 26 installations into 12 Joint Bases. This action responded to persistent internal and external criticism that base support was duplicative. The Department also felt that joint operation would enhance the military value of Service-unique installations, making them a DOD-wide asset.

The creation of a joint base is complex. The commander must merge diverse, service-specific financial systems, management structures, operating procedures, and staffs, so as to jointly manage functions ranging from facilities sustainment to mail delivery to the provision of family support services. Considering the size of many of our installations, such a consolidation is equivalent to the merger of two corporations. As with corporate mergers, moreover, the cultural differences are often the hardest to bridge.

I chair a flag-level group (the Senior Joint Base Working Group (SJBWG)) that has met regularly for the last 3 years to oversee the implementation and operation of Joint Bases. The SJBWG created the initial framework for joint basing, including a body of policy guidance (Joint Base Implementation Guidance) and a collaborative governance structure (Joint Management Oversight Structure). Throughout the process, the SJBWG made key strategic decisions.

First, to hold the lead Service accountable, the SJBWG created a comprehensive set of Common Output Level Standards (COLS). Previous efforts to create joint bases had encountered strong resistance because of concerns by one Service that another Service would not provide adequate base support—i.e., that it would adopt a "lowest-common-denominator" approach to installation management. To allay this fear, the SJBWG led an exhaustive effort to define a COLS metric for every relevant aspect of base support—274 COLS in all.¹ Significantly, in every case the SJBWG opted for the highest standard used by any of the Services as the COL standard

¹For example, one COLS metric specifies the maximum height that grass on an installation can reach before it must be cut. In addition to defining the underlying metric (grass height, measured in inches), the SJBWG selected the actual value (standard) for that metric to which the Joint Bases as a whole would be held.

for Joint Bases. Although this “highest-common-denominator” approach allayed the fears that had doomed joint basing in the past, it did so at a price: installation support costs for the Joint Bases have gone up by 6 percent on average. However, we expect the savings from consolidation to offset this. Moreover, COLS give the Department a solid basis for estimating and budgeting for installation support requirements—a best practice that we hope to apply to all military bases.

Second, the SJBWG opted to give the Joint Bases a transition period to merge their organizations before asking them to achieve a savings target.² This represents a conscious decision by the Services to defer the near term savings from joint basing in order to increase the odds that it will succeed in the long run. It is directly analogous to the Department’s approach to traditional BRAC actions, which often require an upfront investment in order to achieve the long-term savings.

Joint Bases represent a fundamental change in our approach to installation management. Although these bases have been operating for only a short time, we are already beginning to see the expected economies of scale from consolidation. For example, by combining its recycling operations, Joint Base McGuire-Dix-Lakehurst is avoiding \$1 million in facility and equipment costs and \$200,000 a year in contract costs. Less expected, however, is that our Joint Bases are proving to be incubators for innovation, as the commanders, faced with inconsistent Service rules and requirements, adopt new, cross-cutting business processes. For example, at Joint Base San Antonio, the commander standardized security procedures and created a single chain-of-command across the three facilities that make up the installation, thus facilitating cooperation with state and local law enforcers.

I have had the opportunity to meet personally with most of the Joint Base Commanders. They get it. They see “jointness” not just as a more efficient and effective way to support the installation missions on their bases but as a superior way to support the soldiers, sailors, airmen and marines learning to fight together. I strongly believe their ability to transcend traditional practices and develop innovative solutions to longstanding inefficiencies will position us for future, Department-wide reforms.

II. MANAGING OUR BUILT ENVIRONMENT

The President’s fiscal year 2013 budget requests \$11.2 billion for Military Construction (MILCON) and Family Housing—a decrease of approximately \$3.5 billion from the fiscal year 2012 budget request. This decrease primarily reflects the declining budget environment and the Services’ decision to defer facility investments at locations that may be impacted by changes in force structure.

TABLE 1. MILCON AND FAMILY HOUSING BUDGET REQUEST, FISCAL YEAR 2012 VS. FISCAL YEAR 2013

[In millions of dollars]

	Fiscal Year 2012 Request	Fiscal Year 2013 Request	Change from Fiscal Year 2012	
			Funding	Percent
Military Construction	12,006.4	8,540.6	(3,465.8)	(29)
Base Realignment and Closure	582.3	476.0	(106.3)	(18)
Family Housing	1,694.4	1,650.7	(43.7)	(3)
Chemical Demilitarization	75.3	151.0	75.7	100
Energy Conservation Investment Program	135.0	150.0	15.0	11
NATO Security Investment Program	272.6	254.1	(18.5)	(7)
Total	14,767.0	11,222.7	(3,544.3)	(24)

Military Construction

We are requesting \$8.5 billion for “pure” MILCON—i.e., exclusive of BRAC and Family Housing. This addresses routine needs for construction at enduring installations here and overseas and for specific programs such as the NATO Security Investment Program and the Energy Conservation Investment Program. In addition, we are targeting three priorities.

²Specifically, Joint Base commanders were given leeway to adjust resources within their portfolios, for fear that premature staff reductions could compromise the design and implementation of their new organizational constructs. Ironically, the Joint Bases have had to function with a large number of civilian vacancies largely because of the Services’ backlog of personnel actions.

First and foremost are the operational missions. Our fiscal year 2013 budget requests \$3.5 billion to support operations and training requirements, including a second Explosives Handling Wharf at Kitsap, WA; communications facilities in California and Japan that are needed for operations in the Pacific region; specialized facilities for Special Operations Forces at various global locations; and range and training facilities for ground forces at several Army installations.

Second, our budget request continues the recapitalization of DOD-owned schools as part of the 21st Century Schools Initiative. We are requesting \$547 million to replace or renovate 11 schools that are in poor or failing condition, primarily at enduring locations overseas. By the end of fiscal year 2018, more than 70 percent of the DOD-owned schools will have been replaced or undergone substantial renovation. The new buildings, intended to be models of sustainability, will provide a modern teaching environment for the children of our military members.

Although it is not part of the MILCON budget, the fiscal year 2013 budget also requests \$51 million to construct, renovate, repair or expand schools that, while located on military installations, are operated by Local Education Agencies (LEA). This request represents a third year of funding for LEA schools (Congress set aside \$250 million for LEA schools in fiscal year 2011 and again in fiscal year 2012, in response to concerns about poor conditions and overcapacity). The request is part of DOD's proposed budget for the Office of Economic Adjustment (OEA), which Congress designated to execute the LEA school funding it provided. OEA is working with other parts of the Department and giving priority to those schools with the most serious deficiencies.

Third, the fiscal year 2013 budget request includes \$1 billion for 21 projects to upgrade our medical infrastructure. By modernizing our hospitals and related facilities, we can improve healthcare delivery for our servicemembers and their families, and enhance our efforts to recruit and retain personnel. The fiscal year 2013 request provides the next increment of funding to replace the William Beaumont Army Regional Medical Center in Texas (\$207 million) and the Landstuhl Regional Medical Center in Germany (\$127 million). It also provides for continued improvement of the medical research facilities that support our chemical-biological mission.

Family and Unaccompanied Housing

The Services rely largely on privatization to provide family housing on U.S. bases. As I have said many times, privatization of family housing—where the Services partner with the private sector to generate housing built to market standards—is the single most effective reform my office has carried out. Prior to privatization, the Services' chronic underinvestment in their facilities had created a crisis, with almost 200,000 of the Department's family housing units rated "inadequate." Privatization leveraged the power of the commercial market to serve our needs. With an investment of approximately \$3.6 billion, the Services have generated \$29.7 billion in construction to build new and renovate existing family housing units. The Services also transferred responsibility for maintenance, operation and recapitalization for 50 years to (private) entities that have an incentive to maintain the housing so as to attract and retain military tenants. My office works closely with the Office of Management and Budget to ensure that the relevant Federal budget policy continues to support this much-heralded success story.

TABLE 3. FAMILY HOUSING BUDGET REQUEST, FISCAL YEAR 2012 VS. FISCAL YEAR 2013

[In millions of dollars]

	Fiscal Year 2012 Request	Fiscal Year 2013 Request	Change from Fiscal Year 2012	
			Funding	Percent
Family Housing Construction/Improvements	372.7	190.6	-182.1	-49
Family Housing Operations and Maintenance	1,318.2	1,458.3	+140.1	+11
Family Housing Improvement Fund	2.2	1.8	-0.4	-18
Homeowners Assistance Program	1.3	0	-1.3	-100
Total	1,694.4	1,650.7	-43.7	-3

Most of the remaining government-owned family housing is on (enduring) bases overseas. The fiscal year 2013 budget requests \$1.7 billion for government-owned family housing. This allows us to maintain 90 percent of non-Navy, government-owned family housing in good or fair condition in keeping with the goal we will meet this year; the Navy-owned family housing will not achieve this goal until fiscal year

2017. The request includes \$191 million for construction and improvements of government-owned family housing and \$1.4 billion to operate and maintain it.

The Department is committed to improving housing for our unaccompanied personnel as well. In recent years, we have made sizable investments in this area to support initiatives such as BRAC, global restationing, force structure modernization and Homeport Ashore—a Navy program to move sailors from their ships to shore-based housing. The fiscal year 2013 budget request includes \$1.1 billion for 28 construction and renovation projects that will improve living conditions for more than 10,000 unaccompanied personnel. We are also focusing on long-term sustainment of the modernized inventory. My office has worked closely with the Comptroller to establish performance goals for sustaining our permanent party unaccompanied housing. Under these standards, 90 percent of the non-Navy government-owned housing for unaccompanied personnel must be in good or fair condition by fiscal year 2018; the Navy will not achieve that benchmark until fiscal year 2022.

Facilities Sustainment and Recapitalization

In addition to investing in new construction, we must maintain, repair, and recapitalize our existing facilities. The Department's Sustainment and Recapitalization programs strive to keep our inventory of facilities mission capable and in good working order. Moreover, by maintaining a consistent level of quality in our facilities, we can improve the productivity and quality of life of our personnel.

TABLE 2. SUSTAINMENT AND RECAPITALIZATION BUDGET REQUEST, FISCAL YEAR 2012 VS. FISCAL YEAR 2013

[In millions of dollars]

	Fiscal Year 2012 Request	Fiscal Year 2013 Request	Change from Fiscal Year 2012	
			Funding	Percent
Sustainment (O&M & MILPERS)	8,835	8,674	(161)	(2)
Recapitalization (O&M, MILCON, MILPERS, RDT&E)	9,031	5,331	(3,700)	(41)
Total	17,866	14,005	(3,861)	(22)

The fiscal year 2013 budget request includes \$8.7 billion for sustainment, which is the single most important investment we make to keep our facilities in good working condition. Sustainment includes regularly scheduled maintenance and repair and replacement of facility components.

Our policy calls for the Services to fund sustainment at no less than 90 percent of the requirement generated by DOD's Facilities Sustainment Model, which uses industry benchmarks to estimate the annual cost of regularly scheduled maintenance and repair for different types of facilities. Nevertheless, for fiscal year 2013, as was the case in fiscal year 2012, the Navy and Air Force are funding sustainment at only 80 and 82 percent of their requirement, respectively. Thus, our budget request funds sustainment DOD-wide at only 84 percent of the FSM-generated estimate.

The fiscal year 2013 budget requests \$5.3 billion for recapitalization, a reduction of \$2.5 billion from last year. Recapitalization (restoration and modernization) serves to keep the inventory of facilities modern and relevant, extend the service life of individual facilities and restore capability lost due to manmade or natural causes. The reduction in recapitalization funding reflects an overall decrease in both O&M- and MILCON-funded replacement and renovation projects.

A final category of investment (one not shown in the table) is demolition, which allows the Services to eliminate facilities that are excess to need or no longer cost effective to repair. Our fiscal year 2013 budget request includes \$123 million in operations and maintenance funding, which will allow us to demolish 5 million square feet of facilities. With this funding, we will reach our formal goal, established in fiscal year 2008, to eliminate over 62 million square feet by fiscal year 2013. We are also working with the Services to identify facilities that could be repurposed—for example, the use of barracks as administrative space.

Ongoing Initiatives to Reduce Costs

Finally, I would like to mention three ongoing initiatives designed to improve the Department's management of the built environment. The first initiative has to do with the Department's anti-terrorism/force protection (AT) standards, which impose certain minimum requirements on all buildings and add as much as 9 percent to

the cost of leased space and new construction. The rest of the Federal Government uses a somewhat different approach, based on the Interagency Security Committee (ISC) standards, which were developed by a 21-agency group led by the Department of Homeland Security and issued in updated form in April 2010. The ISC standards reflect the risk to an individual building, including its size, location, mission criticality and symbolism.

To evaluate the two approaches, my office looked first at leased space. Working closely with the General Services Administration (GSA), which is responsible for incorporating AT standards into its leases, we commissioned an expert analysis that compared the scope, cost and effectiveness of the DOD standards versus the ISC standards for six DOD leases in the National Capital Region. Based on that expert analysis, an internal DOD working group, led by the Office of the Under Secretary of Policy and the Joint Staff, is evaluating the merits of adopting the ISC process for leased space. Once the Department has made a decision on whether to alter DOD's AT standards with respect to leased space, we will pose the same question for on-base buildings.

Second, my office is looking at how to promote innovation and efficiency in the construction industry—in particular, MILCON. The U.S. construction industry is plagued by high costs and low productivity growth as a result of low investment in research and development, a fragmented industry structure and other factors. Moreover, some data suggest that the Federal Government's construction costs are higher than those of the private sector for comparable facilities. Finally, the contractual incentives for Federal construction projects lead to a focus on reducing "first costs"—the cost of constructing a building—as opposed to the much larger costs associated with building ownership and operations (life-cycle costs).

We are working with the GSA to identify ways that the two largest Federal customers for construction (DOD and GSA) can incentivize behavior on the part of construction firms that will lead to more innovation and lower costs, including life-cycle costs. Two areas offer promise. We are looking at accelerating requirements for the use of new technologies, such as building information modeling (BIM), which can improve the efficiency and reduce the cost of the construction process as well as and lead to lower life-cycle costs for the buildings themselves. In addition, we are looking at alternative contracting methods, such as ones that reward contractors based on how well they meet the owner's objectives (e.g., optimal energy efficiency).

Third, we are analyzing the effect that investments in energy efficiency and sustainability have on the long-term cost of owning and operating our buildings. Building on past studies, we are working with the National Research Council to understand the impact of the requirement that DOD facilities be built to certain sustainability standards—namely, LEED (Leadership in Energy and Environmental Design) Silver or an equivalent standard and/or the five principles of High Performance Sustainable Buildings, as well as consensus based standards such as the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) 189.1. The study will help us invest smartly in our buildings to reduce the total cost of ownership while increasing mission effectiveness.³

III. MANAGING OUR ENERGY USE

Facility energy is important to the Department for two reasons.⁴ The first is cost. With more than 300,000 buildings and 2.2 billion square feet of building space, DOD has a footprint three times that of Wal-Mart and six times that of GSA. Our corresponding energy bill is \$4 billion annually—roughly 10 percent of what DOD spends to maintain its installation infrastructure. There are non-monetary costs as well: although facility energy represents only 20–25 percent of DOD's energy costs, it accounts for nearly 40 percent of our greenhouse gas emissions.

Second, facility energy is key to mission assurance. Our military installations here at home support combat operations more directly than ever before, and they serve as staging platforms for humanitarian and homeland defense missions. DOD installations are almost entirely dependent on a commercial power grid that is vulnerable to disruption due to aging infrastructure, weather related events and (potentially)

³The study will also meet the requirement to report to Congress on the return on investment from using consensus standards such as ASHRAE 189.1.

⁴Facility energy refers to the energy (largely electricity) used to operate the buildings on DOD's 500+ fixed military installations in the United States and overseas. It also includes the fuel used by DOD's approximately 200,000 non-tactical vehicles. Facility energy is distinct from operational energy—largely fuel used for mobility (military aircraft, ships and tanks) and by the generators that produce power on our forward operating bases.

direct attacks. According to the Defense Science Board, DOD's reliance on a fragile grid to deliver electricity to its bases places critical missions at risk.⁵

The Department's facility energy strategy is designed to reduce costs and improve the energy security of our fixed installations. It has four elements: reduce the demand for traditional energy through conservation and improved energy efficiency; expand the supply of renewable and other distributed (onsite) generation sources; enhance the energy security of our installations directly (as well as indirectly, through the first two elements); and leverage advanced technology.

Reduce Demand

First and most important, we are reducing the demand for traditional forms of energy through conservation and improved energy efficiency. The Department's fiscal year 2013 budget includes more than \$1.1 billion for energy conservation investments—up from \$400 million in 2010. Almost all of that funding is designated for energy efficiency improvements to existing buildings.⁶

In addition to their own funding, the Services are using third-party financing tools, such as Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs), to improve the energy efficiency of their existing buildings. In response to the President's memo calling on the Federal Government to initiate \$2 billion worth of these performance-based contracts over the next 2 years, the Department has as its own goal to execute roughly \$465 million in ESPCs and UESCs in fiscal year 2012 and \$718 million in fiscal year 2013.

In addition to retrofitting existing buildings, we are taking advantage of new construction to incorporate more energy-efficient designs, material and equipment into our inventory. Currently, all new construction projects must meet the LEED Silver or an equivalent standard and/or comply with the five principles of High Performance Sustainable Buildings. This year my office will issue a new construction code for high-performance, sustainable buildings, which will govern all new construction, major renovations and leased space acquisition. This new code, which will draw on ASHRAE 189.1, will accelerate DOD's move toward efficient, sustainable facilities that cost less to own and operate, leave a smaller environmental footprint and improve employee productivity.

As DOD strives to improve its energy efficiency, accurate, real-time facility energy information is becoming essential. Although we collect a massive amount of data, we lack the standardized processes and integrated systems needed to systematically track, analyze and benchmark our facility energy and water use and the related costs. The absence of usage and cost data reduces the efficiency of our existing facility operations, and it limits our ability to make the right investments in new, efficiency-enhancing technology and tools.

To fill this gap, my office has been leading the development of an Enterprise Energy Information Management system (EEIM) that will collect facility energy data in a systematic way. The EEIM will also provide advanced analytical tools that allow energy professionals at all levels of the Department both to improve existing operations and to identify cost-effective investments.

I will also be issuing an updated policy on the metering of DOD facilities; in addition to lowering the threshold for buildings that must be metered, the policy will address the types of meters that can be used and establish guidelines for determining when advanced meters make financial sense. No less important, the policy will help ensure that installed meters can securely deliver data to the energy professionals in the field. As an example, Naval District Washington has developed an innovative approach that uses a secure network to integrate data on energy usage with information on building management so as to allow for active management of facility energy. We would like to see this approach or one like it deployed throughout the Department.

Expand Supply of Onsite Energy

Second, DOD is increasing the supply of renewable and other distributed (onsite) sources of energy on our installations. Onsite energy is critical to making our bases

⁵“More Fight-Less Fuel,” Report of the Defense Science Board Task Force on DOD Energy Strategy, February 2008.

⁶Of the \$1.1 billion, \$968 million is in the Military Components' operations and maintenance accounts, to be used for sustainment and recapitalization projects aimed at energy efficiency, including improved lighting, high-efficiency HVAC systems, double-pane windows, energy management control systems and new roofs. Another \$150 million is for the Energy Conservation Investment Program (ECIP), a MILCON fund that my office distributes to the Services for specific projects (see discussion below). Only about \$35 million of ECIP's budget will go for investments in distributed and renewable energy as opposed to energy efficiency and water conservation.

more energy secure. Together with the kind of smart microgrid and storage technologies discussed below, it allows a military base to maintain its critical operations “off-grid” for weeks or months if necessary.

DOD’s installations are well situated to support solar, wind, geothermal and other forms of distributed energy. In response to a congressional directive, my office commissioned a study of the potential for solar energy development on military installations in the Mojave and Colorado Deserts in California and Nevada. The year-long study looked at seven military bases in California and two in Nevada. It found that, even though 96 percent of the surface area of the nine bases was unsuited for solar development because of military activities, the presence of endangered species and other factors, the solar-compatible area on four of the California bases was nevertheless large enough to support the generation of 7000 megawatts (MW) of solar energy—equivalent to the output of seven nuclear power plants.⁷

The study also confirmed the logic of the approach the Department is already taking for large-scale renewable energy projects—namely, third-party financing. (Third-party financing makes sense because private developers can take advantage of tax incentives that are not available to Federal agencies.) In September, the Army established its Energy Initiatives Task Force to work with the private sector to execute 10+ MW projects at Army installations. The Army hopes to develop around one gigawatt of renewable energy on its installations by 2025, and it has projects underway at Fort Bliss, TX, and White Sands Missile Range, NM. The Navy has used the Title 10 authority in Section 2922a to contract for renewable energy development in California, including a 3 MW landfill gas facility at Marine Corps Air Station Miramar, a 14 MW solar photovoltaic (PV) array at Naval Air Weapons Station China Lake, and a 1 MW solar PV array at Marine Corps Air Ground Combat Center Twentynine Palms. The Air Force is using the Title 10 authority in Section 2667 to lease non-excess land for the development of large-scale renewable projects, the first of which is under negotiation at Edwards Air Force Base.

My office is working closely with the Department of Interior (DOI) to identify and overcome impediments to the execution of renewable energy projects on public lands withdrawn for military purposes (many of the sites identified in the ICF study are on “withdrawn land”). Where renewable energy development is compatible with the military mission, these lands offer a significant opportunity to improve our energy security while lowering the cost of energy. However, we must first overcome the policy and authority challenges posed by this unique construct whereby DOD uses and manages land under the administrative jurisdiction of DOI.

Enhance Security

The first two elements of our facility energy strategy contribute indirectly to installation energy security; in addition, we are addressing the problem directly. A major focus of my office is smart microgrid technology. Smart microgrids and energy storage offer a more robust and cost effective approach to ensuring installation energy security than the current one—namely, back-up generators and (limited) supplies of on-site fuel. Although microgrid systems are in use today, they are relatively unsophisticated, with limited ability to integrate renewable and other distributed energy sources, little or no energy storage capability, uncontrolled load demands and “dumb” distribution that is subject to excessive losses. By contrast, we envision microgrids as local power networks that can utilize distributed energy, manage local energy supply and demand, and operate seamlessly both in parallel to the grid and in “island” mode.

Advanced microgrids are a “triple play” for DOD’s installations. Such systems will reduce installation energy costs on a day-to-day basis by allowing for load balancing and demand response. They will also facilitate the incorporation of renewable and other on-site energy generation. Most important, the combination of onsite energy and storage, together with the microgrid’s ability to manage local energy supply and demand, will allow an installation to shed non-essential loads and maintain mission-critical loads if the grid goes down.

The Installation Energy Test Bed, discussed below, has funded 10 demonstrations of microgrid and storage technologies to evaluate the benefits and risks of alternative approaches and configurations. Demonstrations are underway at Twentynine Palms, CA; Fort Bliss, TX; Joint Base McGuire-Dix-Lakehurst, NJ; Fort Sill, OK; and several other installations.

⁷ Environment Research and Development Program (ESTCP) solar study (ICF International), Solar Energy Development on Department of Defense Installations in the Mojave and Colorado Deserts (January 2012) <http://www.serd.org/News-and-Events/News-Announcements/Program-News/DOD-study-finds-7-000-megawatts-of-solar-energy-potential-on-DOD-installations-in-Mojave-Desert>

Although microgrids will address the grid security problem over time, we are taking steps to address near-term concerns. Together with the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs, I co-chair DOD's Electric Grid Security Executive Council (EGSEC), which works to improve the security, adequacy and reliability of electricity supplies and related infrastructure key to the continuity of critical defense missions. In addition to working across DOD, the EGSEC works with the Departments of Energy and Homeland Security. The three agencies recently created an Energy Surety Public Private Partnership (ES3P) to work with the private sector. As an initial focus, the ES3P is collaborating with four utilities in the National Capital Region to improve energy security at mission critical facilities.

Finally, my office is updating the DOD Instruction on "Installation Energy Management" (DODI 4170.11), which provides guidance to installation commanders and energy managers on a range of energy security and energy efficiency matters. For example, we are updating the requirements for fuel distribution plans to ensure that emergency generators can operate for a sufficient time.

Leverage Advanced Technology

As the discussion of microgrids illustrates, one of the ways DOD can lower its energy costs and improve its energy security is by leveraging advanced technology. Technology has been DOD's comparative advantage for 200 years, as evidenced by the military's leadership in the development of everything from interchangeable machine made parts for musket production to the Internet. This advantage is no less important when it comes to facility energy.

To leverage advanced technology relevant to facility energy, 3 years ago my office created the Installation Energy Test Bed, as part of the existing Environmental Security Technology Certification Program (ESTCP). The rationale is straightforward. Emerging technologies offer a way to cost effectively reduce DOD's facility energy demand by a dramatic amount (50 percent in existing buildings and 70 percent in new construction) and provide distributed generation to improve energy security. Absent outside validation, however, these new technologies will not be widely deployed in time for us to meet our energy requirements. Among other problems, the first user bears significant costs but gets the same return as followers. These barriers are particularly problematic for new technologies intended to improve energy efficiency in the retrofit market, which is where DOD has the greatest interest.

As the owner of 300,000 buildings, it is in DOD's direct self-interest to help firms overcome the barriers that inhibit innovative technologies from being commercialized and/or deployed on DOD installations. We do this by using our installations as a distributed test bed to demonstrate and validate the technologies in a real-world, integrated building environment.⁸ Projects conduct operational testing and assessment of the life-cycle costs of new technology while addressing DOD unique security issues. For example, the Test Bed is doing a demonstration of an advanced control system that could increase boiler efficiency by 10 percent; if the technology proves out, DOD can deploy it on thousands of boilers and see a meaningful energy savings. More generally, by centralizing the risk and distributing the benefits of new technology to all DOD installations, the Test Bed can provide a significant return on DOD's investment.

The Test Bed has about 70 projects underway in five broad areas: advanced microgrid and storage technologies, such as the project at Twentynine Palms; advanced component technologies to improve building energy efficiency, such as advanced lighting controls, high performance cooling systems and technologies for waste heat recovery; advanced building energy management and control technologies; tools and processes for design, assessment and decisionmaking on energy use and management; and onsite energy generation, including waste-to-energy and building integrated systems. (See the next section for additional detail.)

Progress on Goals

In 2011, the Department made progress in its performance with respect to facility energy and water although it fell short of its statutory and regulatory goals for energy.

- DOD reduced its energy intensity by 2 percent—a meaningful improvement but less than the 3 percent needed to meet the annual goal. Overall,

⁸The approach is similar to one that ESTCP has used since 1995 to demonstrate innovative environmental technologies on DOD sites and in doing so help them transition to the commercial market. As discussed in section IV below, ESTCP has a strong track record of reducing DOD's environmental costs.

DOD has reduced its energy intensity by 13.3 percent since 2005, compared to the cumulative goal of 18 percent.

- With respect to the renewable energy goal (produce or procure 25 percent of all electricity from renewable sources by 2025), DOD lost ground, going from 9.6 percent to 8.5 percent. The drop was partly the result of a policy decision to buy fewer Renewable Energy Credits.⁹ It also reflected a decline in the output of the 270 MW geothermal facility at China Lake.
- DOD continued to reduce its consumption of petroleum, reaching a cumulative reduction of 11.8 percent since 2005—just shy of the 12 percent goal.
- DOD reduced its potable water intensity (measured as consumption per gross square foot) by 10.7 percent from 2007 to 2011—well above the goal of 8 percent.

Fiscal Year 2013 Budget Request

The President's fiscal year 2013 budget request includes funding for the ESTCP Installation Energy Test Bed as well as the Energy Conservation Investment Program (ECIP).

Installation Energy Test Bed

The budget request includes \$32 million in fiscal year 2013 for energy technology demonstrations under ESTCP.¹⁰ ESTCP began these demonstrations—now known as the Installation Energy Test Bed—as a \$20 million pilot in 2009. Seeing its value, the Department continued to fund the Test Bed on an annual basis the \$30 million level. Starting this year, we have funded the test bed, as an RDT&E line, across the Future Years Defense Program. Although a modest investment, the Test Bed is a high leverage program that the Department believes will produce major savings.

ESTCP awards funds based on rigorous competition. The process begins with a solicitation to firms and others to identify emerging technologies that would meet installation needs. The response has been huge: the 2012 solicitation drew 600 proposals from leading companies in the building energy sector, small startups with venture capital funding and the major DOE labs. The proposals are reviewed by teams made up of technical experts from inside and outside of DOD along with Service representatives familiar with the installations' needs; winning proposals are matched up with a Service and an installation at which to demonstrate the technology. ESTCP has funded about 70 projects, and the fiscal year 2010 projects will begin reporting results this year.

The timing for an Energy Test Bed is ideal—one reason the response from industry has been so strong. The Federal Government has invested significant resources in energy R&D, largely through DOE, and the private sector is making even larger investments as evidenced by the growth of venture capital backing for “cleantech.” As a structured demonstration program linked to the large DOD market, the Test Bed can leverage these resources for the military's benefit.

Energy Conservation Investment Program

The fiscal year 2013 budget requests \$150 million for ECIP, \$15 million above the fiscal year 2012 appropriation. ECIP has a long history of producing savings for the Services, and we have reoriented the program to give it even greater leverage.

ECIP traditionally has funded small projects that promised a significant payback in reduced energy costs, and the Services relied heavily on it to achieve their energy goals. In keeping with DOD's focus on energy, last year we began to reshape the role that ECIP plays—from one of funding the Services' routine energy projects to one of leveraging their now-larger investments in ways that will produce game-changing improvements in energy consumption, costs or security. Two other changes are worth noting. To encourage long-term planning, we are requiring the Services to build a 5-year program of projects that they want to get funded through ECIP. To encourage them to put forward their best ideas, we are replacing formula-funding with competition. In fiscal year 2013, we incorporated competition but guaranteed each service a minimum level of funding. Beginning in fiscal year 2014, we will award the funds based purely on competitive merit.

⁹The purchase of renewable energy credits (RECs) is an alternative to the actual development of renewable energy; DOD has decided to meet the goals by adding supply on its installations as opposed to buying RECs.

¹⁰As discussed in section IV, we are also requesting \$43.9 million for ESTCP for environmental technology demonstrations. These two demonstration programs appear as separate lines under ESTCP in the fiscal year 2013 budget.

V. ENVIRONMENTAL MANAGEMENT

The Department has long made it a priority to protect the environment on our installations, not only to preserve irreplaceable resources for future generations, but to ensure that we have the land, water and airspace we need for military readiness. Over the last 10 years, the Department has invested more than \$40 billion in its environmental programs, and our steady level of expenditure has produced quality results. In the President's fiscal year 2013 budget, we are requesting \$3.97 billion to continue the legacy of excellence in our environmental programs. While this is below the fiscal year 2012 request, the reduction reflects management efficiencies and improved technology rather than any decline in effort.

ENVIRONMENTAL PROGRAM BUDGET REQUEST, FISCAL YEAR 2013 VS. FISCAL YEAR 2012

(In millions of dollars)

	Fiscal Year 2012 Request	Fiscal Year 2013 Request	Change from Fiscal Year 2012	
			Funding	Percent
Environmental Restoration	1,467	1,424	-43	-2.9
Environmental Compliance	1,552	1,449	-103	-6.6
Environmental Conservation	380	378	-2	-0.3
Pollution Prevention	104	111	+6.4	+6.1
Environmental Technology	227	220	-6.9	-3.0
Legacy BRAC Environmental	394	318	-75.6	-19.2
BRAC 2005 Environmental	127	73	-54.2	-42.7
Total	4,250	3,974	-277	-6.5

Environmental Conservation

In order to maintain access to the land, water, and airspace needed to support our mission needs, the Department continues to manage successfully the many threatened and endangered species found on our lands. (Military installations are home to more than 400 threatened and endangered species, about 40 of which are found only on our installations.) DOD develops and implements detailed Installation Integrated Natural Resource Management Plans (INRMPs) in coordination with the U.S. Fish & Wildlife Service (USFWS) and its state counterparts. These plans help us avoid critical habitat designations—thereby maintaining our flexibility to carry out mission activities—while providing equal or greater protection for endangered species.

To preserve mission readiness while complying with the Endangered Species Act, we must prepare for new requirements. The USFWS is required to evaluate 251 “candidate” species for potential listing on the Federal Endangered Species List by 2017. The Services have identified some 60 of these as species sufficiently present on our bases that a listing could impact mission activities. We are establishing a partnership with USFWS to share management and scientific data and discuss natural resource management actions that can benefit these species. We are also working with the Services to ensure they are actively managing the candidate species that pose the greatest risk to mission, including making the appropriate changes to their INRMPs.

In addition to natural resources, the Department is responsible for thousands of archaeological sites, historic buildings and other cultural resources. DOD owns or manages the Nation's largest inventory of Federal historic properties and continues to use many of these historic properties to meet mission requirements. Use of these properties allows DOD to retain significant cultural resources for future generations. In addition, many older buildings have features that are now considered “green,” such as high ceilings to encourage air circulation, large windows to provide maximum natural light and operational shutters to reduce heat gain.

The Department is requesting \$378 million in fiscal year 2013 for environmental conservation, which includes \$213 million in recurring funds for ongoing activities and \$165 million in non-recurring funds for one-time projects directed at threatened and endangered species, wetland protection, or other natural, cultural and historical resources.

ENVIRONMENTAL RESTORATION

The Defense Environmental Restoration Program provides funds for two types of environmental cleanup. The Installation Restoration Program (IRP) manages the

cleanup of hazardous substances, pollutants and contaminants—things that cause human health concerns. The Military Munitions Response Program (MMRP) manages the cleanup of unexploded ordnance and discarded military munitions—things that may explode. The cleanup occurs at three types of locations: active military bases, bases closed through the BRAC process, and other Formerly Used Defense Sites (FUDS).

By the end of 2011, the Department, in cooperation with state agencies and the U.S. Environmental Protection Agency, completed cleanup activities on 78 percent of IRP sites and is now monitoring the results. For MMRP sites, the comparable figure is 40 percent. The Department determines the order of cleanup for both IRP and MMRP sites on the basis of risk: by cleaning up the “worst first,” we reduce our long-term liability and expedite the return of properties to productive reuse.

Our cleanup program is mature enough that we can begin to envision completion. We are approaching 2014, by which time we have committed to have a remedy in place (RIP) or response complete (RC) for every cleanup site. In anticipation of reaching that milestone, we are developing the next major goal for our environmental cleanup program. We have established as goals to achieve RC at 90 percent of our active installations in 2018 and at 95 percent in 2021. The sites that remain will be the most complex ones, and we will need to conduct another review of the cleanup program when we reach that point.

We are requesting \$1.8 billion for fiscal year 2013 to clean up IRP and MMRP sites. This includes \$1.42 billion for “Environmental Restoration,” which encompasses active installations and FUDS sites, \$318 million for “Legacy BRAC Environmental” and \$73 million for “BRAC 2005 Environmental.” While these figures represent reductions from fiscal year 2012, we have not reduced our commitment to the program, as evidenced by our ambitious goals for achieving 95 percent RC over the next decade. Rather, the cut to Environmental Restoration is attributable to program reforms and reorganized oversight of the FUDS program by the Corps of Engineers. In addition, we have temporarily reduced investments in the MMRP portion of our program, anticipating validation of a major new cleanup approach able to detect and characterize unexploded ordnance (see the discussion below). We expect the MMRP request to increase once the new technology is validated and put into wider use. Finally, the BRAC investments are decreasing because we are making progress completing the much smaller number of BRAC sites.

Pollution Prevention

For fiscal year 2013, the DOD is requesting \$110 million for pollution prevention efforts. DOD’s approach to pollution prevention has many elements: recycling, reducing the use of hazardous materials and developing safer alternatives to them, eliminating the use of ozone-depleting substances, purchasing environmentally preferable products, and ensuring that DOD activities do not adversely impact the Nation’s air, water and land resources.

DOD is working to incorporate sustainable practices into acquisition and maintenance operations of military systems and into the day-to-day operations of our installations. By designing systems or practices such that waste (hazardous or non-hazardous) is minimized or eliminated, we reduce the overall cost of operations over the long term. For operational systems that are well past the design phase, the pollution prevention program funds initiatives that will, for example, change maintenance practices or find alternatives for toxic substances used to prevent corrosion.

With its limited budget, DOD’s pollution prevention program has emphasized cost-effective investments that lower life-cycle costs and improve efficiency. These investments continue to pay dividends. In fiscal year 2011, the Department diverted 4.1 million tons or 64 percent of our solid waste from landfills, avoiding approximately \$148 million in landfill disposal costs. We generated over 4 million tons of construction and demolition debris, diverting more than 77 percent of that debris to reuse and recycle. Additionally, the Department realized a 4 percent reduction in Toxic Release Inventory reportable releases in 2010 compared to 2009.

Environmental Compliance

Clean water and air are essential to the health and well being of our communities and ecosystems. The Department continues to maintain a high level of compliance with environmental laws and regulations. For example, the Department provides safe drinking water to the 3.4 million men, women, and children working and living on our military installations. Our fiscal year 2013 budget requests \$1.4 billion for environmental compliance—\$103 million below last year’s request. This decrease reflects the fact that the Department has completed many one-time repairs and upgrades to infrastructure, such as hazardous waste storage facilities, underground storage tanks and waste water treatments facilities.

Environmental Technology

A key part of DOD's approach to meeting its environmental obligations and improving its performance is its pursuit of advances in science and technology. The Department has a long record of success when it comes to developing innovative environmental technologies and getting them transferred out of the laboratory and into actual use—on our installations, in our depots and in the very weapon systems we acquire.

To accomplish this, the Department relies on two closely linked programs—the Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP). SERDP is DOD's environmental science and technology program; its mission is to address high priority cross-service environmental requirements and develop solutions to the Department's most critical environmental challenges. As one of the only R&D programs aimed at reducing DOD operating costs, SERDP has allowed the Department to avoid spending billions of dollars for environmental cleanup, environmental liability and weapons system maintenance. ESTCP's mission is to transition technology out of the lab. It does this by demonstrating the technology in a real-world setting, such as a clean-up site on a military installation or at an aircraft maintenance depot. This "direct technology insertion" has proven key to getting regulators and end users to embrace new technology.

A decade ago, SERDP and ESTCP took on a challenge—developing technologies that could discriminate between scrap metal and hazardous UXO ("beer cans and bombs"). Current clean-up methods lack that ability—their false-positive rate is 99.99 percent. As a result, contractors must dig up hundreds of thousands of metal objects in order to identify and remove just a few pieces of UXO. Because this process is so labor-intensive, it is very expensive: the estimated cost to clean up UXO on known DOD sites is more than \$14 billion. However, as I reported last year, 10 years of investment by SERDP and ESTCP have yielded technologies that can discriminate between UXO and harmless metal objects with a high degree of reliability. This is a remarkable achievement and one that many clean-up experts thought was impossible.

ESTCP has initiated live-site demonstrations to acquire the data needed to validate, gain regulatory approval for and fully transition these technologies into the field. Beginning in fiscal year 2011, we accelerated these demonstrations so that the technology would be ready by 2015, when the Services undertake major UXO clean-up efforts. We have conducted demonstrations on seven sites exhibiting diverse conditions, and the results show that on most sites the new technologies can distinguish the metallic scrap 70–90 percent of the time.

The challenges to implementing new technology go beyond demonstration of technical success, however. For these new UXO technologies to get deployed, our key partners—commercial cleanup firms, state and Federal regulators, and DOD contracting experts—must all be comfortable with what represents a fundamentally new approach to UXO cleanup (e.g., with the current technology, DOD pays contractors for each hole they dig up). Toward that end, my office is engaging with each group to work through its concerns. For example, contractors want to be sure they can recoup their investment in expensive new equipment; and regulators want to provide for management of the residual risk (i.e., any UXO found after the cleanup is complete). The interactions to date have been promising: all of our partners appear committed to adopting the new technologies once we have answered their concerns. State regulators are particularly supportive because they recognize that DOD will be able to clean up UXO sites sooner.

The fiscal year 2013 budget request includes \$65.3 million for SERDP and \$43.9 million for ESTCP for environmental technology demonstrations. (The budget request for ESTCP includes an additional \$32 million for energy technology demonstrations, as discussed in section III above.) Of the \$43.9 million requested for ESTCP environmental technology demonstrations, \$14 million will go to support the UXO live-site technology demonstrations.

The fiscal year 2013 budget request for Environmental Technology overall is \$220 million. In addition to SERDP and ESTCP, this includes funding for the Services' environmental research and development. The Services' investments focus on Service-unique environmental technology requirements and complement the larger, cross-Service SERDP and ESTCP investments. SERDP and ESTCP work closely with the Services to coordinate and leverage their investments.

Compatible Development

Encroachment is a growing challenge to the military mission, particularly test and training. Sprawl, incompatible land use and other forms of encroachment put the Department's test and training missions at risk and reduce military readiness. For

example, lights from developments near installations reduce the effectiveness of night vision training, and land development that destroys endangered species habitat causes those species to move onto less developed military lands, resulting in restrictions on the type, timing and frequency of test and training. I want to highlight three efforts I oversee that are designed to deal with this challenge.

Readiness and Environmental Protection Initiative

The Readiness and Environmental Protection Initiative (REPI) is a key tool for combating the encroachment that could negatively impact the operations of our bases. Under REPI, the Department partners with conservation organizations and state and local governments to preserve buffer land around our installations and ranges. The preservation of buffer land allows the Department to avoid much more costly alternatives, such as training workarounds or investments to replace existing testing and training capability. Through its unique cost-sharing partnerships, REPI directly leverages the Department's investments one-to-one. In the current real estate market, where property is more affordable and there are a great many willing sellers, REPI is a particularly good investment.

REPI's utility can be enhanced by looking beyond the immediate vicinity of installations and leveraging it across a regional landscape. For example, the airspace in and around Eglin Air Force Base has become increasingly crowded as new missions drive testing and training requirements. To avoid saturating the airspace, the Air Force is looking at the possibility of conducting missions across the entire gulf coast region (lower Alabama, Mississippi and the Florida Panhandle) in an effort called the Gulf Regional Airspace Strategic Initiative (GRASI). REPI can help GRASI achieve its goals by conserving key areas well outside Eglin—effectively expanding the training space available to Eglin and other installations in the region. This strategy will allow the Air Force to expand capacity at a fraction of what it would cost to acquire additional installations and build permanent infrastructure. Further, REPI hopes to take advantage of its unique authority by leveraging funding from environmental organizations that have a similarly ambitious plan to conserve lands in this region, providing an opportunity to meet compatible military and environmental goals at reduced cost for each stakeholder.

The President's fiscal year 2013 budget requests \$50.6 million for REPI.

Office of Economic Adjustment's Compatible Use Program

OEA's Compatible Use Program provides direct assistance to communities to help them prevent and/or mitigate development that is incompatible with nearby military operations. OEA provides technical and financial assistance to state and local governments to undertake a Joint Land Use Study (JLUS) in cooperation with the local military installation.

A JLUS serves as a powerful tool to bring a military installation and the surrounding community together to identify and address compatible use issues, develop a set of compatibility guidelines and implement specific measures to ensure the long-term viability of the military mission. The kinds of implementation measures that come out of a JLUS include: conservation buffers; aviation easements; the establishment of military influence areas with associated limits on development; the incorporation of sound-attenuation measures into building codes; requirements for disclosure of military activities (e.g., aircraft noise) in real estate transactions; ordinances to limit lighting that would interfere with night vision training; the transfer of development rights; and local development review procedures that ensure military input.

OEA has more than 70 JLUS projects currently underway, and they provide a useful complement to REPI's efforts. For example, through the JLUS process, military and stakeholder communities may identify an issue for which a REPI project may provide resolution.

Renewable Energy Siting

Although most transmission and renewable energy projects are compatible with the military mission, some can interfere with test, training and operational activities. Until recently, the process by which DOD reviewed projects and handled disputes was opaque, time-consuming and ad hoc, resulting in costly delays. Spurred in part by Congress, DOD created the DOD Siting Clearinghouse to serve as a single point of contact within the Department on this issue and to establish a timely and transparent review process. The goal is to facilitate the siting of energy projects while protecting test, training, and operational assets vital to the national defense.

The results are impressive: to date, the Clearinghouse has overseen the evaluation by technical experts of 506 proposed energy projects; 486 of these projects, or 96 percent, have been cleared, having been found to have little or no impact. These 486 projects represent 24 gigawatts of potential energy from wind, solar and geo-

thermal sources. The 20 projects that have not been cleared are undergoing further study, and we are working with industry, State and local governments, and Federal permitting and regulatory agencies to identify and implement mitigation measures wherever possible.

In addition to reviewing projects, the Clearinghouse has conducted aggressive outreach to energy developers, environmental and conservation groups, State and local governments, and other Federal agencies. By encouraging developers to share project information, we hope to avert potential problems early in the process. We are being proactive as well in looking at regions where renewable projects could threaten valuable test and training ranges.¹¹ The Clearinghouse is working with DOE, DHS, and the Federal Aviation Administration to model the impact of turbines on surveillance radars, evaluate alternative mitigation technologies, and expedite fielding of validated solutions.

Finally, the Clearinghouse is taking advantage of section 358 of the NDAA for Fiscal Year 2011, which allows DOD to accept voluntary contributions from developers to pay for mitigation. The Clearinghouse and the Navy recently negotiated an agreement that provides for the developer to pay the cost to mitigate the impact of wind turbines on the precision approach radar on a runway at Naval Air Station (NAS) Kingsville, TX. The agreement facilitates the continued growth of wind energy generation along the Texas Coastal Plain while providing for the safety of student pilots at NAS Kingsville and NAS Corpus Christi. We believe there will be many other situations in which a developer is willing to pay the relatively small cost of mitigation in order to realize the much larger value of the project; Section 358 is an extremely useful, market-based tool that allows us to negotiate those win-win deals.

CONCLUSION

My office takes seriously our mission to strengthen DOD's infrastructure backbone—the installations that serve to train, deploy and support our warfighters. Thank you for your strong support for the Department's installation and environment programs and for its military mission more broadly. I look forward to working with you on the challenges and opportunities ahead.

Senator McCASKILL. Thank you, Dr. Robyn.
Ms. Hammack?

STATEMENT OF HON. KATHERINE G. HAMMACK, ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, ENERGY, AND ENVIRONMENT)

Ms. HAMMACK. Thank you very much, Chairman McCaskill, Ranking Member Ayotte, and Senator Nelson. On behalf of soldiers, families, and civilians of the U.S. Army, I want to thank you for the opportunity to present to you the Army's MILCON budget request for fiscal year 2013.

The budget request supports an Army in transition, yet we are still at war. We know the fiscal challenges that the Nation faces and are planning accordingly to implement what was asked of us by the Budget Control Act (BCA). The committee's continued support will ensure that the Army remains manned, ready, trained, and equipped to face the challenges of protecting this Nation's interests both at home and abroad.

The Army's MILCON budget request reflects the Nation's current fiscal reality and is a 32 percent reduction from the prior year. Pending strategic decisions on the Army's end strength reductions, force structure, and stationing have required the Army to prioritize

¹¹DOD is conducting a study to identify areas of likely adverse mission impact in the region that is home to China Lake and Edwards Air Force Base in California, and Nellis Air Force Base and the Nevada Test and Training Range in Nevada. These installations are the Department's premier sites for test and evaluation and require a pristine environment clear of interference. The results of the study will be used to inform stakeholders of areas where the Department is likely to oppose the siting of wind turbines and solar towers.

our facility investments and to defer some of those investments that could be impacted by force structure changes. The active Army MILCON budget has absorbed most of these reductions, although we have taken some cuts in the National Guard and Reserve based upon budget requirements. Once a total Army analysis has been completed, the Army will then rebalance the fiscal year 2014 MILCON budget to meet the needs of a realigned force.

The Army has implemented a facility strategy to focus our strategic choices on cost-effectiveness and efficiency, reducing unneeded footprints, saving energy by preserving the most efficient facilities, and consolidating functions for better space utilization. It also demolishes failing buildings and uses appropriate excess facilities as lease alternatives.

For fiscal year 2013, the Army's budget request is \$3.6 billion, 103 construction projects, of which \$1.9 billion is Active Army; \$614 million, National Guard; and \$306 million for the Reserves.

I do want to talk about BRAC, echoing a bit what Dr. Robyn said. The Army met our BRAC 2005 obligations within the 6-year implementation window, but it was a very different BRAC for the Army in that it was a transformational BRAC. It transformed how the Army trains, deploys, supplies, equips, and cares for its soldiers and its garrisons. We shut down 11 installations, 387 Reserve component sites, and realigned 53 installations and their functions at an investment cost of almost \$18 billion which included 329 major construction projects.

I want to highlight that the realignment has enabled our troops to train the way we fight. This may not have resulted in cost savings, but it has impacted training effectiveness, as highlighted by a recent trip I took to Fort Benning. That is what the guys on the ground were saying, that we do not encounter the other types of fighting in the battlefield. We are training together side by side and we are more efficient and effective when we meet the enemy.

BRAC 2005 also greatly benefitted the Army Guard and Reserve in that they consolidated on a 3 to 1 basis out of failing facilities into newer facilities, returning land to communities for greater economic and taxpayers' use.

As of January 2012, the Army has conveyed an unprecedented 47 percent of our BRAC 2005 excess acreage, over 35,000 acres, which is more than we have in any other BRAC round. Other BRAC rounds waited until the BRAC date of closure and then transfers started, but we were able to, in this BRAC round, transfer land during the BRAC process.

For fiscal year 2013, the Army is requesting \$106 million for BRAC 2005, and of that, it is a 50-50 split to handle both environmental cleanup activities and caretaker requirements. We also are requesting \$79 million for prior BRAC rounds. In the prior BRAC rounds, a more significant portion is for environmental cleanup, whereas \$4 million remains for caretaker status.

The Army does support the administration's request for BRAC authority in 2013 and 2015. Changes in force structure will necessitate evaluation of our facilities to optimize usage, capability, and costs.

We have listened to Congress and have followed your guidance to reduce costs and footprint in Korea and Europe.

In Europe, over the last 6 years, we have closed 97 sites and returned 23,000 acres. In the next 4 years, we plan to close another 23 sites and return 6,400 acres, primarily in Germany.

In Korea, over the last 6 years, we have closed 34 sites with over 7,000 acres returned, and in the next 4 years, we plan another 20 sites and over 9,000 acres.

So we have been implementing a BRAC-like base realignment and closure overseas for many years similar to what has been done in the United States.

On energy, the Army has a comprehensive energy and sustainability program. Energy at Army facilities is mission critical to us and we have seen energy challenges due to recent weather events. The tornadoes that we have seen over the last 12 months have had an impact on some of our installations, reducing access to energy as power lines go down and causing us to rely on generators. So we recognize that energy is mission critical.

Since 2003, the Army has reduced our installation energy consumption by 13 percent, while at the same time our number of active soldiers and civilians on installations has increased 20 percent.

We have implemented in the last 12 months a net zero initiative which focuses on reducing energy, water, and waste on our Army installations. We identified 17 installations that are striving to reach net zero by 2020. In the fiscal year 2013 budget, we only ask for \$2 million to assist in funding the management, oversight, and direction of this program. The initiative is to encourage and to provide direction to our installations as to how to improve their energy and water consumption, leveraging existing authorities and existing funding.

We have implemented an energy initiatives task force that is focusing on large scale alternative energy production on Army installations. Again, leveraging private sector investment, we are not asking for money to fund that renewable investment.

At the same time, we have accelerated the use of energy-saving performance contracts. These are contracts where the private sector invests in energy security projects and puts the capital up to install it on an Army installation. We pay them back out of energy savings. In the first quarter of fiscal year 2012, we implemented \$93 million of contracts for energy-saving performance contracts, and that was more than all of fiscal year 2011, which was \$74 million. So the Army is on track, if not ahead of schedule, to meet the goal set by the President of energy-saving performance contracting in the military sector.

Each of these energy initiatives is leveraging private sector capital, not appropriated funds, utilizing authorities that you, Members of Congress, have given us. This enables us to enhance energy security, promote job growth in local communities, and leverage the cost effectiveness of the private sector.

In closing, I want to thank you for the opportunity to appear before you today and for your continued support for our Army's soldiers, families, and civilians. The Army's fiscal year 2013 budget request is a balanced program that reflects the current fiscal environment. It supports an Army in transition while at war.

I look forward to your questions.

[The prepared statement of Ms. Hammack follows:]

PREPARED STATEMENT BY HON. KATHERINE G. HAMMACK

INTRODUCTION

Chairwoman McCaskill, Senator Ayotte, and members of the subcommittee, on behalf of the soldiers, families, and civilians of the U.S. Army, I want to thank you for the opportunity to present the Army's Installation Management Community Fiscal Year 2013 Military Construction budget request.

The Army's Fiscal Year 2013 Military Construction budget request supports an Army in transition while still at war. We understand the fiscal challenges faced by the Nation. Through efforts like the Army Facility Strategy 2020, the Army Family Covenant, the Army Community Covenant, and the Army Energy Enterprise, the Installation Management Community is focused on providing the facilities to support a trained and ready land force. We continue to be careful stewards of both the fiscal and environmental resources provided to the Army.

Over the past 4 years, the Army, with the support of Congress, has regained balance, restoring strategic flexibility for the Nation. Continued support of Congress will ensure the Army remains manned, trained, equipped, and ready for all challenges and to protect America's interests at home and abroad. The committee's commitment to our soldiers, families, and civilians and support of the Army's military construction program is deeply appreciated. The Army's strength is its soldiers—and the families and Army civilians who support them. They are and will continue to be the centerpiece of our Army. America's Army is the Strength of the Nation.

OVERVIEW

The Army's fiscal year 2013 President's budget requests \$3.6 billion for Military Construction (MILCON), Army Family Housing (AFH), and Base Realignment and Closure (BRAC). This request is \$1.7 billion less or a 32 percent reduction from the fiscal year 2012 request. The \$3.6 billion request represents 3 percent of the total Army budget. Of the \$3.6 billion requested, \$1.9 billion is for the Active Army, \$614 million is for the Army National Guard, \$306 million is for the Army Reserve, \$186 million is for BRAC, and \$535 million is for AFH. In addition and in support of Army installations and facilities the President's budget requested \$9.0 billion for Base Operations Support (BOS) and \$1.17 billion for environmental programs.

The 32 percent reduction in this budget request reflects the new fiscal reality that we are facing as a Nation. The Budget Control Act of 2011 combined with the pending strategic decisions on Army end strength reductions and force structure and stationing across the country required the Army to review the facility investments necessary to sustain an All-Volunteer Army. This MILCON budget request reflects the investments required in training, maintenance, operations, and quality of life facilities to preserve the All-Volunteer Force.

ARMY FACILITY STRATEGY 2020

As we shape the Army of 2020 through a series of strategic choices over the coming months and years, the Installation Management Community looks to implement its Army Facility Strategy 2020 (AFS 2020) to provide quality, energy efficient facilities in support of the Force. AFS 2020 provides a strategic framework to manage facilities at Army installations and is integrated with Army Systems and Force Structure decisions. AFS 2020 proposes a more cost effective and efficient approach to facility investments that reduces unneeded footprint, saves energy by preserving more efficient facilities, consolidates functions for better space utilization, demolishes failing buildings and uses appropriate excess facilities as lease alternatives while meeting future Force drawdown as a 2020 objective.

AFS 2020 incorporates a facility investment strategy using MILCON funding to build out critical facility shortages; MILCON and Operation and Maintenance-Restoration and Modernization (O&M R&M) funding to improve existing facility quality; O&M Sustainment funding to maintain existing facilities; and O&M Demolition and Disposal funding to eliminate failing excess facilities. Investments from MILCON and O&M funding will support facilities grouped in the following categories: Global Defense Posture Realignment; Redeployment/Force Structure; Modularity; Barracks; Recapitalization/Deficit; and Ranges and Training Facilities. The fiscal year 2013 budget request begins the implementation of the AFS 2020 Facility Investment Strategy (FIS) by building out shortfalls for barracks, maintenance facilities, ranges, and Reserve component facilities.

FISCAL YEAR 2013 BUDGET REQUEST—MILITARY CONSTRUCTION, ARMY

The Active Army Fiscal Year 2013 Military Construction, Army (MCA) budget request is for \$1,923,323,000 (for appropriation and authorization of appropriations) to support the Army facility investment strategy. There are no requests for construction in Germany as we reassess our force structure in that country. The MCA budget has been further reduced by deferring projects that could be impacted by the Total Army Analysis (TAA). Upon completion of the TAA, future MCA budget requests will be rebalanced to meet the needs of a realigned force.

Barracks Buyout (\$401 million/21 percent): The fiscal year 2013 budget request will provide for 1,180 new permanent party barracks spaces that will meet Department of Defense “1+1” construction standard and contribute to the reduction of inadequate permanent party barracks and deficits. The locations of these projects are at Joint Base San Antonio, TX; Wheeler Army Air Field and Schofield Barracks, HI; and Camp Ederle, Italy. The fiscal year 2013 request will also provide our soldiers 2,280 new training barracks spaces that meet applicable standards. The locations of these projects are at Fort Jackson, SC; Fort Lee, VA; and Fort Leonard Wood, MO. The total barracks buyout investments will provide 3,460 spaces at 7 installations.

Global Defense Posture Realignment (\$128 million/7 percent): The fiscal year 2013 budget request includes two projects that support forward deployed forces in the Pacific Theater: \$45 million for a battalion complex at Army Garrison Humphreys in South Korea and \$18 million for a vehicle maintenance facility in Sagami, Japan. The request also includes \$65 million for two mission projects for units currently stationed at Fort Leonard Wood, MO, in temporary or failing structures.

Modularity (\$301 million/16 percent): The fiscal year 2013 budget requests \$78 million to support a critical strategic communication facility required by the Army's Network Enterprise Technology Command in its continuous pursuit of improved command and control, communication and intelligence linkages between combatant commanders and the National Command Authorities. Another \$128 million supports barracks and mission facilities for unaccompanied soldiers at Fort Campbell, KY, and Joint Base Lewis-McChord, WA. The remaining \$95 million will provide aircraft maintenance hangers for the Combat Aviation Brigade at Fort Drum, NY.

Redeployment/Force Structure (\$165 million/9 percent): The fiscal year 2013 budget request includes \$30 million for infrastructure necessary to support six Special Operations Command (SOCOM) buildings programmed in fiscal years 2012 and 2013. Senate Report 104–116 accompanying the Military Construction Appropriation Bill, 1996, prohibited the inclusion of infrastructure improvements in SOCOM Defense Wide MILCON budget requests and Senate Report 104–116 directed the military departments responsible for supporting the special operations forces to provide installation infrastructure as well as other common support facilities. The request includes \$107 million to support the fielding of the Gray Eagle units at Fort Bragg, NC; Fort Campbell, KY; Fort Hood, TX; Fort Riley, KS; and Fort Stewart, GA. As a result of the Energy Independence and Security Act of 2007 and Executive Order, the remaining \$28 million replaces failing heating systems with ground source heat transfer systems at Fort Benning and Fort Gordon, GA.

Recapitalization/Deficit (\$572 million/30 percent): The fiscal year 2013 budget request includes 11 projects with investments of \$94 million for operations facilities, \$202 million for operational support facilities and \$276 million for institutional support projects. Included in the \$202 million is \$91 million for a waste water treatment plant at Joint Base Lewis-McChord, WA. Joint Base Lewis-McChord must recapitalize this plant to meet the more stringent Puget Sound effluent standards and avoid escalating environmental violations. Also included is \$93 million to support the upgrade of the Army's aging critical industrial base facilities located at Corpus Christi Army Depot, TX; Joint Base McGuire-Dix-Lakehurst, NJ; and the Military Ocean Terminal Concord, CA. The two institutional support projects are the Cadet Barracks at the U.S. Military Academy for \$192 million and the expansion of the Arlington National Cemetery for \$84 million, plus planning and design funds to support the development of the former Navy Annex. The Cadet Barracks will provide 325 modern 2-person rooms for the future leaders of the Army, eliminating current overcrowding. The expansion of the Arlington National Cemetery's Millennium Site will provide hallowed burial grounds for soldiers, sailors, airmen, and marines beyond 2025.

Ranges and Training Facilities (\$232 million/12 percent): The fiscal year 2013 budget request includes \$160 million for training ranges to support multiple weapon systems and \$72 million in digital/simulations training facilities. The Army ranges and training facilities are used by all components of the Army to achieve mission combat readiness. The current ranges do not meet the quantity required by training

demands and/or require modernization to meet current weapons qualification standards.

Other Support Programs (\$124 million/6 percent): The fiscal year 2013 budget request includes \$65 million for planning and design of MCA projects and \$34 million for the oversight of design and construction of projects funded by host nations. As executive agent, the Army provides oversight of host nation funded construction in Japan, Korea, and Europe for all Services. The fiscal year 2013 budget also requests \$25 million for unspecified minor construction to address unforeseen critical needs.

MILITARY CONSTRUCTION, ARMY NATIONAL GUARD

The Army National Guard fiscal year 2013 MILCON budget request of \$613,799,000 (for appropriation and authorization of appropriations) is focused on Modularity, Recapitalization/Deficit, Ranges and Training Facilities, Barracks, and other support programs.

Modularity (\$227.2 million/37 percent): The fiscal year 2013 budget request is comprised of 15 projects, which include 9 Readiness Centers/Armed Forces Reserve Centers, 2 Combined Support Maintenance Shops, 2 Army Aviation Support Facilities, 1 Field Maintenance Shop, and 1 Refill Station Building.

Recapitalization/Deficit (\$310.5 million/51 percent): The Army National Guard budget requests 18 projects to replace failing, inefficient facilities. There is one Maneuver Area Training and Equipment Site, four Regional Training Institutes (RTI), five Readiness Centers/Armed Forces Reserve Centers, two Operations Readiness Training Complexes, three Field Maintenance Shops, one Taxiway, Ramp & Hangar Alterations, one Unit Training Equipment Site, and one RTI enlisted barracks. These projects will provide modernized facilities to enhance the Guard's operational readiness.

Ranges and Training Facilities (\$34.4 million/5 percent): The fiscal year 2013 budget request includes four projects which will support the Army National Guard's training of its operational force. These funds will provide the facilities soldiers require as they train, mobilize, and deploy. Included are one Live Fire Shoot House, one Combined Arms Collective Training Facility, one Urban Assault Course, and one Scout Reconnaissance Range.

Other Support Programs (\$41.7 million/7 percent): The fiscal year 2013 Army National Guard budget request includes \$26.6 million for planning and design of future projects and \$15.1 million for unspecified minor military construction to address unforeseen critical needs.

Special Program Considerations: The Army National Guard requests a technical correction to the scope of the fiscal year 2010 North Las Vegas, NV, Readiness Center. Due to technical errors, the DD Form 1391 did not reflect the correct size for two line items and omitted one line item from what was presented to Congress. The Readiness Center should read 68,593 square feet (SF) vice 65,347 SF, and the unheated equipment storage area read 10,000 SF vice 4,800 SF. In addition 25,000 SF unheated vehicle storage must be added. All changes in scope can be executed within the appropriated amount of the project.

MILITARY CONSTRUCTION, ARMY RESERVE

The Army Reserve fiscal year 2013 MILCON budget request for \$305,846,000 (for appropriation and authorization of appropriations) is for Recapitalization/Deficit; Ranges and Training Facilities, Barracks, and other support programs.

Recapitalization/Deficit (\$258.8 million/85 percent): The fiscal year 2013 Army Reserve budget request includes \$258.8 million for facilities that prepare our soldiers for success in current operations. The construction of six new Army Reserve centers, one Armed Forces Reserve center, and one Operational Readiness Training Complex will provide modernized training classrooms, simulations capabilities, and maintenance platforms that support the Army force generation cycle and the ability of the Army Reserve to provide trained and ready soldiers for Army missions when called. The construction of one Equipment Concentration Site will enhance maintenance, equipment training set and storage capacity at Fort McCoy, WI. In addition, the request includes a new Central Issue Facility and a consolidated Dining Facility at Fort McCoy. The construction of these two facilities will provide modern, technologically advanced and energy efficient facilities, as well as demolish eight failing World War II era wood structures.

Ranges and Training Facilities (\$15.9 million/5 percent): The budget request includes three ranges that enable soldiers to hone their combat skills. Two ranges will be constructed at the Devens Reserve Forces Training Area, MA, and one will be constructed at Joint Base McGuire-Dix-Lakehurst, NJ, to support Reserve component soldiers in the northeastern part of the country.

Barracks Buyout (\$4.3 million/1 percent): The budget request includes an Unaccompanied Personnel Housing (UPH) barracks project for permanent party soldiers assigned to Fort Hunter-Liggett, CA.

Other Support Programs (\$26.8 million/9 percent): The fiscal year 2013 Army Reserve budget request includes \$15.9 million for planning and design of future year projects and \$10.9 million for unspecified minor military construction to address unforeseen critical needs.

ARMY FAMILY HOUSING

The Army's fiscal year 2013 budget request for \$534,692,000 (for appropriation and authorization of appropriations) is for the Army's investment in and operation of its worldwide inventory of family housing assets. The Army relies first on the local economy to provide housing for our soldiers. When housing on the economy is not available, the Army provides housing by various means including government-owned, privatized, and leased housing. The Army has successfully privatized 98 percent of on-post housing assets inside the United States, while overseas we primarily house families in Army-owned and leased quarters.

Residential Communities Initiative (RCI). In 1999, the Army began privatizing housing assets and the RCI continues to provide quality housing that soldiers and their Families and senior single soldiers can proudly call home. The Army leverages appropriated funds and existing housing by engaging in 50-year partnerships with nationally recognized private real estate development, property management, and home builder firms to construct, renovate, repair, maintain, and operate housing communities.

RCI family housing is at 44 locations, with a projected end state of over 85,000 homes—98 percent of the on-post family housing inventory inside the United States. Initial construction and renovation investment at these 44 installations is estimated at \$12.7 billion over a 3 to 14 year initial development period, which includes the Army's contribution of close to \$2.0 billion. From 1999 through 2012, our partners have constructed 27,497 new homes, and renovated another 23,025 homes.

The RCI program for Senior Unaccompanied Housing includes 4 installations for a total of 1,394 accommodations for senior single soldiers in grade staff sergeant and above including officers at locations where there is a deficit of adequate accommodations off post. The four locations are Forts Irwin, Drum, Bragg, and Stewart.

ARMY FAMILY HOUSING CONSTRUCTION

AFH Construction (\$4.6 million/1 percent): The Army's fiscal year 2013 Family Housing Construction request is \$4.6 million for planning and design of future projects to continue our significant investment in our soldiers and their families. This supports our goal to improve Army owned housing and eliminate our remaining inadequate inventory at enduring overseas installations.

ARMY FAMILY HOUSING OPERATIONS

AFH Operations (\$530 million/99 percent): The fiscal year 2013 budget request includes \$530.1 million for: Operations, Utilities, Maintenance and Repair, Leased Family housing, and management of RCI. This request supports over 16,000 Army-owned homes, in the United States and in foreign countries, as well as almost 7,500 leased residences and provides government oversight of more than 83,000 privatized homes.

Operations (\$102.9 million): The operations account includes four subaccounts: management, services, furnishings, and a small miscellaneous account. All operations subaccounts are considered "must-pay accounts" based on actual bills that must be paid to manage and operate the AFH owned inventory.

Utilities (\$88.1 million): The utilities account includes the cost of delivering heat, air conditioning, electricity, water, and wastewater support for owned or leased (not privatized) Family housing units. The overall size of the utilities account is decreasing in proportion to the reduction in supported inventory due to RCI.

Maintenance and Repair (\$109.5 million): The maintenance and repair account supports annual recurring projects to maintain and revitalize AFH real property assets. Since most Family housing operational expenses are fixed, maintenance and repair is the account most affected by budget changes. This funding ensures that we appropriately maintain housing so that we do not adversely impact soldier and family quality of life.

Leasing (\$203.5 million): The Army leasing program is another way to provide soldiers and their families adequate housing. The fiscal year 2013 budget request includes funding for a total of 7,490 housing units, including 250 existing section 2835

(“build-to-lease”—formerly known as 801 leases), 1,478 temporary domestic leases in the United States, and 5,762 leased units overseas.

Privatization (\$26.0 million): The privatization account provides operating funds for management and oversight of privatized military family housing in the RCI program. RCI program costs include: civilian pay, travel, and contracts for environmental and real estate functions; training; real estate and financial consultant services, and oversight to monitor compliance and performance of the overall privatized housing portfolio and individual projects.

BASE REALIGNMENT AND CLOSURE—BRAC 2005

The Army met its BRAC obligations within the 6-year implementation window on 15 September 2011. The implementation of BRAC 2005 enabled the Army to reshape the infrastructure supporting the Operating Force, the Generating Force and the Reserve component transforming how the Army, trains, deploys, supplies, equips, cares for and garrisons its soldiers, families, and civilians. BRAC 2005 closed 12 installations, 387 Reserve component sites, realigned 53 installations and/or functions at an investment of almost \$18 billion which included 329 major construction projects. The completion of those recommendations, combined with the efficiencies achieved in the completion of the other Army BRAC recommendations, generates almost \$2 billion in annual recurring savings. BRAC 2005 relocated three four-star and five three-star headquarters to multi-use installations that support the missions of those headquarters, six Joint and Army Training Centers of Excellence, a Human Resources Center of Excellence, seven joint bases, four joint mobilization sites, and two joint technical and research facilities. It transformed the Army’s industrial base, medical infrastructure and authorized 125 multi-component Armed Forces Reserve Centers and realigned the Army Reserve command and control structure. The Army has also conveyed an unprecedented 47 percent of its 70,311 BRAC 2005 total excess acreage as of January 2012. The remaining focus for BRAC 2005 is to dispose of the balance of excess property.

The Army fiscal year 2013 budget request for BRAC 2005 is \$106,219,000. The funding request includes \$48.4 million to support facility caretaker requirements. In fiscal year 2013, the Army will continue environmental closure, cleanup and disposal of BRAC properties. These activities will continue efforts previously ongoing under the Army Installation Restoration Program and will ultimately support future property transfer actions. The budget request for environmental programs is \$57.8 million, which includes management of munitions and explosives of concern as well as hazardous and toxic waste restoration activities. The timely execution of environmental restoration projects in fiscal year 2013 at several industrial sites, such as Riverbank Army Ammunition Plant, CA; Lone Star Army Ammunition Plant, TX; and Kansas Army Ammunition Plant, KS, is critical to transferring property back into productive reuse and job creation.

BRAC 1990

The Army is requesting \$79,863,000 in fiscal year 2013 for prior BRAC rounds. The request includes \$4.5 million for caretaking operations and program management of remaining properties and \$75.4 million for environmental restoration to address environmental restoration efforts at 280 sites at 36 prior BRAC installations. The funds requested in fiscal year 2013 are needed to keep planned clean-up efforts on track, particularly at Forts Ord, CA; McClellan, AL; Wingate, NM; Devens, MA; and Savanna Army Depot, IL. The Army has disposed of 178,357 acres (85 percent of the total acreage disposal requirement of 209,291 acres), with 30,934 acres remaining. Similar to BRAC 2005, prior BRAC also produces recurring savings which the Army estimates at nearly \$1 billion annually.

FUTURE BRAC

The Department of Defense is requesting BRAC authority in 2013 and 2015. In BRAC 2005, the National Guard and Reserve benefited greatly through consolidation of facilities into joint readiness centers. On a 3 to 1 basis, the Army closed and returned land and buildings to local communities, consolidating onto military or other lands. The benefit to the local communities and Army was both economic and operational. We anticipate that there could be similar efficiencies in a future BRAC round. Additionally, with the anticipated end-strength reduction, BRAC could facilitate realignment of leased facilities onto installation facilities vacated due to TAA. Although no analysis has been completed, further study could identify other opportunities to gain efficiencies and reduce costs.

ENERGY

The Army is the largest facilities energy user in the Federal Government. To maintain an effective readiness posture as energy costs escalate, the Army has implemented a comprehensive Energy and Sustainability program based on culture change, increased energy efficiency, and development of renewable and alternate sources of energy. Reducing energy use at Army facilities is mission critical, operationally necessary, and financially prudent.

Army installations and facilities require secure and uninterrupted access to energy. Dependence on fossil fuels and a vulnerable electric power grid jeopardizes the security of Army installations and mission capabilities. Investment in renewable energy and energy efficient technologies will help ensure the Army can meet mission requirements today and into the future. The Army evaluates every single energy investment opportunity to determine its long-term benefits for the Army. For investments on our installations we examine projects based on positive return on investment and demonstrated cost savings over its lifetime. We also expect projects to make positive contributions to energy security and improve the quality of life experienced by soldiers and their family members.

Since fiscal year 2003 the Army has reduced its installation energy consumption by 13.1 percent while its total number of active soldiers and civilians has increased 20 percent. In addition, the Army has adopted the highest building code in the Federal Government, ASHRAE 189.1 which will reduce energy and water consumption on average 40 percent annually in our new construction program and in existing facilities that undergo major renovations.

In fiscal year 2013 the Army's Installation Energy budget totals \$1.453 billion and includes \$50 million from the Department of Defense (DOD) "Defense-Wide" appropriation for the Energy Conservation Investment Program (ECIP), \$343 million for Energy Program / Utilities Modernization program, \$1,053 million for Utilities Services, and \$7.1 million for installation related Science and Technology research and development. The Army conducts financial reviews, business case and life-cycle cost analysis and return on investment evaluations for all energy initiatives.

The Army's fiscal year 2013 allocation of the ECIP program, \$50 million, includes seven renewable energy projects, six energy conservation projects, one water project, and two Energy Security projects. In accordance with DOD guidance, fiscal year 2013 project submissions are divided into four categories: Renewable Energy; Energy Conservation; Water, and Security. Effective with fiscal year 2013, ECIP has established a new funding category to capture a project's contribution to enhancing water and/or grid security. The Army is taking a strategic look at requirements, including a thorough project validation and prioritization process, to develop an ECIP Future Years Defense Program to fund additional requirements should such an opportunity arise.

The Utilities Services account pays all Army utility bills and is used to finance the repayment of Utilities Privatization, Energy Savings Performance Contracts (ESPCs) and Utilities Energy Service Contracts (UESCs). ESPCs and UESCs allow the Army to implement energy efficiency improvements through the use of private capital, repaying the contractor for capital investments over a number of years out of the energy cost savings.

Reducing consumption and increasing energy efficiency are among the most cost effective ways to improve installation energy security. The Army funds many of its energy efficiency improvements through the Energy Program/Utilities Modernization program account. In addition to funding O&M project execution, this account enables planning and developing of third party financed renewable energy initiatives such as the Energy Initiatives Task Force (\$29 million) and integrated holistic design strategies for managing resources on Army installations such as the Net Zero Initiative (\$2.2 million).

The Army is moving forward to address the challenge of energy and sustainability to ensure the Army of tomorrow has the same access to energy, water, land, and natural resources as the Army of today. Our energy goals include a 30 percent reduction in facilities energy intensity by 2015 from the 2003 baseline; generation of 25 percent of energy from renewable resources by 2025; reduction in petroleum use in nontactical equipment by 20 percent by 2015; and elimination of the use of fossil fuel generated energy in newly constructed buildings by 2030.

In fiscal year 2011, the Army announced two key initiatives, the Net Zero Initiative and the Energy Initiatives Task Force (EITF). These initiatives will make the Army a leader in sustainable practices and use of renewable energy. The Net Zero Installation initiative is advancing an integrated approach and will improve the management of energy, water, and waste. Net zero installations will consume only as much energy or water as they produce and eliminate solid waste to landfills, and

when fully implemented, will establish Army communities as models for energy security, sustainability, value, and quality of life. Seventeen installations have been identified for this effort, with plans to reach Net Zero by 2020.

The EITF strengthens Army Energy Security and Sustainability by developing a comprehensive capability to plan and execute cost-effective large-scale renewable energy projects by leveraging private sector financing. The EITF will serve as a one-stop shop and augment installation staff for the development of renewable energy projects greater than 10 MW on Army installations to obtain secure, sustainable, and affordable energy from a diversity of sources. The EITF is currently evaluating 12 projects at 8 installations to determine whether they are worthy of further development and has identified further opportunities at 21 installations.

The Army is incorporating cost effective Energy Efficient Measures into the MILCON Program. The Army has implemented energy efficiency requirements into all new facilities construction, renovation and modernization requirements.

The Army is committed to contributing to our Nation's energy security by reducing our dependence on foreign oil. In the Army, "Every Soldier is a Power Manager" and energy is a consideration in every aspect of how we do business. We are committed to advancing energy security by changing our doctrine, our behavior, and our technological advancement throughout all aspects of our enterprise. We will build on our past accomplishments and ensure our soldiers and civilians wisely employ the resources entrusted to them.

ENVIRONMENT

The Army fiscal year 2013 Environmental program provides \$1.17 billion in support of current and future readiness. The environmental program includes Army Working Capital Fund, BRAC 2005 and Prior BRAC, and Army O&M programs. This program ensures an adequate environmental resource base to support mission requirements, while maintaining a sound environmental compliance posture. Additionally, it allows Army to execute environmental aspects of restationing, Global Defense Posture Realignment and BRAC while increasing programmatic efficiencies, and addressing the Army's past environmental legacy.

As a land-based force, our compliance and stewardship sustains the quality of our land and environment as an integral component of our capacity to effectively train for combat. We are committed to meeting our legal requirements to protect natural and cultural resources and maintain air and water quality during a time of unprecedented change. We are on target to meet DOD goals for cleaning up sites on our installations, and we continue to manage environmental compliance requirements despite operating in a constrained resource environment.

SUSTAINMENT/RESTORATION & MODERNIZATION

The Army continues its commitment to fund sustainment at 90 percent of the OSD Facilities Sustainment Model (FSM) requirement. The Army views 90 percent sustainment funding as the absolute bedrock of proper facilities stewardship, and is an essential objective of the Army facilities investment strategy. The Army has chosen not to take risk in the sustainment of our facility inventory valued at \$329 billion. In keeping with the Army Facility Investment Strategy (FIS), the Army has increased its investment in facility restoration through the O&M Restoration and Maintenance account. This will fully restore trainee barracks, enable progress toward energy objectives and provide commanders with the means of restoring other critical facilities. Facilities are an outward and visible sign of the Army's commitment to providing a quality of life for our soldiers, families, and civilians that is consistent with their commitment to our Nation's security.

BASE OPERATIONS SUPPORT

The Army's fiscal year 2013 Base Operations Support (BOS) request is \$9.0 billion and is consistent with our fiscal year 2012 BOS Budget request. The Army's fiscal year 2013 BOS strategy continues to prioritize funding for Life, Health and Safety programs and Army Force Generation (ARFORGEN) requirements ensuring soldiers are trained and equipped to meet demands of our Nation at war. Army remains committed to its investment in Army Family Programs and continues to evaluate its services portfolio in order to maintain relevance and effectiveness. Army will meet the challenge of day-to-day requirements by developing more efficient service delivery or adjusting service levels while managing customer expectations. These efforts will encourage program proponents to evaluate policies, seek alternative and find innovative solutions to meet these challenges. The Army is committed to developing a cost culture for increasing the capabilities of BOS programs through an enterprise approach. Additionally, the Army will continue to review service delivery

of its soldier, family, and civilian programs to ensure the most efficient and effective means of delivery are realized.

CONCLUSION

The Army's fiscal year 2013 installations management budget request is a balanced program that supports the Army in transition while at war, supports our soldiers, families, and civilians, and recognizes the current fiscal reality. The Army Facility Strategy 2020 and facilities investment strategy will be accomplished through Congress' continued commitment to timely and sustained funding of the military construction, BRAC and family housing budget request.

In closing, thank you again for the opportunity to appear before you today and for your continued support for our soldiers, families, and civilians.

Senator McCASKILL. We will now move to the testimony of Ms. Pfannenstiel.

STATEMENT OF HON. JACKALYNE PFANNENSTIEL, ASSISTANT SECRETARY OF THE NAVY (ENERGY, INSTALLATIONS, AND ENVIRONMENT)

Ms. PFANNENSTIEL. Thank you, Madam Chairman.

Madam Chairman, Senator Ayotte, Senator Nelson, I am pleased to appear before you today to provide an overview of the Department of the Navy's investment in shore infrastructure.

The Navy's fiscal year 2013 budget request includes \$13 billion for investment in MILCON, facilities sustainment, and restoration and modernization, previous rounds of BRAC, family housing, environmental restoration, and base operating support.

The MILCON request of \$1.8 billion supports our combatant commanders, new warfighting platforms and missions, facility recapitalization, and servicemember quality-of-life initiatives for the U.S. Navy and Marine Corps.

MILCON projects in Bahrain and Djibouti support high priority missions in the region, enhance our forward presence and provide stability for U.S. interests. Two projects in Spain support the forward-deployed naval forces, and a project in Romania supports the European Phased Adaptive Approach infrastructure.

Equally important, our MILCON programs invest in support facilities for the Joint Strike Fighter (JSF) and MV-22B, infrastructure improvements, training and education facilities, and the safety and security of nuclear weapons in the United States.

I would specifically like to emphasize that we remain committed to establishing an operational Marine Corps presence on Guam. We know Congress has concerns regarding execution of the Guam military alignment, and we are taking the necessary steps to address them and move the program forward. The U.S. Government is currently meeting with the Government of Japan to discuss adjustments to the 2006 realignment road map agreement. As Secretary Panetta has testified, Guam is an important part of the U.S. effort to reposition our forces in the Pacific. We believe the adjustments being discussed will address execution concerns, increase our flexibility, and strengthen our presence in the region. This is an important year for the Guam realignment. We will continue to work with you and our partners on Guam and in Japan as more information becomes available.

As for the 2005 round of BRAC, DOD met our legal obligations by the statutory deadline of September 15, 2001 and successfully implemented all required realignment and closure actions, as has

been previously specified in our business plans. For BRAC 2005 installations, our fiscal year 2013 budget request of \$18 million enables ongoing environmental restoration, caretaker, and property disposal efforts.

For the prior BRAC rounds, our fiscal year 2013 budget request of \$147 million will enable us to continue disposal actions for the remaining 7 percent of real property and meet the legal requirements for environmental cleanup.

The Navy fully supports the SECDEF's proposal for additional rounds of BRAC to assess and improve the alignment of our shore infrastructure with our force structure.

Finally, we intend to meet the energy goals set forth by Congress and the Secretary of the Navy. We recognize that energy is a critical resource for maritime, aviation, expeditionary, and shore missions. We must strengthen our energy security and reduce our vulnerability to price escalations and volatility. With this in mind, the Navy and Marine Corps continue to reform how we produce, procure, and use energy. Our budget request includes \$1 billion in fiscal year 2013 and \$4 billion across the Future Years Defense Program (FYDP) that will not only increase our combat effectiveness, but also improve our security.

Under the direction of Congress and our Commander in Chief and in partnership with other Federal agencies, we have two major initiatives underway.

The first is symbolized by our demonstration of what we call the Great Green Fleet, that name being a tribute to the Great White Fleet that President Roosevelt sent around the world in 1906 to demonstrate America's technological achievements. This summer, we will mix biofuels in a 50–50 blend with standard fuel to power ships and planes during the international Rim of the Pacific exercise. We are testing and certifying our ships and planes on advanced biofuels to reduce our Service's dependence on conventional sources of fuel.

Our second major initiative is advancing the production and consumption of renewable energy generation on our installations. While we are a seagoing service, we own more than 3 million acres of land and over 72,000 buildings. We will facilitate the production of a gigawatt of large-scale renewable power projects on Navy installations. By using existing third-party financing mechanisms, power purchase agreements, joint ventures, and enhanced use leases, we will avoid adding costs to taxpayers.

Currently our bases support about 300 megawatts of renewable energy, 270 megawatts of which is produced by a geothermal power plant at China Lake. We have awarded contracts for three solar projects in the Southwest and are finalizing a similar contract for Hawaii. The three awarded purchase power agreements at China Lake, Twentynine Palms, and Barstow will save the Navy \$20 million over 20 years. In all three locations, we will be paying less per kilowatt hour than we would for conventional power.

In closing, your support of the Navy's fiscal year 2013 budget request will ensure that we can build and maintain the facilities that our Navy and Marine Corps need to meet the diverse challenges of tomorrow.

Thank you for the opportunity to testify before you today. I look forward to answering any questions you may have.
 [The prepared statement of Ms. Pfannenstiel follows:]

PREPARED STATEMENT BY HON. JACKALYNE PFANNENSTIEL

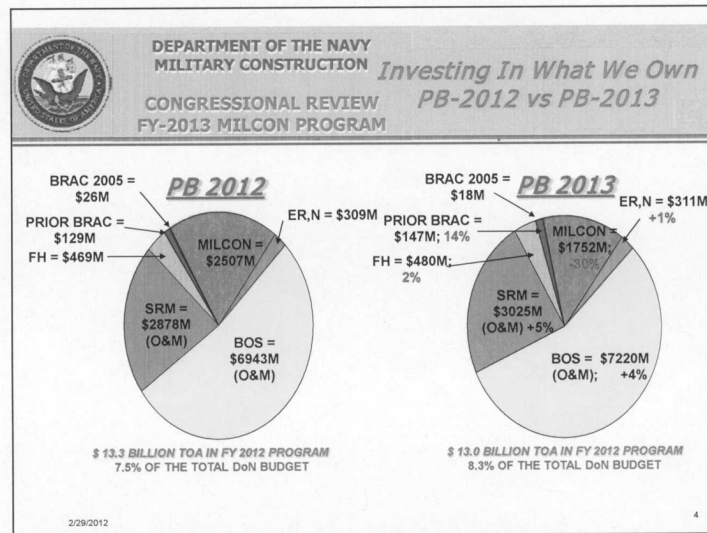
Chairman McCaskill, Senator Ayotte, and members of the subcommittee, I am pleased to appear before you today to provide an overview of the Department of the Navy's (DON) investment in its shore infrastructure.

THE NAVY'S INVESTMENT IN FACILITIES

Our Nation's Navy-Marine Corps team operates globally, having the ability to project power, effect deterrence, and provide humanitarian aid whenever and wherever needed to protect the interests of the United States. Our shore infrastructure provides the backbone of support for our maritime forces, enabling their forward presence. The Department's fiscal year 2013 budget request includes a \$13.0 billion investment in our installations, a decrease of \$0.3 billion from last year.

The fiscal year 2013 military construction (Active + Reserve) request is \$1.8 billion. Although significantly less than the fiscal year 2012 request of \$2.5 billion, it represents continued investment enhancing combatant commander's capabilities, improving servicemember's quality of life, supporting mission requirements, continued emphasis on energy security, and recapitalizing aging infrastructure.

The fiscal year 2013 family housing request of \$480 million represents a 2-percent increase from the fiscal year 2012 request. The Navy and Marine Corps continue to invest in housing, both the recapitalization of our overseas housing and additional privatization to recapitalize inadequate housing in the United States. Having privatized virtually all family housing located in the United States, we are investing in a "steady state" recapitalization effort to replace or renovate housing at overseas and foreign locations where we continue to own housing.



Our BRAC program consists of environmental cleanup and caretaker costs, as well as property disposal costs for prior round BRAC and BRAC 2005 locations. We do not foresee potential for large revenue from land sales, which were used to fund the legacy BRAC program from fiscal year 2005 through fiscal year 2008. Thus, we again seek appropriated funds in fiscal year 2013 in the amount of \$147 million. The fiscal year 2013 BRAC 2005 budget request of \$18 million supports ongoing environmental restoration, caretaker costs, and property disposal efforts. The Department has completed implementation of the BRAC 2005 recommendations. The DON

fully supports the Secretary's proposal for two additional rounds of BRAC to improve alignment of our shore footprint with our force structure.

Our fiscal year 2013 request for base operating support (BOS) is in excess of \$7.0 billion. The BOS program finances the operation of our DON shore infrastructure worldwide including programs that support ship, aviation and combat operations, public safety, security, installation management, housing and quality of life for both Active and Reserve components. To maximize the impact of our BOS funding, we continue to pursue and realize more cost effective ways of providing base support functions.

Finally, the Department's budget request invests \$1.0 billion in fiscal year 2013, and \$4.0 billion across the Future Years Defense Program (FYDP), to support DON's aggressive energy goals to increase energy security and reduce dependency on fossil fuels.

MILITARY CONSTRUCTION

The DON's fiscal year 2012 military construction program requests appropriations of \$1.8 billion, including \$105 million for planning and design and \$17 million for Unspecified Minor Construction.

The Active Navy program totals \$918 million and includes:

- \$176 million to fund eight combatant commander projects: At Camp Lemonnier, Djibouti: a joint operations center, a cold storage warehouse, containerized living/work units and a fitness center; in Souda Bay: an aircraft parking apron and an intermodal access road; and, in Bahrain: a bachelor quarters and dining facility.
- \$146 million to fund Quality of Life initiatives including a bachelor quarters at Naval Base Coronado, CA, in support of the Chief of Naval Operations' Homeport Ashore initiative; a training barracks at Naval Air Station Oceana, VA; a bachelor quarters in Okinawa, Japan; a dining facility at Naval Air Station Meridian, MS, and a fitness center at Naval Support Activity South Potomac, VA.
- \$280 million to fund the second increment of a second explosives handling wharf at Naval Base Kitsap, WA.
- \$284 million to fund twelve projects to achieve initial or final operational capability requirements for new systems and new missions: a general purpose warehouse and high explosive magazine at Naval Station Rota, Spain; an Aegis Ashore missile defense complex at Naval Support Facility Romania; a Broad Area Maritime Surveillance (BAMS) mission control facility at Naval Air Station Jacksonville, FL; a BAMS maintenance training facility at Beale AFB, CA; a H-60S simulator training facility at Naval Base Coronado, CA; a EA-18G flight simulator facility at Naval Air Station Whidbey Island, WA; a Littoral Combat Ship training facility at Naval Base San Diego, CA; drydock electrical distribution upgrades for CVN78 at Norfolk Navy Shipyard, VA; a cruiser/destroyer training facility at Naval Support Activity, South Potomac in Virginia; a combat system engineering building at Naval Weapons Station Earle, NJ, and a BAMS operational facility at an overseas location.
- \$32 million to fund additional critical Navy priorities: a strategic systems evaluation lab consolidation at Naval Weapons Station Seal Beach, CA, and communications infrastructure at Naval Support Facility, Diego Garcia.

The active Marine Corps program totals \$664 million and includes:

- \$18 million for the construction of unaccompanied housing at Naval Weapons Station Yorktown, VA, for the consolidation of the Marine Corps Security Force Regiment;
- \$13 million to provide quality of life facilities such as a mess hall at Quantico;
- \$31 million to construct student billeting for the Basic School in Quantico, VA;
- \$83 million to build infrastructure to support ingress/egress access at Marine Corps installations. These projects include road improvements, main gate improvements, anti-terrorism force protection posture improvements, and correct safety issues. These projects will have a direct effect on the quality of life of our marines along with alleviating both on-base and off-base community concerns;
- \$394 million to fund projects enhancing operational capability such as those needed for the MV-22 aircraft at Camp Pendleton, Hawaii, Miramar, and Yuma; Joint Strike Fighter at Beaufort and Iwakuni; and operational units in New River, Cherry Point, and Yorktown;

- \$53 million to provide training facilities at Camp Pendleton, Camp Lejeune, Beaufort, and Iwakuni;
- \$47 million for land expansion for MAGTF large-scale training exercises at Twentynine Palms;
- \$26 million for the second increment of the North Ramp Parking project at Anderson Air Force Base to support the relocation of marines to Guam.

The Navy and Marine Corps Reserve Military Construction appropriation request totals \$47 million and includes a Transient Quarters at Naval Air Station Joint Reserve Base New Orleans, LA, a Commercial Vehicle Inspection Site at Naval Air Station Joint Reserve Base Fort Worth, TX, a Joint Navy and Marine Corps Reserve Center at Des Moines, IA, a Marine Corps Reserve Training Center at Yuma, AZ, and a Vehicle Maintenance Facility at Brooklyn, NY.

FACILITIES MANAGEMENT

Facilities Sustainment, Restoration, and Modernization (SRM)

The Department of Defense (DOD) uses a Facilities Sustainment Model to calculate life-cycle facility maintenance and repair costs. The model uses industry-wide standard costs for various types of buildings and geographic areas and is updated annually. Sustainment funds in the operation and maintenance accounts are used to maintain facilities in their current condition. The funds also pay for preventative maintenance, emergency responses for minor repairs, and major repairs or replacement of facility components (e.g. roofs, heating and cooling systems).

The fiscal year 2013 budget request funds sustainment at 80 percent and 90 percent of the model's recommended levels for the Navy and Marine Corps, respectively. To maximize support for warfighting readiness and capabilities, the Navy has requested overall facilities sustainment at 80 percent of the DOD model level. To enhance the quality of education at our premier institutes of higher learning, we will continue to fund the Naval Academy, Naval War College, and Naval Postgraduate School at 100 percent of this model. Additionally, the Navy has targeted the allocation of sustainment funds to increase the sustainment and maintenance of unaccompanied housing. The Navy has minimized operational impacts and ensured the safety of our Sailors and civilians by prioritizing maintenance and repair efforts for facilities that directly affect mission operations such as piers, hangars, and communications facilities, as well as unaccompanied housing and family support centers. The Marine Corps will maintain sustainment funding at 90 percent of the model. Even this strong commitment will result in some facilities degradation. The Marine Corps will continue to prioritize and target facilities that directly affect mission operations for full sustainment.

Restoration and modernization provides major upgrades of our facilities. In fiscal year 2013, the DON is investing \$0.6 billion of Military Construction, and \$1 billion of Operation and Maintenance funding into restoration and modernization of existing facilities.

NAVAL SAFETY

Protecting the Department's sailors, marines, and civilian employees and their dependents remains one of our highest priorities. I consider continual, marked improvement in our safety performance to be essential to maintaining the highest state of operational readiness for our Navy and Marine Corps team. During fiscal year 2011, DON once again achieved recordsetting mishap rate reductions in numerous key mishap categories.

The Department continues to be a world-class safety organization, where, in step with civilian industry leaders, no avoidable mishap or injury is considered acceptable. In benchmarking against the Nation's largest, safest, and most productive commercial industries, we have recognized that our top initiative must be the development and deployment of a state-of-the-art Risk Management Information System (RMIS). RMIS will dramatically expand the quality and quantity of data available, improve DON safety information management and analysis, simplify reporting, enhance unit-level access to safety information, and automate unit-level safety program management. RMIS is a high priority for funding in our fiscal year 2014 budget.

Using fiscal year 2002 as a baseline, the Secretary of Defense established a goal for each Military Service and DOD Agency to achieve a 75 percent reduction in key mishap rates by the end of fiscal year 2012. By the end of fiscal year 2011, both the Navy and the Marine Corps achieved mishap rate reductions which exceeded the DOD-wide average reduction in each of the three primary mishap categories being tracked by the Office of the Secretary of Defense. The three mishap categories

and associated reductions from the fiscal year 2002 mishap rate baseline are depicted below:

(Percentage)

Mishap Category	USN Reduction	USMC Reduction	Average DOD-Wide Reduction
Private Motor Vehicle Fatality Rate ¹	60	47	39
Aviation Class A Flight Mishap Rate ²	49	42	39
Civilian Total Lost Day Rate ³	43	47	39

¹Rate is number of deaths per 100,000 military members.

²Rate is number of mishaps per 100,000 flight hours. A Class A Aviation Flight Mishap occurs when there was intent for flight and greater than \$2 million damage, total loss of an aircraft, a fatality, or an injury resulting in total permanent disability.

³Rate is days lost per 100 persons per year (more of a FECA case management than safety metric).

I am committed to sustained, continuous improvement and our hard work is paying dividends. At the end of fiscal year 2011, the Department achieved the lowest on- and off-duty fatality rates ever recorded in our history. Similarly, for the first time we achieved the lowest ever fatality rates for on-duty, private motor vehicle and off-duty/recreational mishaps in the same year. On the civilian side, over the past 10 years, the Department has witnessed declines in civilian total and lost time case rates of 39 percent and 36 percent, respectively. These reductions are in line with annual Presidential injury and illness rate reduction requirements.

I am pleased to report that the DON is the proud owner of nearly half of all DOD OSHA VPP (Voluntary Protection Program) Star sites, and we recently recognized three OCONUS installations in Japan as VPP Star equivalent sites. Implementation of safety management systems, such as VPP, will be an important tool for our continued improvement in Department-wide safety results.

ENERGY

The DON is committed to implementing an energy program that enhances our national security by reducing our dependence on imported fossil fuels. Its platform is that energy security is national security. The energy program is comprehensive—it involves both Services and contains initiatives to reduce energy demand and provide alternative forms of energy supplies on shore, afloat, in the air, and in theater.

The Department is a recognized leader and innovator in the energy industry by the Federal Government and private sector as well. Over the past decade, DON has received almost a quarter of all of the Presidential awards and nearly a third of all of the Federal energy awards. Additionally, DON has received the Alliance to Save Energy “Star of Energy Efficiency” Award and two Platts “Global Energy Awards” for Leadership and Green Initiatives.

Goals and Initiatives

The program for which fiscal year 2013 funding is sought will exceed the goals established by the Energy Independence and Security Act of 2007, Energy Policy Act of 2005, National Defense Authorization Act of 2007 and 2010, Executive Orders 13423 and 13514.

The Secretary of the Navy has set five aggressive department-wide goals to reduce DON’s overall consumption of energy, decrease its reliance on petroleum, and increase its use of alternative energy. Meeting these goals requires that the Navy and Marine Corps value energy as a critical resource across maritime, aviation, expeditionary, and shore missions.

The goals are:

- By 2020, 50 percent of total DON energy will come from alternative energy resources,
- By 2020, DON will produce at least 50 percent of shore based energy requirements from alternative resources and 50 percent of Department installations will be net-zero,
- DON will demonstrate a Green Strike Group in local operations by 2012 and sail the Great Green Fleet by 2016,
- By 2015, DON will reduce petroleum use in commercial vehicles by 50 percent,
- Evaluation of energy factors will be used when awarding contracts for systems and buildings.

A myriad of investments and activities will be directed to meeting the Secretary’s goals. Principally, they will be geared toward behaviors and technologies that will reduce the Navy and Marine Corps’ overall requirements for energy and tech-

nologies that can provide adequate substitutes for fossil-based energy. Two significant initiatives will be:

- The development of a biofuel alternative to the liquid fuels used in ships, tanks, and tactical vehicles. To meet the goal of 50 percent of total DON energy from alternative energy, the DON has partnered with the DOE and USDA to collectively pool \$510 million to spark development of the commercial advanced alternative fuels industry. The DON is using authorities provided by the Defense Production Act (DPA) Title III for its contribution. This effort will help to obtain the 8 million barrels of biofuel needed by 2020. The alternative fuel must be available at prices competitive with the conventional petroleum fuels being replaced; it must not have negative consequences for the food chain; and it must be a “drop-in”, that is, not requiring infrastructure or operational changes.
- Development of a gigawatt of renewable energy generation on DON installations. Pursuant to meeting the 50 percent shore energy goal, the Secretary has directed the establishment of a task force to facilitate the production of large-scale renewable power where possible on the bases. This development will use existing third-party financing mechanisms such as power purchase agreements, joint ventures and enhanced use leases. The projects will cost no more over their life than conventional energy sources.



Funding

The Department has budgeted \$1.0 billion in fiscal year 2013 and approximately \$4.0 billion across the FDYP for operational and shore energy initiatives. The strategy for executing these initiatives focuses on reducing our dependence on petroleum, lowering our energy cost, and complying with Federal legislation and energy mandates.

The funding sources are:

O&M Navy: Projects would include propeller coatings, in-port ship energy conservation, Advanced Metering Infrastructure, combustion system improvements, Aviation & Maritime training in support of best practices for energy conservation (ENCON) and facility energy audits and facility energy efficiency upgrades.

O&M Marine Corps: Projects would include completion of energy audits, shelter liners, advanced power systems, renovated HVAC system to increase efficiency, and completed SMART metering projects.

National Defense Sealift Fund (NDSF)/Other Procurement Navy: Projects would include Shipboard Lighting Upgrades, shore power management/monitoring systems, ship engine automation upgrades.

Research, Development, Test, and Evaluation: Projects would include undersea power systems, energy storage and power management, the ship-board energy dashboard, water purification technologies, manportable electric power units, and energy storage and distribution.

Achievements

The Department is on track to meet its goals, and throughout 2011, we demonstrated progress through an assortment of energy programs, partnerships, and initiatives. This past summer, the Blue Angels flew all six planes on biofuels during their 2-day air-show at NAS Patuxent River.

Since flying the F/A18, dubbed 'The Green Hornet', at MACH 1.7 in 2010 as part of the test and certification process using a 50-50 blend of Camelina based JP-5, the Department has also successfully conducted test and certification on the MH-60 Seahawk helicopter, AV-8B Harrier, E-A6B Prowler, MQ-8B Fire Scout, T-45C Goshawk, MV-22 Osprey, ran a Riverine Command Boat, Landing Craft Air Cushion (LCAC), Landing Craft Utility (LCU), 7m Rigid Hull Inflatable Boat (RHIB), the ex-USS *Paul F Foster*, and an Allison 501K turbine generator. The DON also partnered with Maersk to run a large merchant ship on renewable biofuel. These tests represent milestones necessary to meet the goal of sailing the Great Green Fleet in 2016.

The USS *Makin Island*, using a hybrid-electric drive to dramatically lower its fuel usage at slow speeds is currently deployed to the Pacific region on its maiden operational deployment. The Navy is continuing to move forward with installation of a similar system on new construction guided missile destroyers and to look at the feasibility of retrofitting the fleet with these systems in the course of routine shipyard availabilities.

Additional energy initiatives, such as propeller and hull coatings, were undertaken to make the existing inventory of ships more energy efficient. Stern flaps will also assist in reducing energy consumption, as will some combustor modifications and systems to monitor ship-wide energy use. Energy conservation programs were also put in place for both ships and aircraft to educate and incentivize the Fleets to reduce energy consumption and identify inefficient activities for improvement. The future Navy will use advanced materials on propellers, energy storage and power management systems, and advanced propulsion technology to make warships more efficient while allowing them to meet their combat capability.

Last year, the marines tested equipment that could be deployed on battlefields at their Experimental Forward Operating Bases (ExFOB) at Twentynine Palms. Technologies tested at the ExFOB are now deployed with marines in Afghanistan. Solar power generators and hybrid power systems are reducing the amount of fossil fuel needed to operate in a combat zone. This year's ExFOB will concentrate on wearable electric power systems and lightweight manportable water purification systems. By deploying these technologies, the marines have proven that energy efficiency means combat effectiveness and increased safety for our deployed servicemembers as fewer convoys are needed to resupply fuel.

In addition to these tactical and platform applications, the DON has 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. We have awarded three projects under our Solar Multiple Award Contracts (MAC) in the Southwest (SW) and are finalizing a similar solar MAC for Hawaii. One of the SW solar MAC awards will provide 13.8 MW of solar power at NAWS China Lake. This project will save the Department \$13 million over 20 years while also providing security from electric grid outages. The Hawaii solar MAC will install 28 MW of solar PV on DON installations including covering the runway on Ford Island with PV thus recreating the look of the runway as seen from the air. We are also looking at developing our wind resources, exploring Waste to Energy projects and developing ocean power technology at all DON installations.



We are also aggressively conducting facility energy audits while completing installation of “Smart” electric metering to implement a wide range of facility energy efficiency measures. By the end of this year, over 27,000 meters will be installed in our existing facilities and provide the means to better measure the amount of energy we are consuming. This will allow for our energy managers to provide ‘real-time’ feedback to our leaders on our installations. At the same time, we continue to ensure that new construction is built to LEED Silver standards per the 2012 NDAA.

DON continues to explore how to implement and maintain culture change initiatives, beginning with education and training, to ensure that energy management is understood by all personnel to be a priority in tactical, expeditionary, and shore missions. Energy awareness campaigns will be used to encourage personal actions that show commitment to energy program goals. The Naval Postgraduate School has added an energy program to its curricula and we are partnering with the National Defense University to pilot two culture change demonstrations. The pilots, at MCB Camp Lejeune and NAVSTA Mayport, will focus on raising the energy awareness of civilian and military personnel.

The Department will continue to cultivate strategic partnerships with existing and new organizations to leverage our energy goals. By partnering with Federal agencies, such as the Department of Energy, the Department of Interior, the Department of Agriculture, and the Small Business Administration, we are raising the awareness at all governmental levels of the strategic importance of energy within DON. In addition, we are working with academic institutions and private industry to bring innovative ideas and approaches to the forefront.

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.

RELOCATING THE MARINES TO GUAM

On February 8, 2012, the U.S. Government and Government of Japan acknowledged that they were meeting to discuss potential adjustments to the 2006 Realignment Roadmap. Both governments remain committed to the establishment of an operational Marine Corps presence on Guam. We believe that the adjustments to the Guam force laydown that are being considered will be responsive to congressional concerns, while also maintaining and enhancing peace and security in the Asia-Pacific region, one of two regions emphasized in the January 2012 Defense Strategic Guidance. Bilateral discussions have only just begun and I expect that more information will be available in the next couple of months. The Department will keep Congress informed of these discussions and, upon a final decision on the Guam laydown, will provide you with updates on our planning, programming and execution strategies for implementing any adjustments.

The fiscal year 2013 budget request includes \$26 million to construct facilities in support of the relocation of marines from Okinawa to Guam. The project funds the second increment of a facility necessary to support the relocating aviation element and, upon completion of both increments, will provide aircraft parking apron, taxiways, lighting, wash racks and supporting utilities at Andersen Air Force Base. This project supports the relocating aviation element and is required regardless of the final force laydown on Guam. In its JFY-12 budget (which runs April 1, 2012 through March 31, 2013), the Government of Japan has requested \$8 million in design funds for its direct cash contribution. The JFY-12 budget request also includes \$83 million in funding for utilities financing, pursuant to the Realignment Roadmap, for water and power projects.

The Government of Japan remains committed to both the realignment of Marine Corps forces to Guam and the Futenma Replacement Facility. Of the \$6.09 billion Japanese share, \$834 million in direct cash contributions have been received to date. The Government of Japan has also committed to making concrete progress on the Futenma Replacement Facility. In December 2011, the Government of Japan delivered an Environmental Impact Statement to the Governor of Okinawa, a necessary precursor to the signing of the landfill permit. Further progress on the Futenma Replacement Facility and future Japanese financial contributions to the Guam realignment will be discussed in detail during ongoing bilateral negotiations.

A Record of Decision (ROD) for the Guam military realignment was signed in September 2010. The first military construction contracts were awarded following the ROD. Construction activity funded by both the U.S. and Government of Japan at Apra Harbor and Andersen Air Force base is now ongoing.

In response to public concerns regarding access to cultural sites near the preferred alternative site for the live-fire training range complex, a decision on the location for the live-fire training range complex was deferred in the September 2010 ROD. In January 2011, the DON committed that training activities would be conducted in a manner such that access to these sites would remain available 24 hours per day, 7 days per week as is currently available today. The DON has evaluated options to satisfy this commitment while fully meeting the training requirements of the relocating marines. It was determined that a Supplemental Environmental Impact Statement (SEIS) would be necessary prior to making a final decision on the location of the live-fire training range complex. Litigation regarding the live-fire training range complex was dismissed in December 2011 following the Navy's commitment to prepare the SEIS.

A Notice of Intent was published on February 9, 2012, which formally began the SEIS process. The SEIS is expected to take approximately 2 years to complete. Upon completion of the SEIS and the selection of a location for the training range complex, the DON will work with the Government of Guam and any affected private land owners in order to secure property necessary to meet training requirements.

Guam remains an essential part of the United States' larger Asia-Pacific strategy, which includes developing the island as a strategic hub and establishing an operational Marine Corps presence. DOD recognizes Congress' concerns regarding execution of the Guam military realignment as outlined in the National Defense Authorization Act (NDAA) for Fiscal Year 2012 and is taking steps necessary to resolve critical issues that will allow the construction program to move forward. The United States and Japan are continuously looking for more efficient and effective ways to achieve the goals of the Realignment Roadmap. Both countries remain committed to maintaining and enhancing a robust security alliance, and the United States remains committed to enhancing the U.S.-Japan Alliance and strengthening operational capabilities while significantly reducing the impact of U.S. bases on the Okinawan people.

HOUSING

The following tenets continue to guide the Department's approach to housing for sailors, marines, and their families:

- All servicemembers, married or single, are entitled to quality housing;
- and
- The housing that we provide to our personnel must be fully sustained over its life.

A detailed discussion of the Department's family and unaccompanied housing programs, and identification of those challenges, follows:

Family Housing

As in past years, our family housing strategy consists of a prioritized triad:

- Reliance on the Private Sector. In accordance with longstanding DOD and DON policy, we rely first on the local community to provide housing for our sailors, marines, and their families. Approximately three out of four Navy and Marine Corps families receive a Basic Allowance for Housing (BAH) and own or rent homes in the community. We determine the ability of the private sector to meet our needs through the conduct of housing market analyses that evaluate supply and demand conditions in the areas surrounding our military installations.
- Public/Private Ventures (PPVs). With the strong support from this committee and others, we have successfully used PPV authorities enacted in 1996 to partner with the private sector to help meet our housing needs through the use of private sector capital. These authorities allow us to leverage our own resources and provide better housing faster to our families. Maintaining the purchasing power of BAH is critical to the success of both privatized and private sector housing.
- Military Construction. Military construction (MILCON) will continue to be used where PPV authorities do not apply (such as overseas), or where a business case analysis shows that a PPV project is not feasible.

Our fiscal year 2013 budget includes \$102 million in funding for family housing improvements (including planning and design). This request provides for the revitalization of approximately 200 Navy and Marine Corps housing units in Japan and Guam and the second phase of privatization in the Pacific Northwest, involving almost 900 homes. The budget request also includes \$378 million for the operation, maintenance, and leasing of remaining Government-owned or controlled inventory.

The Navy and Marine Corps privatized family housing inventory consists of over 63,000 homes. With over 90 percent of the housing stock privatized, our focus, and my priority, continues to be the oversight of the Department's privatized housing portfolio to ensure that the public/private ventures are financially viable and self-sustaining, that our private partners meet their obligations under the governing business agreements and that residents are satisfied with both their housing and the services they receive.

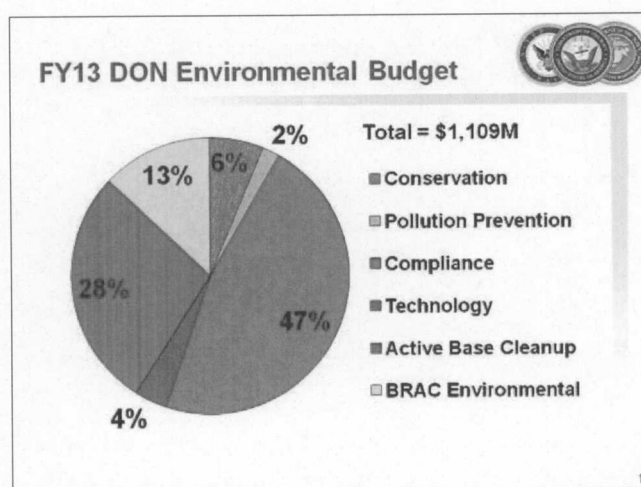
Surveys continue to reflect steady, significant improvement in reported resident satisfaction. Where issues have been identified, the Department has worked with the partners to resolve them as quickly as possible. We have taken, or are taking, a number of actions to further strengthen our oversight. These include:

- Identifying and flagging key indicators (e.g., number and type of service calls, response times);
- Identifying common issues and trends identified in comments provided along with resident surveys;
- Increasing and reinforcing resident awareness of the Services' role in privatized housing and advocacy for members and their families; and
- In conjunction with the partners, developing a risk communications plan to respond to resident concerns.

Unaccompanied Housing

Our budget request includes over \$133 million in funding for the construction of unaccompanied housing and student quarters to support over 1,000 single sailors and marines. This includes an \$76 million unaccompanied housing project at Naval Base Coronado, CA to support the Chief of Naval Operations commitment to achieve the Navy's "Homeport Ashore" objective by 2016.

The following are areas of emphasis within the Department regarding housing for single sailors and marines:



- Provide Homes Ashore for our Shipboard Sailors. The Homeport Ashore initiative seeks to provide a barracks room ashore whenever a single sea duty sailor is in his or her homeport, so they need not live on the ship. The Navy has made considerable progress towards achieving this goal through military construction, privatization, and intensified use of existing barracks capacity. The Navy remains on track to provide housing ashore for all junior single sailors, assigned to sea duty, by 2016.
- Condition of Unaccompanied Housing. The Department continues to address the challenge of improving the condition of existing Navy and Marine Corps unaccompanied housing. The Navy has increased its level of Restoration and Modernization funding targeted to unaccompanied housing across the FYDP to ensure that 90 percent of the Navy's unaccompanied housing inventory is adequate by fiscal year 2022. With the construction of a large amount of new housing under the recently completed Commandant's BEQ initiative, almost 90 percent of the Marine Corps' unaccompanied housing is now considered adequate.

ENVIRONMENT

In fiscal year 2013, DON is investing over \$1 billion in its environmental programs across all appropriations. This level of investment has remained relatively consistent over the past few years. The relative distribution of environmental funding across the environmental program areas, as displayed within the chart to the right, remains stable.

While fulfilling its national security mission, DON continues to be a Federal leader in environmental management by focusing our resources on achieving specific environmental protection goals and proactively managing emerging environmental issues. The Department continues its commitment to environmental compliance, stewardship and responsible fiscal management that support mission readiness and sustainability. In this regard, DON is continuing efforts to integrate sound environmental policies and long-term cost considerations into the early stages of the acquisition process to achieve cleaner, safer, more energy-efficient and affordable weapons, materials, processes, and technologies across the naval enterprise.

Compliance—Sustainability

The Department's environmental budget will ensure continued compliance with existing regulations, while also smartly investing in a more agile and sustainable Navy and Marine Corps. Sustainability is seen by DON as a means of supporting our mission while also reducing lifecycle costs. DON has instituted many policies and practices implementing sustainability tenets including retrofitting/constructing buildings to optimize energy and water use, adopting goals for renewable energy use and stormwater management on facilities, and conducting integrated solid waste management.

As an example, to reduce afloat solid waste, Naval Supply Systems Command (NAVSUP) has several packaging initiatives underway. These include two programs (Plastics Removal In Marine Environment (PRIME) and Waste Reduction Afloat Protects the Sea (WRAPS)) that reduce the amount of solid waste generated at sea and encourage use of environmentally friendly products. Under these programs, NAVSUP is working with the General Services Administration (GSA) to identify items that can be shipped with reduced packaging that is free of plastics and is implementing a reusable water bottle pilot project. NAVSUP is also working with GSA on industry packaging strategies that shift the mindset from point of sale packaging to e-commerce packaging that features recyclable boxes that are easy to open and free of excess materials such as hard plastic clamshell cases, plastic bindings, and wire ties.

National Ocean Council

The National Ocean Council (NOC) is a Cabinet-level body established by Executive Order in July 2010 which includes a mandate for the use of spatial planning as a tool to maximize compatible use. Including the DON, there are 27 Federal agencies and offices tasked to develop a comprehensive national ocean policy which uses ecosystem based management and coastal and marine spatial planning as foundational building blocks. The DON is extensively engaged in supporting the President's NOC goals while working to ensure our current operating areas remain accessible within the comprehensive national ocean policy: for the first time comprehensive spatial planning is being conducted in the Exclusive Economic Zones (EEZs) including the western Pacific, Alaska and the Arctic, the Gulf of Mexico, and the Caribbean. DON is supporting the NOC in a variety of activities, including collecting and developing information about military activities in the coastal and marine zone, writing strategic plans, serving as the Federal co-lead for the South Atlantic Regional Planning Body, and participating in developing Coastal and Marine Spatial Plans for each of the nine identified regions.

The Department participates in numerous interagency ocean-policy working groups formed under the NOC. The DON also participated in developing the NOC Implementation Plan, which was released to the public in January 2012. To foster more effective Federal engagement with tribal governments regarding coastal and marine spatial planning, DON is coordinating delivery during 2012 of the DOD Tribal Communications and Coastal and Marine Spatial Planning courses to participants from all four Military Services plus the President's Council on Environmental Quality, the U.S. Coast Guard, National Oceanic and Atmospheric Administration, and Bureau of Ocean Energy Management.

Chesapeake Bay

After issuing the Chesapeake Bay Strategy in May 2010, the Department continues to demonstrate environmental leadership working with the other Federal agencies to achieve Chesapeake Bay restoration goals. DON represents DOD as the Executive Agent for the Chesapeake Bay program. As such, DON has participated with the Federal Leadership Council to ensure that the Strategy sets forth aggressive, measurable, and attainable goals to restore the health of the Chesapeake Bay, a National Treasure. DON continues working with the States as they develop their Watershed Implementation Plans. Our goal is to identify our nutrient and sediment sources, prioritize areas for nutrient and sediment reduction projects, and implement these projects to meet or exceed our reduction targets.

Natural Resources Conservation

DON natural resources program managers continue to provide installation commanders with special subject matter expertise, products and services necessary to ensure they can access, test, train, and execute construction projects with as little environmental constraint as possible, while also protecting the natural resources under our stewardship. The basis of our conservation program centers on the preparation and implementation of Integrated Natural Resources Management Plans (INRMPs). These plans integrate natural resources management with the installation's operational and training requirements as well as address the needs of our Federal and State partners and other stakeholders to ensure our INRMPs remain current and effective. A primary objective of our INRMPs is to implement conservation measures which protect threatened and endangered species and their habitat as required by the Endangered Species Act, which can help to reduce or eliminate the need to designate critical habitat on DON property. The Department has been very successful in protecting and conserving natural resources on our installations and near-shore areas while ensuring our installation commanders have the land, sea and airspace necessary to test and train in a realistic manner.

A recent noteworthy accomplishment involved the installation of a living shoreline at Naval Support Activity Panama City, FL. The Navy partnered with the Florida Department of Environmental Protection to restore approximately 2,800 feet of shoreline. This shoreline was restored by establishing 175 separate reefs created from recycled oyster shells obtained from local restaurants and plantings of approximately 22,000 donated marsh grasses. This living shoreline is a natural substitute for the typical hardened sea wall or rip rap that would otherwise be necessary to address years of erosion from natural and manmade causes. This enduring project was supported by 2,840 volunteer hours, both military and civilian, who worked together to provide this living shoreline which will support interactive educational opportunities provided by the Navy.

Cultural Resources Conservation

Cultural resources under the Department of Navy's stewardship include infrastructure, ships, and objects of our Navy and Marine Corps heritage; vestiges of our Colonial past; and Native American/Alaskan Natives/Native Hawaiian resources. We take great pride in our heritage, and the many cultural resources on our installations serve as reminders of the long and distinguished course we have charted and of those who lived on the lands before they were incorporated into our bases. The objective of the Department's cultural resources program is to balance our current and future mission needs with our stewardship responsibility to the American taxpayer and our desires to preserve our cultural heritage for future generations. The primary mechanism to achieve these goals is an Integrated Cultural Resources Management Plan (ICRMP), which remains the key mechanism for gathering information about an installation's history and resource inventory, assessing potential use/reuse candidates with our built environment and ensuring that our installation planners and cultural resources managers are working closely together to protect cultural resources while supporting the DON mission.

To increase awareness of many of the Nation's cultural resources under the stewardship of DON, this past year, the Marine Corps began the development of a poster series, titled "Defending Our Cultural Heritage," that celebrates and educates the public on Marine Corps stewardship of cultural resources. The initial four posters in this series highlight the National Historic Landmarks under Marine Corps stewardship, as well as the partnership initiative with the Advisory Council on Historic Preservation, the National Park Service, and the State Historic Preservation Offices in the four States represented by these posters.

Installation Restoration Program (IRP)

The DON continues to make significant progress remediating past contaminants. At the end of fiscal year 2011, the Department had completed cleanup or has remedies in place at 86 percent of the 3,909 contaminated sites on active installations. We are projecting that all but 46 of these sites will be cleaned up or have remedies in place by 2014. These remaining sites will be subject to newly established DOD metrics to drive successful completion in the coming years.

Munitions Response Program (MRP)

The DON is proceeding with investigations and cleanup of Munitions and Explosives of Concern and Munitions Constituents at all Navy and Marine Corps munitions response sites. Our major focus through fiscal year 2011 was initiating remedial investigations and completing site inspections for newly identified sites. Of the 361 sites in the program, site inspections have been completed at 99 percent of these sites, with only one remaining. This site had a removal action underway that was necessary prior to the start of the investigation. Additional funding was also obligated to address high priority sites at Vieques, PR. DON is using the results of the completed site inspections to prioritize the next phases of work. DON plans to achieve cleanup or remedies in place at 99 percent of MRP sites by fiscal year 2020, with the remaining five sites reaching remedy in place by fiscal year 2024.

Marine Mammals

The DON is continuing its focused research and monitoring programs addressing marine mammals and anthropogenic sound. The Navy is investing over \$25 million per year to continue research into the effects of sound on marine mammals, develop products and tools that enable compliance with marine mammal protection laws for Navy training and operations, provide a scientific basis for informed decisionmaking in regulatory guidance and national/international policy, continue research to define biological criteria and thresholds, and to predict location, abundance, and movement of high risk species in high priority areas.

Using our improved scientific knowledge developed from our research, the Navy has started a second round of environmental documentation focused on marine

mammal and sound issues. Phase II Environmental Impact Statements will include all of the spatial areas covered by Phase I, plus increased coverage to include parts of the global commons.

COMPATIBLE LAND USE

The DON has an aggressive program to promote compatible use of land adjacent to our installations and ranges, with particular focus on limiting incompatible activities and protecting important natural habitats. A key element of the program is Encroachment Partnering, which involves cost-sharing partnerships with States, local governments, and conservation organizations to acquire interests in real property adjacent and proximate to our installations and ranges. Encroachment Partnering agreements help prevent development that would adversely impact existing or future missions. These agreements also preserve important habitat near our installations in order to relieve training or testing restrictions. The program has proven to be successful in leveraging DOD and Department of Navy resources.

DOD provides funds through the Readiness and Environmental Protection Initiative (REPI) that are used in conjunction with Navy and Marine Corps O&M funds to leverage acquisitions in partnership with states, local governments and non-governmental organizations. For fiscal year 2011, the Marine Corps acquired restrictive easements over 3,349 acres. REPI and Marine Corps funds totaled \$3.4 million while the encroachment partners provided \$3.6 million. The Navy acquired 1,908 acres with combined REPI and Navy funds of \$9.36 million and \$6.4 million provided by partners.

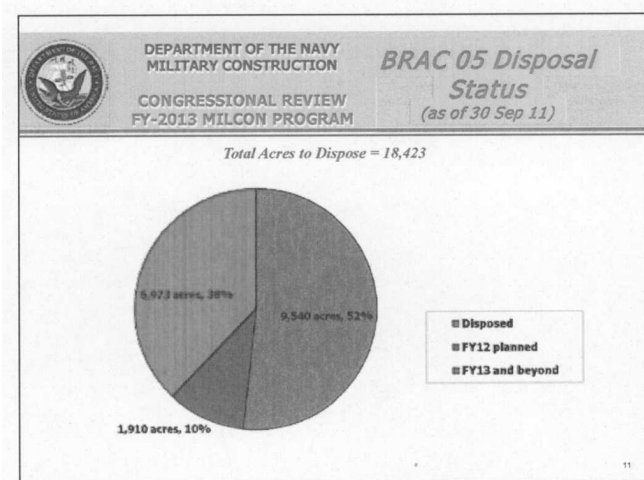
To date, the marines have acquired restrictive easements for 33,862 acres of land with \$50.8 million of REPI and Marine Corps funding. Encroachment partners have contributed \$55.7 million. The Navy has acquired 9,851 acres to date with \$28.4 million of REPI and Navy funding, and \$35.5 million contribution from encroachment partners.

Vital to the readiness of our Fleet is unencumbered access to critical water and air space adjacent to our facilities and ranges. An example is the outer continental shelf (OCS) where the vast majority of our training evolutions occur. The Department realizes that off-shore energy exploration and wind development play a crucial role in our Nation's security and are not necessarily mutually exclusive activities with military training. Therefore, we are engaging with the other Services, the Office of the Secretary of Defense, and the Department of Interior to advance the administration's energy strategy. We are poised to coordinate with commercial entities, where feasible, in their exploration and development adjacent to installations and our operating areas along the OCS that are compatible with military operations. However, we must ensure that obstructions to freedom of maneuver or restrictions to tactical action in critical range space do not degrade the ability of naval forces to achieve the highest value from training and testing.

BRAC IMPLEMENTATION

BRAC 2005 Implementation

The Department met its legal obligations by the statutory deadline of September 15, 2011 and successfully implemented all required realignment and closure actions as specified in our established business plans. Going forward, our fiscal year 2013 budget request of \$18 million enables ongoing environmental restoration, caretaker, and property disposal efforts at BRAC 2005 installations.



BRAC 2005 provided an important opportunity to improve operational efficiencies, reduce excess infrastructure, add joint bases, and produce savings. In total, the Department led 33 recommendations which involved 484 realignment and closure actions and 118 BRAC construction projects. We invested our dollars to build state-of-the-art facilities which vary in function from administrative to industrial to research and development that are necessary to support our warfighters.

During the past year, DON closed Naval Air Station Brunswick, ME, Naval Air Station Joint Reserve Base Willow Grove, PA and the Naval Support Activity New Orleans, LA along with a number of Navy Marine Corps Reserve Centers. The Department established the Marine Corps Support Facility in the first-of-its-kind Federal City New Orleans. We led the effort and completed the relocation of five DOD Investigative, Counterintelligence and Security agencies to Marine Corps Base Quantico. The Department invested over \$400 million on construction and outfitting of 11 facilities to establish a state of the art Research, Development, Acquisition, Test and Evaluation center for Integrated Weapon System and Armaments and Fixed Wing Air Platforms at Naval Air Warfare Center China Lake, CA.

By the end of fiscal year 2011, the Department disposed of 52 percent of the property that was slated for closure in BRAC 2005. These disposal actions were completed via a combination of lease transfers and terminations, reversions, public benefit conveyances, Federal and DOD agency transfers and an Economic Development Conveyance (EDC). Of interest for fiscal year 2011 is the conveyance of 1,133 acres at Naval Air Station Brunswick to several recipients using various real estate authorities supporting economic redevelopment of the community and public uses, such as education and parks.

For 2012, the Department will continue its disposal efforts at Brunswick with another 1,593 acres planned for conveyance. The 2012 Plan also includes transfer of remaining real property at Naval Station Ingleside, TX, Marine Corps Support Activity Kansas City, MO and Naval Support Activity New Orleans, LA. Other significant disposals include completing all disposal actions at five smaller facilities.

Naval Support Activity New Orleans, LA: Construction for the new building that houses Headquarters, Marine Forces Reserve and Marine Corps Mobilization Command was completed in June 2011.

Naval Air Station Brunswick, ME: The Department's largest BRAC 2005 operational action closed Naval Air Station Brunswick and consolidated the East Coast maritime patrol operations in Jacksonville, FL. Runway operations in Brunswick ceased in February 2010. The closure ceremony occurred in May 2011. The disposal of NAS Brunswick has been a stunning success story to support the reuse and economic redevelopment of the base and mid-coast Maine. Almost 1,200 of the base's 3,400 acres have already been disposed. This includes 750 acres of runway and aviation facilities to start a private airport before the base even closed, and almost 300 acres through an EDC. This EDC was transferred at Fair Market Value with Navy receiving a portion of the mixed use redevelopment proceeds for the next 20 years.

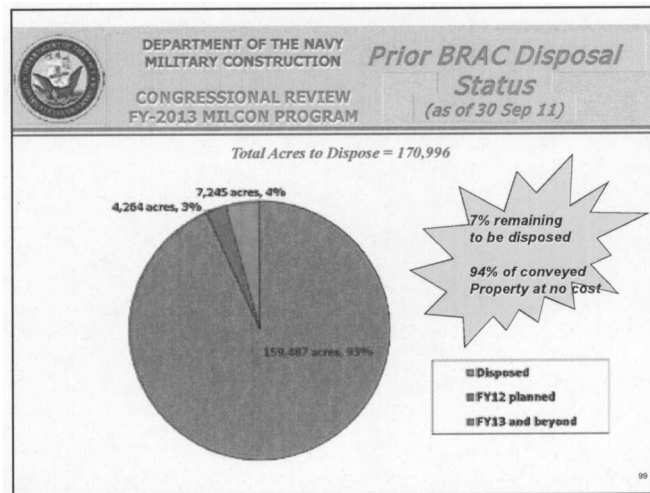
Smaller conveyances have also been made to the local community college for classroom facilities and to the Town of Brunswick for parks and recreation reuse.

Over the last year, we spent \$16 million in cleanup at BRAC 2005 locations. The majority of this funded environmental activities at Naval Air Station Brunswick, ME, Naval Weapons Station Seal Beach Detachment Concord, CA, and Naval Air Station Joint Reserve Base Willow Grove, PA. Our remaining environmental cost to complete for fiscal year 2012 and beyond is \$189 million.

Prior BRAC

The BRAC rounds of 1988, 1991, 1993, and 1995 were a major tool in reducing our domestic installation footprint and generating savings. All that remains is to complete the environmental cleanup and property disposal on portions of 14 of the original 91 bases and to complete environmental cleanup, including long-term monitoring at 26 installations that have been disposed.

We disposed of 839 acres of real property in fiscal year 2011, for a total of 93 percent of real property disposed in the first four rounds of BRAC. In fiscal year 2011, we completed the disposal of nearly 400 acres at the former Naval Air Station Barbers Point, HI to the city and county of Honolulu via a National Parks Service sponsored public benefit conveyance. This will allow the city and county of Honolulu to develop much needed parks, ball fields, and preserve open space in the rapidly developing Kalaheo area of Oahu. We continue to use the variety of the conveyance mechanisms available for Federal Property disposal, including the Economic Development Conveyance that was created for BRAC properties. Ninety-one percent of the property conveyed has been at no consideration to the Federal Government. Our fiscal year 2013 budget request of \$147 million will enable us to continue disposal actions and meet the legal requirements for environmental cleanup.



With 64 percent of our remaining property requiring supplemental National Environmental Policy Act (NEPA) analysis and completion of environmental remediation activities, disposal actions will continue after fiscal year 2012. Due to changing redevelopment plans, we are finalizing Supplemental NEPA analyses at Naval Shipyard Hunters Point, CA and recently completed efforts at Naval Station Roosevelt Roads, PR.

In fiscal year 2012, we have already conveyed nearly 600 acres at Naval Air Station South Weymouth, MA and over 1,000 acres at Naval Station Roosevelt Roads via EDCs. Other significant actions include the initiation of a public sale at Naval Station Roosevelt Roads, PR, for about 2,033 acres and the initial impending conveyance of property at Naval Station Treasure Island via an EDC. With the completion of these actions, we will have disposed of 96 percent of our prior BRAC real properties.

The Department has now spent about \$4.6 billion on environmental cleanup, environmental compliance, and program management costs at prior BRAC locations through fiscal year 2011. Our remaining environmental cost to complete for fiscal

year 2012 and beyond is approximately \$1.36 billion. This includes about \$150 million cost growth, which is due in part to additional radiological contamination at Naval Air Station Alameda, CA, Naval Station Puget Sound, WA and Naval Station Treasure Island, CA. The increase is also associated with ground water cleanup at sites at Naval Air Station Moffett Field, CA and additional investigation and remediation at Naval Shipyard Mare Island, CA.

BRAC Summary

The Department met its legal obligation to complete the BRAC 2005 closure and realignment actions by September 15, 2011. While the relocation of Navy organizations from leased locations in the National Capital Region to DOD owned space continues to require some effort, we expect to be fully complete this spring.

For the Prior BRAC installations, we transferred 1,041 acres at Naval Station Roosevelt Roads, PR and 557 acres at Naval Air Station South Weymouth, MA to the respective Local Redevelopment Authorities. Additionally, we are working with the Naval Station Treasure Island Local Redevelopment Authority to complete the first transfer of property required for the construction of the Oakland Bay Bridge. Although the remaining prior round BRAC installations present cleanup and disposal challenges, we continue to work with regulators and communities to tackle complex environmental issues, such as low-level radiological contamination, and provide creative solutions to support redevelopment priorities, such as Economic Development Conveyances with revenue sharing.

CONCLUSION

Our Nation's Sea Services continue to operate in an increasingly dispersed environment to support the maritime strategy and ensure the freedom of the seas. We must continue to transform and recapitalize our shore infrastructure to provide a strong foundation from which to resupply, re-equip, train, and shelter our forces. With your support of the Department's fiscal year 2013 budget request, we will be able to build and maintain facilities that enable our Navy and Marine Corps to meet the diverse challenges of tomorrow.

Thank you for the opportunity to testify before you today. I look forward to working with you to sustain the war fighting readiness and quality of life for the most formidable expeditionary fighting force in the world.

Senator MCCASKILL. Thank you very much.
Mr. Yonkers?

STATEMENT OF HON. TERRY A. YONKERS, ASSISTANT SECRETARY OF THE AIR FORCE FOR INSTALLATIONS, ENVIRONMENT, AND LOGISTICS

Mr. YONKERS. Thank you, Madam Chairman, Ranking Member Ayotte.

It is a pleasure to be here today and have the opportunity to talk to you about the Air Force's installation, environment, and energy programs and again to say thank you to this committee for the strong, unwavering support that you give to our airmen in our Air Force every day.

Our fiscal year 2013 budget request responds to two main drivers. The first is the BCA that Congress put into place last year. The second is the new strategic policy that the President and Secretary Panetta announced in January.

As the Air Force prepared our fiscal year 2013 budget, we looked across the entire enterprise—nothing was left off the table—and made the difficult decisions to achieve the Air Force's share of the \$487 billion mandated by the BCA.

In our installations, MILCON, and environmental portfolios, we are focusing on investments in critical infrastructure needed to sustain our air bases and quality-of-life improvements for our airmen and their families. We are requesting funding to meet the COCOM's most critical facility requirements and most urgent facil-

ity modifications to bed down and sustain new weapons such as the JSF, the MQ-9 remotely piloted aircraft, and the accommodation of a B-52 squadron at Minot Air Force Base in North Dakota.

We are ever cognizant of the smart investments that will drive down our cost of doing business, and we are requesting over \$300 million this budget year to reduce our energy footprint by demolishing old, energy-inefficient buildings, and an additional \$215 million to upgrade heating, ventilation, and cooling systems and other high energy use systems, investments that will have tangible pay-back across the FYDP.

Across our energy program, we are requesting \$530 million in fiscal year 2013, the \$215 million I already mentioned, as well as \$315 million in science and technology to develop more energy-efficient engines and to do things as practical as reengining KC-135s and looking at drag coefficients on KC-10s.

Last year, this committee challenged us to find ways to lower our MILCON costs. We are currently reevaluating our policies and contracting mechanisms in this area and believe that we can reduce as much as 5 to 10 percent of our MILCON program.

Additionally, last year we put into place new goals and contracting methods that are helping us avoid nearly 20 percent in our environmental cleanup programs.

Our fiscal year 2013 budget request contains \$3.9 billion for MILCON, family housing, facility sustainment, restoration, and modernization. For MILCON, Madam Chairwoman, as you mentioned, \$442 million is the budget request for 2013, which is down \$900 million from fiscal year 2012.

We are channeling our limited resources to fund the most urgent combatant commander needs, our most pressing new mission work, and continuing our efforts to take care of our airmen. The deliberate pause in our program is prudent in light of the force structure decisions stemming from the new defense strategy, and for this year we have made a deliberate effort to build only where existing capacity is not available or where the cost/benefit analysis validates demolishing aging facilities and construction of more efficient and functional replacements.

Also in our fiscal year 2013 budget request, we continue to emphasize first-class housing and strive to improve the overall quality of life for our airmen and their families. The 2012 to 2016 dormitory master plan will guide our future investments for sustaining existing facilities and recapitalizing those which are inadequate.

As we progress through 2012, we are nearing the completion of our privatized family housing in the continental United States and renovating family housing overseas, especially in Japan. Our fiscal year 2013 budget request for military family housing is \$580 million. The funding will improve more than 400 units and infrastructure, utilities, electrical, water, sewer systems, et cetera for Japanese bases, as well as here in the continental United States.

On September 15, 2011, the Air Force successfully completed its 2005 BRAC program on time and within the original \$3.8 billion budget. The upfront BRAC investment is now resulting in savings of \$1.4 billion on an annual basis.

With that being said, we are still in need of a new BRAC. The BRAC 2005 did not meet our expectations of reducing that footprint. The SECDEF report that was provided to Congress in 2004 highlighted 24 percent excess capacity for the Air Force, and I dare say if we were to look at that analysis today, we would find a similar outcome, particularly based on the reduction of almost 500 aircraft, 250 from the combat Air Force several years ago, as well as the almost 300 that are in the budget request for 2013.

Lastly, let me close by touching briefly on our environmental efforts. This budget year, we are asking for \$1.1 billion to meet our environmental compliance commitments and the cleanup of past hazardous waste disposal sites. Specifically, we are requesting \$469 million to meet our ongoing compliance commitments and natural resource management efforts. This includes \$46 million for pollution prevention, up from last year's request, that will deliver efficiencies, reduce hazardous waste streams, and reduce our environmental liability and future costs. We are requesting \$644 million to continue our environmental cleanups at both BRAC and non-BRAC bases.

Last year, we implemented a new cleanup policy that relies on firm fixed-price, performance-based contracts to achieve closure of sites. While this year's request appears relatively the same as last year's request, by employing this new method, we are seeing about a 20 percent cost avoidance and getting sites to closure three times faster.

Madam Chairwoman, Senator Ayotte, Senator Nelson, we heard you loud and clear. We have some challenging times in front of us and we need to be looking across the entire enterprise. We realize we can do things better and we look forward to the continued support of this committee to do exactly that.

I look forward to your questions.

[The prepared statement of Mr. Yonkers follows:]

PREPARED STATEMENT BY HON. TERRY A. YONKERS

INTRODUCTION

The United States is in the midst of a deliberate evolution in the role of the military in achieving our national interests. This evolution is shaped by a dynamic geostrategic environment, uncertain economic circumstances, and the diffusion of regional centers of influence. In order to effectively deal with this new paradigm, the Department of Defense issued new Strategic Guidance which focuses our limited resources on deterring and defeating aggression across all domains, maintaining a safe and effective nuclear deterrent, and protecting the homeland, while reducing the quantity of our forces to ensure the quality of our force.

The U.S. Air Force plays an integral role in this refined guidance, and we have taken care to protect the distinctive capabilities we provide every day to our joint, interagency, and coalition partners. These enduring capabilities include control of air, space, and cyberspace; providing global intelligence, surveillance, and reconnaissance; rapidly moving people and materiel around the planet; and holding targets at risk—anytime and anywhere.

Difficult decisions were made to achieve the Air Force's share of the \$487 billion in defense savings mandated by the Budget Control Act of 2011. These decisions fell into five broad categories: Force Structure, Readiness, Modernization, More Disciplined Use of Defense Dollars, and Taking Care of Our People. These five focus areas were integral to the allocation of the resources entrusted to us by the taxpayer.

Within the portfolio of Installations and the Environment, we focused investments in critical installation facilities and infrastructure and quality of life improvements for our airmen and families; reducing our energy footprint by demolishing old, en-

ergy inefficient buildings and upgrading HVAC and other high energy use systems and continuing to build on our excellence in environment, safety, and occupational health across our Air Force.

The Air Force is striving to identify opportunities and initiatives in each of the above areas that will enable us to maximize the impact of every dollar we are given with an eye of every investment have a return on those dollars. We are reevaluating how we can improve the way we manage our military construction, housing, real estate, environmental, and energy portfolios by centralizing these functions and services into a single Field Operating Agency. By doing so, we are substantially reducing manpower and overhead costs, streamlining processes and decisionmaking and centralizing program management and accountability under one agency.

As funding for military construction becomes more austere we have made a deliberate effort to build only where existing capacity is not available or where the cost benefit analysis validates demolishing aging facilities in lieu of more efficient and functional replacements. Since 2008, we have demolished 23 million square feet of building space with an estimated savings of \$184 million. Furthermore, we are reevaluating our policies and contracting mechanisms in the areas of military construction and environmental cleanup with the objective of reducing construction and environmental costs.

As we work our way through the current fiscal challenges the Air Force is committed to charting a path that fulfills the promises made to the American people today and in the future while staying true to our airmen and their families.

INSTALLATIONS

Military Construction

Our fiscal year 2013 President's budget request contains \$3.9 billion for military construction, military family housing, and facility sustainment, restoration, and modernization. For military construction we request \$442 million, \$900 million less than fiscal year 2012. This deliberate pause in our program is prudent in light of force structure decisions stemming from the new Defense Strategic Guidance.

Our most critical projects are captured in this request and align with our priorities of continuing to strengthen the nuclear enterprise, partnering with the joint and coalition team to win today's fight, developing and caring for our airmen and their families, modernizing our air, space, and cyber inventories, organizations, and training, and recapturing acquisition excellence. Removal of the C-27 program is one example of how force structure decisions have affected our fiscal year 2013 military construction program and the corollary elimination of facilities that would otherwise be needed to support the C-27 aircraft here in the CONUS.

We are accepting minor risk by electing to wait a year to fund current mission requirements, channeling the limited funds we have requested to fund combatant commander and new mission needs—especially facilities needed to bed-down the Joint Strike Fighter. While we strove to fund our active, guard, and Reserve components in accordance with their equity in built infrastructure, the combination of austere funding and how the components derived their priorities led to a small shortfall in the Air Force Reserve.

We continue to stay focused on the needs of our airmen and their families and are requesting nearly \$500 million to sustain and modernize our overseas housing, while supporting housing privatization here in the United States. Unaccompanied airmen, likewise remain a top priority and we are requesting \$118 million to build new dormitories or upgrade existing dorms to the Air Force standard—keeping us on track to meet our goal of eliminating inadequate housing for unaccompanied airmen by 2017.

Finally, we request restoration and modernization funding at 90 percent of historical levels, and sustainment funding at slightly over 80 percent of the OSD model. For the first time in the Air Force, restoration and modernization funds will be centrally managed giving us the ability to prioritize new requirements across the enterprise while improving our ability to forecast where sustainment dollars should be invested to minimize risk in infrastructure maintenance and emergency repairs. This "Asset Management" approach to facility and infrastructure management is adopted from industry best practices—where industry has realized double digit savings. We expect to achieve similar results and are confident that by centralizing our management we can sustain our air bases on the dollars we have requested in this budget.

Continue to Strengthen the Nuclear Enterprise

The Air Force boasts a legacy of stewardship for two-thirds of the Nation's Nuclear Triad, providing security and maintenance for the weapons that enable a safe

and effective deterrent. Accordingly, our number one priority remains the strengthening of the nuclear enterprise, with a continued focus on reliability, accountability, and compliance from the men and women who fly the bombers and man the missile silos in a state of constant vigilance. The fiscal year 2013 budget request supports the standup of an additional B-52 squadron at Minot AFB, ND, with a \$4.6 million munitions equipment maintenance facility addition.

Partner with the Joint and Coalition Team to Win Today's Fight

The Air Force continues to be an indispensable member of the joint team as our airmen make significant contributions in controlling the domains of air and space, providing unprecedented advantages in intelligence, surveillance, and reconnaissance, moving people and cargo around the world, and providing the ability to hold at risk any target on earth. We currently have more than 35,000 airmen deployed, including nearly 2,300 Air Force civil engineers. In particular, our Air Force Rapid Engineer Deployable Heavy Operational and Repair Squadron Engineers (Red Horse) and our Prime Base Engineer Emergency Force (Prime BEEF) personnel are the recognized experts in providing installation engineering and airfield capabilities to the warfighter. Red Horse assets are in high demand by COCOMS in deployed locations.

Our fiscal year 2013 budget request invests \$193.3 million in projects that support our Joint partners around the world. Examples include:

- Projects supporting our combatant commanders that will greatly enhance ongoing operations. This includes continuing the recapitalization of Headquarters, U.S. Strategic Command at Offutt AFB, NE.
- New facilities for operations and mission support. An expanded air support operations facility at Fort Stewart, GA, will allow us to consolidate personnel on the same installation as their joint partners, enabling the synergistic effects of training, working, and living together.
- Intelligence, Surveillance, and Reconnaissance facilities. The new MQ-9 maintenance hangar at Holloman AFB, NM, will provide adequate cover to work on this sensitive aircraft under any weather condition or any hour of the day—ensuring the training needs of aircrews are met.

Develop and Care for Airmen and Their Families

The All-Volunteer Force is the foundation of the capabilities we contribute to the defense of the Nation. In our fiscal year 2013 budget request we continue to emphasize providing first-class housing and striving to improve the overall quality of life for our airmen and their families. Our new 2012–2016 Dormitory Master Plan will guide our future investments for sustaining existing facilities and recapitalizing those which are inadequate.

Billeting

As part of our basing efficiencies initiative, we propose construction of a \$17.6 million transient contingency dormitory to house personnel supporting rotational aircraft transiting through Europe. This project, when coupled with the elimination of the host nation maintenance contract and real property consolidation, has a payback period of only 2 years.

Dormitories

The Air Force continues to place a high priority on quality housing for our unaccompanied airmen. Our fiscal year 2013 budget request includes two dormitory projects totaling \$42.5 million. One of these projects is located at Joint Base San Antonio, TX, replacing an inadequate facility with severe infrastructure problems and historically high sustainment costs. The other, at Thule AB, Greenland, replaces an inadequate 58-year-old building and is also the lynchpin of consolidation efforts at Thule that will provide a payback in 3 years. This initiative will reduce energy use by 35 percent and is estimated to save \$20 million annually.

Military Family Housing

As we progress through 2012, we are nearing completion of our efforts to privatize family housing in the continental United States. This allows us to deliver high quality homes to our members faster than ever before, and at significant savings to the taxpayer. Our fiscal year 2013 budget request for military family housing is \$580 million. Included in this request is \$84 million to improve 400 homes and upgrade infrastructure in Japan, as well as nearly \$500 million to fund operations, maintenance, utilities, and leases, and to manage privatized units for the family housing program.

Modernize our Air, Space, and Cyberspace Inventories, Organizations, and Training

Even in the face of declining budgets, we must continue to modernize our force to meet the Nation's requirements. Although the pace and scope of this modernization will slow, we must protect programs that are critical to future warfighter needs. Our fiscal year 2013 request continues to invest in the beddown of new weapons systems. We request \$93.5 million for a variety of military construction projects, including:

- Three projects to continue the bed down of our newest fighter, the F-35. These projects provide facilities at Hill AFB, UT, for the first operational F-35 unit, which is scheduled to begin receiving aircraft in 2015.
- Three projects supporting our HC/C-130J fleet. These projects include a fuel systems maintenance hangar at Little Rock AFB, AR, and flight simulators at Little Rock AFB and Moody AFB, GA.
- Other projects. These will support diverse mission areas, including F-22 support at Tyndall AFB, FL, F-16 training at Aviano AB, Italy, and the overseas basing efficiencies discussed previously, which are projected to save up to \$120 million across the FYDP.

Base Realignment and Closure

On September 15, 2011, the Air Force completed its 2005 Base Realignment and Closure (BRAC) program on time and within its original \$3.8 billion budget. This upfront Air Force BRAC investment has resulted in \$900 million in annual savings to the Department of Defense that are being reinvested in emerging missions starting in fiscal year 2013. During the 6-year implementation period of BRAC 2005, the Air Force implemented 64 base closure commission recommendations affecting 122 installations, closing 7 installations and realigning 63 others.

Even so, BRAC 2005 fell short of the Air Force goal to reduce overhead and operational costs by reducing excess installation capacity. Today, 7 years later with almost 500 fewer aircraft in the inventory, the Air Force continues to maintain large amounts of excess infrastructure that is costing hundreds of millions of dollars each year—dollars that we need to invest in other areas. The Air Force has over 24 percent excess installation capacity (DOD's 2004 Report to Congress). This excess capacity can only be effectively eliminated by closing installations. As such, we fully support the Secretary of Defense's request for two more rounds of base closures in 2013 and 2015 to right-size our infrastructure and reduce our overhead and operating costs. We need Congress' help and support—we can't do BRAC if you're not in our corner on this. Without the ability to consolidate and close bases, the Air Force will be forced to make harder choices in the future that will degrade our ability to invest in those assets that directly affect our ability to defend this nation.

Joint Basing

As the Air Force emerges from its first full year of joint basing, we remain committed to providing superior and standardized installation support to our sister Services. Efficiencies were always expected from consolidation of the joint bases—this year we will realize a small return of that investment—about 500 personnel across those joint bases for which the Air Force has operational responsibility. We continue to assess our processes and information systems, services support, and other key areas to garner greater savings from our joint bases. In fiscal year 2011, we met 88 percent of the Office of the Secretary of Defense (OSD) Tri-Service standards, and will continue to increase the effectiveness with which we provide installation support while lowering costs in fiscal year 2013.

Encroachment Management

The Air Force has taken a leadership role in developing encroachment management and compatible land use policies—and coordinating these efforts with communities around our installations. As a follow-on to the Nevada Forum, in January 2011, the Air Force on behalf of OSD, hosted a key interagency meeting aimed at finding ways to “clear” renewable energy projects that had no or little impact to military operations. Those efforts culminated in a cross-functional team and the DOD's Siting Clearinghouse policy and subsequent Air Force policy. In the last year we reviewed and “cleared” 486 Energy Projects.

Privatized Housing

We remain committed to providing quality housing to our airmen and their families. Under the housing privatization initiative, \$485 million in government funding has garnered \$7.85 billion in private sector funding thus far, providing quality homes to our airmen and their families much more quickly than our standard military construction process. Approximately 41,500 units at 48 bases have been

privatized to date, which is 76 percent of our housing inventory in the continental United States (CONUS), Alaska, and Hawaii. In addition, more than 37,000 inadequate units have been eliminated. Our goal is to privatize all CONUS housing by closing the remaining four privatization projects in 2012, which will result in 53,800 privatized homes across the Air Force portfolio.

Enhanced Use Leasing

The Air Force continually seeks to improve our stewardship of real estate assets and to leverage appropriated dollars with investments from the private sector. With the authorities provided to execute enhanced use leases (EUL), we're pursuing innovative ways to leverage our unused real estate to return value from our installations. The AF has set a goal of unlocking \$5 billion in net present value from EULs through fiscal year 2020. In pursuit of this goal, we've executed 9 leases with a net present value of \$233 million and are close to completing a comprehensive survey of all AF installations to identify non-excess real estate assets that could be put to use to generate revenue to meet installation requirements.

As we pursue EULs our intent is to extract the greatest value possible for the asset, and in the current environment renewable energy projects provide significant opportunities. Today, the AF is actively pursuing 11 projects valued at about \$700 million, 7 of which are related to renewable energy. We've identified another 21 opportunities and have developed a set of initiatives to determine where market demand aligns with our available assets to create additional EUL opportunities.

ENERGY

Energy and energy security is the corner stone of the Air Force's ability to maintain global vigilance, reach, and power at home and abroad. The Air Force defines energy security as "having assured access to reliable supplies of energy and the ability to protect and deliver sufficient energy to meet operational needs." To enhance its energy security, the Air Force has developed a three-part strategy:

- (1) Reduce energy demand through conservation and efficiency,
- (2) Increase renewable and alternative energy sources, and
- (3) Ensure the culture of the Air Force recognizes the necessity and criticality of energy to its operations.

We have set a number of aggressive goals across our entire portfolio—goals that, if met, will help us avoid over \$1 billion a year (based on today's energy prices) and improve energy security for our critical assets.

Budget Impact

The Air Force is the largest single consumer of energy in the Federal Government and as energy costs increase and budgets decrease, this means that energy is consuming a greater proportion of the Air Force budget. In fiscal year 2010, the Air Force spent \$8.2 billion for fuel and electricity, an amount that increased to \$9.7 billion in fiscal year 2011 due primarily to the increased cost of crude oil. Ironically, our demand for both fuel and electricity was down over the same period.

At our installations, the Air Force spent more than \$1 billion for facility energy in both fiscal year 2010 and fiscal year 2011. However, as a result of the initiatives put in place over the last 8 years, the Air Force avoided over \$250 million in additional facility energy costs in fiscal year 2011 alone.

In the fiscal year 2013 President's budget, the Air Force is requesting more than \$530 million for aviation, infrastructure, and RDT&E energy initiatives to reduce energy demand, improve energy efficiency, diversify supply, and improve mission effectiveness. Included in this request is \$215 million for energy conservation projects on Air Force installations, a continuation of the nearly \$800 million we have invested in such projects over the last 4 years.

Energy Conservation

Overall, our focus is to reduce our energy footprint across all operations. While we have reduced our overall facility energy consumption since fiscal year 2003 by nearly 20 percent, and reduced energy intensity by more than 16 percent, installation energy costs have increased by 32 percent over that same period. The Air Force is on track to reduce its energy intensity by 37.5 percent by 2020 and increase its renewable energy use to reach 25 percent by 2025.

As a result of our energy conservation efforts, we have cumulatively avoided over \$1.1 billion in facility energy costs since 2003 that can be redirected to better enable warfighters to complete their missions. Investments we are making in fiscal year 2012 to improve our facility energy efficiency and reduce our energy requirement are expected to start generating savings in fiscal year 2014, and the majority are expected to payback before or just shortly after the FYDP.

The Energy Conservation Investment Program (ECIP) is a critical element of the Air Force's strategy to improve the energy performance of its permanent installations. In fiscal year 2011, we completed 15 ECIP projects at a cost of under \$20 million. The Air Force estimates these projects will save more than 253,000 million British Thermal Units (BTU) annually and nearly \$54 million over the life of the projects. We have submitted six projects to OSD for inclusion in the fiscal year 2012 ECIP program. If funded, these projects will save over 213 billion BTUs.

The Air Force is also looking to reduce demand by building in smarter ways, including maximizing energy efficiency and using environmentally-friendly materials, and identifying and demolishing 20 percent of our old, unnecessary, and high-energy use facilities by 2020.

Renewable Energy

The Air Force is looking to improve its energy security and diversify its energy supply through increased use of renewable energy. In fiscal year 2011, more than 6 percent of the electrical energy used by the Air Force was produced from renewable sources. Moving forward, our goal is to develop more than 1,000 megawatts (MW) of renewable power, including more than 600MW from solar, on our installations by 2016. By making the most of private sector knowledge, technology, and financing, we plan to improve our energy security by capitalizing on underutilized land on our installations to develop those projects. Currently, the Air Force has 131 operational renewable energy projects and another 50 under construction across a wide variety of renewable energy sources, including 8.7MW from wind energy, 26.2MW from solar, and 2.4MW from waste-to-energy projects.

In fiscal year 2011, the Air Force had 46 projects funded through the MILCON appropriation with at least one renewable energy component, such as solar photovoltaic systems or cool roof attributes.

The Air Force is not just limiting its efforts to renewable energy projects, but is also incorporating alternative fueled ground vehicles into our fleet. With the support of other private and public stakeholders, the Air Force is currently working to develop an all plug-in electric vehicle fleet at Los Angeles AFB, CA. When the initiative is completed later this year, Los Angeles AFB will be the first Federal facility to replace 100 percent of its general-purpose vehicle fleet with plug-in electric vehicles. By working with OSD and our Sister Services, we have identified 15 other potential locations where such vehicles will support the mission and improve our energy security. We will use the lessons learned at Los Angeles AFB to continue to refine the business case and operational analyses to determine where best to employ electric vehicles.

Third-Party Financing

While the Air Force has made considerable progress to reduce our energy demands and increase our energy diversity, there is still more to do. The Air Force is aggressively pursuing a third-party financing approach for both renewable and energy conservation projects.

Direct Air Force renewable energy project funding through Air Force capital sources is rarely cost-effective when compared to commercial utility rates. To address this, the Air Force is using existing authorities, such as EULs and Power Purchase Agreements, to attract private industry to develop renewable energy projects on underutilized land on Air Force installations. The Air Force is anticipating third-party investments could reach more than \$1 billion over the next 5 years to construct on-base renewable projects, while we plan to invest only \$5 to \$8 million for renewable projects over the same period. The Air Force has set a goal to identify \$5 billion worth of EULs and over half of this value will be energy EULs.

The Air Force is reinvigorating third-party financing to fund energy conservation projects through energy savings performance contracts (ESPC) and utility energy service contracts (UESC). The Air Force is targeting over \$260 million in potential ESPCs and UESCs over the next 2 years. While the Air Force did not award any third-party financed projects in fiscal year 2011, we anticipate awarding six such projects in fiscal year 2012 that would save approximately 1.1 million BTUs, and are evaluating three projects for fiscal year 2013.

ENVIRONMENTAL

Our environmental programs are designed to provide the mission-ready people, infrastructure and natural resources necessary to meet today's and tomorrow's mission requirements. The Air Force is committed to conducting our operations in an environmentally responsible way; meeting all environmental standards and legal obligations applicable to these operations; planning future activities to consider environmental and community impacts, and minimize them where practicable; elimi-

nating pollution from activities wherever and whenever we can; cleaning up environmental damage resulting from past activities; and responsibly managing our irreplaceable natural and cultural resources in a sustainable manner. To address these commitments, the Air Force's fiscal year 2013 President's budget request seeks just over \$1.1 billion for our environmental programs.

In meeting our environmental commitments, the AF is re-emphasizing improved efficiency and effectiveness as necessary outcomes for program management and for a host of process improvement efforts we have underway. Following are only a few examples of the initiatives we are championing.

Environmental Restoration

Our fiscal year 2013 President's budget request seeks \$529 million for cleanup of active installations, and \$115 million for cleanup of BRAC installations. We established our cleanup program in 1984 to cleanup former hazardous waste disposal sites on active and BRAC installations. Our past focus was on completing investigations and getting remedial actions in place—many of which were designed to operate for decades. In early 2011, we put into place a new policy and new metrics—one that shifts the goal from remedy-in-place to closing sites; from one that tolerated decades to complete the cleanup to one that rewards innovative technologies that get the job done in 8–10 years; from one that was cost-plus to one that is fixed price and performance based and incentivizes contractors to develop innovative ways to get to site closure; and to one that considers the total life-cycle cost informed by a solid business case analysis.

Our new goals are to achieve accelerated completion of 90 percent of Air Force BRAC cleanup sites and 75 percent of non-BRAC sites by 2015, in order to place the emphasis on bringing the program to closure. Through the use of improved performance-based contracting, coupled with this new policy, we are cleaning up sites three times faster, with lifecycle cost savings as much as 19 percent, and it is our expectation this will go even higher as we mature this contracting approach. By using this approach, we're not only closing sites faster, we're eliminating land use restrictions, while still being fully protective of human health and environment. We continue to work with state and Federal regulators on socializing this new approach. We have received positive feedback from many of the regulators on the overarching goal to finish cleanup, but there are historical concerns with the execution of performance-based contracts that we are addressing.

Environmental Quality

Our fiscal year 2013 President's budget request seeks \$469 million in Environmental Quality funding for compliance, environmental conservation, pollution prevention, and environmental technology investment. As in our cleanup program, we are refocusing our efforts to streamline and more effectively manage our Environmental Quality program activities. One example is how we've changed our approach in our National Environmental Policy Act (NEPA) program. Every decision we make is backed by environmental analyses—with major efforts and cost going into the development of Environmental Impact Statements and Environmental Assessments. As we looked at how to become more efficient in all our functional areas, we found that over time our NEPA process had become stagnant and bureaucratic. We had migrated away from the Council on Environmental Quality Guidance that emphasizes clear, concise, and analytical analyses rather than encyclopedic documents. On average, EISs were taking 3½ years to complete and EAs half that time. Our decisionmaking process was being crippled by such tasks as elaborate internal reviews and steps that added very little value to the quality of the analysis.

In September 2010, we issued a policy to refocus our NEPA process. The policy emphasizes use of performance-based contracts to incentivize contractors to provide quality environmental analyses that are fully-compliant with the spirit and intent of NEPA, that are aimed at better decisionmaking. Likewise, to refocus our internal reviews the policy sets goals for completion of EISs in 12 months and EAs in 6 months. To execute the new policy the Air Force established a NEPA center of excellence to standardize the Air Force approach to NEPA management and contracting and to provide reach back to major commands and installation NEPA professionals. Results to date are very promising; our first contract actions are hitting the 12 month and 6 month schedules and we're doing this without sacrificing quality.

We also have some initiatives underway that will change how the Air Force manages waste. Pollution prevention and waste minimization provide great potential to realize efficiencies while at the same time sustaining the Air Force mission, maintaining a safe and healthy workplace for our people, and improving the environment in which we live. This year, we are establishing pollution prevention and waste minimization goals; we will use our environmental management system to achieve

these goals; and, we fully expect to see our operations become more efficient, more protective of the workforce, while realizing cost savings. We are also striving to change how our culture considers waste and the environment. The Air Force believes that 'green' is a smart way to do business. Simply put: green is money; green is innovation; green is safety; and, green is good stewardship.

Our pollution prevention initiative provides a great segue to something the Air Force is very excited about. We are embarking on an aggressive initiative to transform how the Air Force manages energy, water, green house gas production, and solid waste. This year, we are rolling out a net zero policy for the Air Force. This initiative will strengthen the Air Force's commitment to supporting the Air Force's operational mission by leading in energy and environmental management. We will do this by complying with legal requirements, reducing unacceptable risk to operations from energy-related considerations and environmental impacts, by continuously improving energy and environmental management practices to be more effective and efficient, and to ensure sustainable management of the resources we need to adequately fly, fight and win into the future. There is no question that responsible and prudent stewardship of the natural and other resources with which we are entrusted is of great importance to national and economic security.

Working together with regulatory agencies, other Federal partners, and industry experts, the Air Force is continuously innovating and adopting best practices to lessen the environmental impact of its operations while helping the Air Force maintain its mission-ready posture and capabilities.

CONCLUSION

Our fiscal year 2013 budget request satisfies our most pressing needs while supporting the greater good of the Nation's fiscal security. It stays true to the fundamental priorities of our Air Force: (1) continue to strengthen the nuclear enterprise; (2) partner with the Joint and Coalition team to win today's fight; (3) develop and care for our airmen and their families; (4) modernize our air, space, and cyber inventories, organizations, and training; and (5) recapture acquisition excellence. We continue to mature our use of centralized asset management principles to mitigate accepted risk in facilities funding. Our Total Force airmen and their families can rest assured that they are cared for as we strive to eliminate inadequate family housing by 2018 and privatize housing in the United States by 2013.

Finally, we continue to think about the taxpayer with every dollar we spend. Our commitment to continued efficiencies, a properly sized force structure, and right-sized installations, combined with steadfast stewardship of our energy resources and environment, will enable us to provide our trademark support to the joint fight without imposing fiscal hardship on the Nation.

Senator McCASKILL. Thank you very much.

Let us start with touching on the BRAC issue. We have over 78,000 authorized Active Duty military assigned to the European Command (EUCOM) right now. Recently DOD announced that this force posture will be reduced from three to two BCTs, an additional drawdown of one over last year's announcement of four to three. So that means we have announced we are going from four to two.

I believe that DOD has contended that we do not need any additional MILCON for the four BCTs in EUCOM. It would make sense if we are going from four to two, plus additional drawdown resulting from fewer enablers required to support the BCTs, coupled with theater-wide service and civilian reduction, that we would have excess capacity in EUCOM. To date, DOD has indicated it will close two bases in Germany.

Chairman Levin has stated—and I agree with him—that we should not consider a new round of BRAC until we have addressed the excess capacity overseas.

What other locations is DOD considering closing in EUCOM and what are the projected savings from those closures? Is DOD considering closing Baumholder? Dr. Robyn?

Dr. ROBYN. I do not want to talk about specific locations, but let me just describe the process.

Let me start by saying that in the last 20 years, U.S. force presence in Europe, both as measured by number of personnel and installation sites, has gone down by about 80 percent. In the last 10 years, DOD has returned more than 100 sites in Europe to their respective host nations and reduced our personnel by one-third. As Katherine said, in the next 3 years, Army alone will close 23 additional sites. Those have already been announced. In terms of more to be done, we definitely believe, with the recently announced force structure changes, we can do more to consolidate in Europe.

The goal? Reduce long-term costs while still supporting our operational requirements and our strategic commitments.

My office is working with the EUCOM theater commander, his component commanders, and the Service leadership here in Washington. It is a BRAC-like process but without a commission looking at measuring the capacity of all of our European installations. We have 300 sites still in Europe. "Site" does not mean something like Anacostia or Bolling Air Force Base. Sites can be quite small, but we have 300 left. Most of our activity is on 200 of them. We are working with the EUCOM folks to measure the capacity of all of our European installations, and then we can analyze how much capacity we can shed and where. Then with the goal of long-term cost reduction, we will prioritize or will assess the costs and savings of each proposed action and identify those with the highest payback. We anticipate giving the SECDEF options this fall.

Senator MCCASKILL. Do you understand that for many of us that would be something that should be the first step before consideration of a BRAC?

Dr. ROBYN. Yes. I think we hear that. Let me just say that ideally we would like to do the two in tandem. In 2004, we did our overseas analysis at the same time that we were doing our analysis for the 2005 BRAC round. There is an advantage in doing that because it allows us to think more creatively about where the troops that are returning from Europe can be placed. Rather than putting them wherever we have excess capacity, we can think about where they should be. So ideally we would do the two processes in tandem.

Senator MCCASKILL. I know that Senator Ayotte will also cover some of this on BRAC, and I may return to it in the second round.

But let me talk about the Navy's budget request for a waterfront development in Bahrain. The project was not authorized last year, but it was appropriated. One of the things that really irritates all of us authorizers is when we say no and the appropriators say yes. The funds cannot be spent without an authorization, and the committee has not received any request this fiscal year to authorize this project. It is my understanding that there are a number of very important unfunded projects in Bahrain such as the repair and replacement of the existing failing pier at the waterfront area. Has the Navy decided whether to request the authorization for this waterfront development project in Bahrain or—hint, hint—maybe looking for other priorities like the pier replacement with this money? Hint, hint?

Ms. PFANNENSTIEL. Senator, we are looking at everything you have just recommended, and we will get back to you with where we want to go on this. I understand that there has been concern

expressed, and we understood that was not authorized last year. So we need to continue to look at what our needs are and what we consider to be our highest priority needs in Bahrain.

Senator MCCASKILL. I think all of us, if we look at force posture issues and developing trouble spots around the world, understand that having a pier that is not falling down in Bahrain, in light of everything that is going on in the world right now, ought to work its way towards the top of the list. It is obviously very important in terms of national security considerations at this juncture.

Ms. PFANNENSTIEL. I understand your concern.

Senator MCCASKILL. Let us talk about the dorm at West Point. I am confused about the dorm at West Point because I think, since I was in college, the West Point population has not changed, 4,400 cadets. I am confused as to why we need 650 new beds at a cost of almost \$300,000 per bed. If we need to update or we need to refurbish, I think that would be much less expensive than \$200 million for 650 beds for a population that has not increased.

Ms. HAMMACK. It is true that the population has not increased at West Point, but what has increased is that women are at West Point and there have been no modifications made to any of the existing barracks to accommodate it and that has caused some problems.

We have also brought in—you might consider them like residential assistants (RA) in a dorm into the barracks where they were not collocated in the past. That has caused more of the overcrowding issues.

So because of that, right now we are at 40 percent of the corps live with three cadets to a room in rooms that were designed for two cadets.

Senator MCCASKILL. I just do not understand. 4,400 is 4,400 is 4,400. I do not understand why we cannot refurbish to accommodate women and why we cannot—I mean, it looks like to me that somebody is not managing the population. I mean, you are adding 650 beds to a population that has not increased. The math does not work.

Ms. HAMMACK. What we have done is we have changed the use of some of the rooms, and so by using some of the rooms for computer servers rooms, for study rooms, for an RA-like use, it has caused overcrowding. In order to better manage the population, we have changed the usage, and that has caused us to need the additional barracks.

Senator MCCASKILL. Well, how many beds are you short?

Ms. HAMMACK. 650.

Senator MCCASKILL. You are telling me that 650 beds were moved over to other uses besides putting people in beds?

Ms. HAMMACK. Yes.

Senator MCCASKILL. Well, I think we are going to need more information on that. That does not sound right to me. That is a lot of rooms for computers, if we have given up 650 beds out of a total population of 4,400. Something does not make sense here. So if you would try to provide us more information, maybe we can muddle our way through this.

Ms. HAMMACK. We can do that. Thank you.

[The information referred to follows:]

West Point has 4,036 bed spaces available for a population of 4,686 cadets. The barracks requirement is based on the authorized graduation end strength of 4,400 cadets; 4,686 spaces accounts for historical attrition rates and international cadets. At the beginning of each academic year, 40 percent of the population lives with three cadets in rooms suited for two. Based on the current capacity, a requirement exists for a new barracks for 650 beds. The new cadet barracks, the first built since 1972, will eliminate overcrowding and improve the Corps of Cadets' academic environment and quality of life. Within the 9 barracks building, 126 rooms are being used for critical requirements that support the Military Academy mission to train the Army's leaders by placing tactical officers and non-commissioned officers where they can have the greatest impact on leader development. Additional rooms are used for study, administrative purposes (used to conduct practical exercises and planning), and support building maintenance functions.

Senator MCCASKILL. Senator Ayotte?

Senator AYOTTE. Thank you, Senator McCaskill. I thank all the witnesses for being here today.

Let me just start with something I am struggling with a little bit, which is this. I know I am new around here, but when I hear BRAC described as we did not do it to save money, but we did it to be transformative—BRAC is a very difficult process for Congress to sign off on because it could mean that any one of our States is impacted. So I am really struggling and finding it hard to believe that we authorized—meaning “we” before I was here authorized—BRAC to undertake a transformative process as opposed to achieving cost savings from the 2005 round.

My guess is, and I am going to go back to the testimony when DOD requested the BRAC rounds and see if it was presented to us collectively in Congress as a transformative process as opposed to saving money because it seems to me that we have undertaken this BRAC process in the past to achieve cost savings. So this to me seems at odds with why you would ask Members of Congress to undertake a very difficult decision to authorize you to subject bases in their own States that could potentially be closed. You can understand why I am struggling with this.

Dr. ROBYN. Can I respond?

Senator AYOTTE. Yes, Dr. Robyn.

Dr. ROBYN. In a two-part response, first let me say I think it is a fair question to say should we use the BRAC process, which is a marvelous process for carrying out something very, very difficult and imposing pain on some number of communities and the civilian workers there. It has worked very, very well for that. I think that is an open question as should one use the BRAC process for other things. I think one can debate that.

As for the historical record, I think it depends on when you look. We started asking for another round of BRAC when I was still working in the Clinton White House.

Senator AYOTTE. 1998. Correct?

Dr. ROBYN. Yes. There was repeated requests for it.

It was shortly after September 11 that—and I think probably in part because of September 11, but I was not here, so I am not sure. But the Senate approved it and the House acquiesced. So I think even at the time it was post-September 11. I do not know how much of the discussion was about transformation.

I will say that in 2002, 3 years before the round, when Secretary Rumsfeld put out the so-called kick-off memo, November 2002—if you go back and read that—it was very much about trans-

formation. I mean he says, of course, we want to reduce capacity, but even more important, we can do something very powerful here which is to transform our infrastructure. So I think it became that between the time that it was approved—and I guess then maybe that gets back then to—but I do not think it was a surprise by the time it happened. A lot happened between 2001 and 2005.

Senator AYOTTE. Well, I do plan—I am going to go back in the record and find what was Congress told and what was our goal because, with all respect, to describe a process as marvelous that cost us 60-plus percent more than was estimated to Congress, where it is a very difficult decision for Congress to make, where there clearly was a substantial investment and upfront costs that we are still paying—so we do have to look back to the last round and the history of this if we are going to make this important decision.

Another concern that I have is, we keep hearing, as I mentioned in my opening testimony, from DOD and the SECDEF that one of the most important things we have with the reductions of our end strength force with our ground forces is that we have to have reversibility. It is not clear to me how DOD will be able to quickly surge, regenerate and mobilize without the capacity in facilities and infrastructure to absorb additional forces if we have to reverse.

So since DOD is asking for a BRAC round in 2013, will we also get a 20-year force structure plan and a facility inventory in order to define these requirements? Because I do not see authorizing a BRAC process to go forward without knowing how reversibility is going to be possible because it is not just reversibility in terms of having our troops trained and the equipment, but we know these facilities can be very important in terms of reversibility as well.

So I would like us to have that, and I see that as a real concern. If you think that you can answer that question, I would be happy to have you answer it.

Dr. ROBYN. Well, let me just respond to my use of the word “marvelous.” Maybe that is not the right adjective, but I think the BRAC process, the up or down, all or nothing mechanism which was devised by Dick Arme, a Congressman from Texas, is an amazing mechanism. People come literally from all over the world to talk to us about how it works and there have been many efforts to use the BRAC mechanism for other purposes. The Office of Management and Budget is now leading a civilian BRAC-like process. Precisely because it is so painful, the BRAC mechanism, by requiring the vote to be all or nothing, up or down, insulates it from politics to the extent possible. That is what is amazing about it. I was referring to its use in the way that it was originally envisioned in the first four rounds.

The 2005 round—I will defend that, but it is a different application of BRAC. I think the Army did things precisely because; with the difficulty of getting MILCON funding, it would have taken them decades to do any other way. I think it is worth a debate in the future, is that a good way to use BRAC.

But our need now is savings, getting rid of excess capacity. Terry alluded to a study done in 2004, and I would not fall on my sword over the quality of the statistics, but it was a report we did for Congress on excess capacity. We estimated we had 24 percent excess capacity in 2004. That was before the 2005 round, but the

2005 round only eliminated, by our estimate, using the same statistical techniques, about 3 percent of our capacity. So we think we even now have excess capacity.

Senator AYOTTE. We could spend probably the entire hearing on BRAC because I am not convinced it is insulated from politics. There are a lot of costs that go into just—I can tell you my own personal experience with BRAC. I am married to an A-10 pilot. What happened in the 2005 round is, just in Massachusetts, they moved the F-15s from the Cape to Westfield. They retrained A-10 pilots to be F-15 pilots. Then they transferred the A-10 pilots to another base, and many of them were retrained on other planes. We all know how much it costs to train a pilot. So the notion that it is insulated from politics I think is not the case. We could spend a lot of time on BRAC.

I have a lot of additional questions, and I am not convinced until we really know what this concept of reversibility is and the substantial end force reductions that we are going to incur, that we will have the facilities if we suddenly have to engage in another conflict for this country if we undertake a BRAC process without knowing how that is going to work. So I think there is a lot more information that Congress needs before we as a group decide to undertake a BRAC process again.

My time is up. I have a whole host of additional questions on other topics, and I will obviously continue to ask questions about BRAC and remain concerned that this is not the time to go forward with a BRAC round.

Senator MCCASKILL. Thank you, Senator Ayotte.

Senator Nelson.

Senator NELSON. Thank you, Madam Chair, and thanks to all of you for being here today.

Before I talk about BRAC, I would like to first talk about a MILCON project, and I think as you perhaps all are aware, progress is being made toward constructing a new command and control complex for U.S. Strategic Command (STRATCOM) with MILCON funds requested by the President and authorized and appropriated by this Congress for the fiscal year 2012.

Obviously, the mission at STRATCOM is at the forefront of our national security. An aged building inadequate for the mission simply is impossible to support. So the entire project, which requires considerable funds, has been authorized, but because of the nature, DOD is going to have to have phased funding or incremental funding and Congress will have to annually step forward and be able to do that.

Both General Dempsey and Secretary Panetta have indicated the importance of this project.

Now, originally the project was scheduled to receive incremental funding over a 3-year period, but last year the \$150 million request was cut to \$120 million which now means that the funding has to be spread out over 4 years. We understand that.

So I guess the first question is, is the full \$160 million requested for fiscal year 2013 actionable on the project if authorized and appropriated? I guess we will start with you, Dr. Robyn. Then we will go to Secretary Yonkers.

Dr. ROBYN. I think I will just defer that one to Terry.

Senator NELSON. You want to defer it. Okay. That will work.

Mr. YONKERS. Well, you have characterized it pretty well. It is an absolute necessity requirement for STRATCOM to have this new facility, and we talked about this last year.

\$120 million in 2012, \$161 million in 2013, \$164 million in 2014, and I think about \$119 million in 2015, spread across 4 years.

Right now, the Corps of Engineers is about ready to go through the final throes of awarding this project.

We have laid in what we think is the appropriate funding stream to complete the project. The dollar amount has stayed consistent across the programming years that we have been looking at this. But I do not think we are going to know the actual dollars until we make the award and the contracting entity that is going to actually do the final design and build says if we look at the construction schedule, \$120 million is right for 2012, \$161 million is right for 2013, and so forth.

Senator NELSON. It is our best estimate, given what we know and what we anticipate to happen.

Mr. YONKERS. Yes, sir. Just the executability. I mean, we are pretty confident with the dollars laid in that we will be able to execute according to those numbers.

Senator NELSON. As each year progresses, of course, we will be faced with the same questions as this year. Will that be enough to take us through the construction for the new fiscal year? So that is why it is phased in.

The second area that I am concerned about equally with my colleagues here is BRAC. I think there is an expectation that you expect savings as a consequence of closing and realignment. The question is whether you will and if you do, how much. But I do believe that the promise has always been out there that it would be a savings. I see we have sanitized BRAC to realignment and spend less time talking about closing. It is a harsher word, a little harder to accept. What seems to be the thought of some folks is, I will sacrifice until your last base.

So I think we understand why the process is necessary, but if it is going to be about realignment, it ought to be, I think, done internally with expertise without the promise so much of savings and do it on the basis of what the military and DOD together think is the best way to realign based on current and future needs. What we have done with this process is injected politics into it in a way that I think is very difficult because who wants to vote to close their own base? That is like voting your town dry and then moving. It has about the same impact in the community.

But in any event, I also believe that there is a greater emphasis that will be required on our overseas installations. I agree, Dr. Robyn, that that ought to be done at the same time if this is about realignment more than closing to save dollars because you can close a bunch of bases and save money and that would not necessarily constitute realignment. That is why the word "realignment" I think is included in there. I guess I would ask you to respond to that, any one of you.

Dr. ROBYN. All right. I will just respond briefly and then Katharine would like to as well.

I did not mean to say realignment rather than closure. It is both. I think we did a lot of the bigger closures in the 1990s, and it is probably not an accident that there were more realignments later in the process. But certainly I am not using “realignment” to be politically correct. It would be both.

I think the way BRAC works, DOD does a very extensive analysis to decide where—they look at everything. Everything is on the table and it is judged primarily but not exclusively in terms of military value, and that takes into account costs but other factors as well. So we then give to the commission a list of recommendations, both closures and realignments, and the commission holds hearings and makes visits and evaluates those. So you have the best of our judgment internally tempered by the judgment of outside commissioners, independent commissioners.

Is it completely free of politics? Probably not, but it is, I think, about as close as one could come.

Senator NELSON. Well, it does have a certain amount of politics in it, or it would not be applied just in U.S. facilities and not applied to overseas facilities.

Dr. ROBYN. Well, we do not need legislative authorization.

Senator NELSON. Well, I know. But if you can realign there without the legislation in place, because it does not affect the same group of constituents that it affects here at home—it is in lieu of politics, in place of politics or because of politics, but it is politics involved.

Ms. HAMMACK. One thing to keep in mind in the BRAC 2005 is several installations in the continental United States absorbed units that were returning from units overseas. So it did have an overseas realignment component to it.

As Dr. Robyn said, the recommendations made sense from a military standpoint. 2005 was a military realignment to realign the way we are fighting the current wars, and so it was a different kind of a BRAC and it was set up and it was communicated that it was going to be a different BRAC than prior BRAC rounds because we were at war during the time period that it was occurring.

Senator NELSON. Well, it is very difficult to realign, to transition in the midst of war. There is no question about it, because it raises all kinds of other questions; obviously that is where we have been and it may be where we still are.

Thank you, Dr. Robyn, and thank you all for being here. I appreciate it.

Thank you, Madam Chair.

Senator MCCASKILL. Thank you, Senator Nelson.

Senator Shaheen.

Senator SHAHEEN. Thank you very much, Madam Chair.

Thank you all for being here this morning.

I am sure you will not be surprised to know that I share the concerns that have been expressed by my colleagues about proposing another round of BRAC closures as early as 2013.

Dr. Robyn, I know that in your testimony you estimated what the savings from the 2005 BRAC round will be. So I am assuming as we are thinking about—at least in testimony from Secretary Panetta, one of the things he implied was that he did not feel like he could go back to his DOD budget and make the cuts that have been

required as the result of the agreement last year without also looking at a BRAC round. So I am assuming that to the extent that another BRAC round is being proposed, it is being proposed in the context of cost savings. As you point out in your testimony, it will be about 10 years before we get back at \$4 billion a year and the cost of \$35 billion—that would about 10 years to get back the pay-back.

Dr. ROBYN. A 9 year period.

Senator SHAHEEN. 9 years. I will give you 9 years.

I wonder if we have any outside expert estimates on what the savings are and whether we have engaged other experts in looking at potential savings from a BRAC round.

Dr. ROBYN. Well, we have not put out any estimates of the savings from a 2013 or 2015 round.

Senator SHAHEEN. Right. I am sorry. I should have been clear. I am talking about the 2005 round.

Dr. ROBYN. Yes. GAO lives with us during BRAC, and Brian Lepore, the head of GAO's infrastructure group, testified with me before the House I guess just last week. GAO documents our analysis and our estimates very closely, and they are in agreement. We disagree on some minor issues. We disagree on how to calculate savings from military personnel who are moved from one base to another, perhaps like Senator Ayotte's husband. I am not sure if he would fall in that category. But by and large, GAO agrees with us on the magnitude of the savings, and I would be happy to get your Brian Lepore's testimony from last week. They literally are in the room almost throughout the entire process.

Senator SHAHEEN. Are they also part of the process that looks at potential savings?

Dr. ROBYN. Yes.

Senator SHAHEEN. So for a 2013 round that is proposed, they will be at the table with coming up with the potential estimate for savings that might be accomplished as the result of that?

Dr. ROBYN. Yes. That comes out of this in-depth, internal process of looking at all the alternatives. Out of that comes an estimate of savings.

This is maybe a footnote, but it is worth saying. The estimated savings from the 2005 round—\$21 billion I think it was, \$22 billion—that comes from a cost of base realignment analysis. It is a model that is not designed to be budget-quality. What it is designed to do is allow us to compare different alternatives. So it is good for what it does, namely allowing us to compare the costs and benefits of different closures. It is not and really should not be put out as our budget-quality estimate of what we think the savings from a round will be.

That having been said, the estimated cost of the 2005 round did go up significantly by any measure, and I think it is worth saying why that is the case. Katherine may want to elaborate. I think the single biggest reason was that the Army made a decision, a very deliberate decision—DOD did but it was primarily Army—to put additional money into various BRAC recommendations because they felt that they needed, rather than renovate, to build new in order to create some new capability. Over and over again, they decided to do more than what they had initially planned to do be-

cause they thought the benefits of that were worth it. They went to Congress and they said we want to move money from this part of our budget, from weapons, into this because this is important to us. That accounted for probably half of the increase, a significant increase, in the estimated cost of the 2005 round.

The other factor was a decision by DOD to delay the implementation, and this was a decision by Secretary Rumsfeld to delay the implementation of BRAC. We have a 6-year window by law to implement it. In the past rounds, it has always been implemented very early in that window. There was a decision for budget reasons—again, we were at war—to push that out. So we pushed it out as far as we—I was not there then—but as far as was possible under the law.

That turned out to be a problem for two reasons. One, delay is always expensive because the costs of inflation get factored in, but it pushed us into a period that no one anticipated of very record-high construction costs as a result of all of the activity in the aftermath of Katrina and then global demand for steel and concrete. So we were putting out our bids for competition at the worst possible time in terms of the construction market in 2007 and 2008, and that accounted for most of the rest of the increase.

So the lesson from that is do not delay the implementation of a BRAC round. It eliminates flexibility.

Senator SHAHEEN. Certainly the more information we have, I think, in making a decision, the better, and at least at this point I think there is a lot of information that has not yet been shared with Congress.

Ms. Pfannenstiel, my next questions are for you. But I should begin by thanking you for helping us. As you are aware—I am not sure that the committee is aware—I chaired a hearing on the USS *Kearsarge* last week to look at what the Navy is doing around energy savings, energy efficiency, and moving to alternative energy. It was fascinating. I applaud the Navy's leadership in this area. I think it is an example that could be set for all of the Federal Government, looking at how we can both be much more energy efficient and also move to alternative sources of energy.

Ms. PFANNENSTIEL. Thank you. I am sorry I was not able to be there. I understand the hearing was very effective and brought a lot of good discussion.

Senator SHAHEEN. It was fascinating.

I had the opportunity to visit the Portsmouth Naval Shipyard which has been the beneficiary of an award from the Navy for their energy efficiency at the yard in their class. So I know you are not going to be surprised to hear that I share Senator Ayotte's concerns about what is happening at our four public shipyards and really what I have to say is a troubling lack of support from the Navy for MILCON projects at the Portsmouth Naval Shipyard. There has been no support for MILCON projects in the 2013 budget request. There have not been projects that have been supported from the executive branch over the last 5 years, probably a little more.

So despite that, the Portsmouth Naval Shipyard has been delivering ahead of schedule very efficiently. They delivered the USS *San Juan* 8 days ahead of schedule despite some other challenges. They are the first shipyard to work on the *Los Angeles* class sub,

the *Virginia* class sub, and that is the weapons system that is going to serve as the backbone of our power for decades to come.

So I wonder if you could just talk about why there has been this lack of support from the Navy for MILCON at Portsmouth?

Ms. PFANNENSTIEL. Thank you, Senator Shaheen.

We do understand the value of the Portsmouth Naval Shipyard and we share your view of how important that is to the Navy. We know that there are a couple projects upcoming, MILCON projects, that have been delayed and that there have been a couple segments that we have sort of pushed out beyond a time that you are comfortable with. But be assured that we are still looking at those and we are looking at those in terms of the needs that we see at the shipyard.

There is still a possibility of combining the two segments into a single project which we would think might be able to be more efficient and have the two segments done together in a future year. So that decision is not final at this point. We are still looking at it.

We have put a fair amount of money into the shipyard in energy projects which have been very effective, and I think they have been part of the efficiencies that we are looking for and that I think will make the shipyard that much more effective going forward.

Senator SHAHEEN. Well, thank you. My time is up, but I would just ask if you would also commit to the shipyard modernization plan that is due back in Congress by September the 1st. Is that something that you think that we should count on arriving by September the 1st?

Ms. PFANNENSTIEL. Yes.

Senator SHAHEEN. Thank you.

Senator MCCASKILL. Thank you, Senator Shaheen.

Mr. Yonkers, I was picking in my previous questioning on the Army for the new dorm at West Point.

I might point out that one of the problems, Dr. Robyn, is that when you come to Congress in the last BRAC and you say, rather than refurbish, we want to build new, it would be unusual for Congress to say no because typically what happens is the Members of the Senate that are from the States where the new construction is going to go on become wildly enthusiastic.

One of the reasons BRAC began in the first place is—you may have noticed—none of us liked the notion of cutting the military, especially when you talk about it in terms of readiness and our capability and the excellence that our military represents to the rest of the world.

Now, as somebody who has spent a lot of time in the weeds over the last 6 years looking at the way the military does business, I am confident that we can save a lot of money without impacting our excellence. Part of that is being very careful about asking for new construction when refurbishing will do, when updating will do. Building it new is not always the right answer especially if we are talking about point-of-the-spear readiness and what we have to be doing with our technology to continue to dominate the world's militaries in terms of our capability.

So let me turn now to the Air Force Academy, and let me turn to a project that I have to tell you that I am not sure that I would

have been excited about authorizing when it was authorized. It is called the Center for Character and Leadership Development. Well, I believe that is the Air Force Academy, the whole thing, that it is in fact a center for character and leadership development. That is why there are so many young men and women in Missouri that are disappointed every year when they cannot receive that appointment to the Air Force Academy. We always leave dozens and dozens disappointed that are really wanting to attend the Air Force Academy.

The fact that we need to build this building just for that is a head-scratcher for me right now. What is even more of a head-scratcher is that it was authorized. You could not get it built for the amount that was authorized because a low-profile skylight was included that was going to cost \$12 million just for the skylight.

What I understand now is that the FYDP contains four projects for the Air Force Academy, including one for force protection, emergency operations center, with a total value of \$53 million. I understand there is a plan to have the endowment pay for this skylight. I have looked at the skylight. It is fancy, but I do not know that it is necessary. I am wondering why the endowment would not look to some of these other needs instead of a \$12 million skylight.

Mr. YONKERS. Well, ma'am, I cannot answer why the endowment would not look at others. They may. Right now they are focused on the Center for Leadership.

The MILCON project that you are talking about is for the basic building. The endowment, I believe, is on the order of \$7 million or \$8 million to build the skylight, which the alumni that support the Air Force Academy believe is part of the heart and soul of Air Force Academy, not unlike every other academic institution that is supported by its alumni.

So we have not heard—at least I have not heard as to whether or not the association or the endowment would consider others. They have in the past, and I would presume that they would in the future.

Senator MCCASKILL. I just hope we would reexamine. It is my understanding the justification for the center was that we did not want to bus people for seminars on character and leadership to other locations. It is hard for me to believe that we could not find a location on campus for seminars on character and leadership without building a new building for that purpose. But I will look forward to additional justification for that.

Dr. Robyn, we were notified by the Air Force of their intent to transfer \$28 million from operation and maintenance to construct a student activity center at Sam Houston, TX, in support of a training mission consolidation directed by the 2005 BRAC. This facility is for community and recreational activities and graduation activities.

After extensive meetings and visits by our staffs to Fort Sam Houston, the committee concluded the additional project was not essential to carrying out the BRAC decision. We provided this position formally to DOD, which is consistent with our intent to take action when DOD's spending may not be essential to military missions.

Unfortunately, in August 2011, the Department of Air Force decided to carry out the project despite our objections. In response, we have acted to rescind all unobligated balances of BRAC that we know about.

Does DOD have any more remaining BRAC fund balances, and if so, can you provide a record of how much and where they are located?

Dr. ROBYN. Yes, I can for the record. I do not offhand know what the amount is, but, yes.

Senator MCCASKILL. I think it is important that we clean that up at this point. Especially if we are talking about a new BRAC, I think it is incumbent upon the military to let us know where there is still money. Obviously, when we have taken a hard look and said we do not think it is a good idea and it is done anyway, it does not make everybody cheerful on this side of the desk.

Dr. ROBYN. I will get you that.

[The information referred to follows:]

The budgeted cost to implement the Base Realignment and Closure (BRAC) 2005 recommendations was \$35.1 billion. At the end of BRAC 2005 implementation on September 15, 2011, an unobligated balance of \$1.5 billion remained in the account. Of that amount, in fiscal year 2012, \$0.5 billion was reprogrammed with congressional approval to the Homeowners Assistance Program to provide benefits to eligible servicemembers and civilians, \$0.3 billion was rescinded by Congress, and \$0.7 billion remains in the account to source continuing caretaker, environmental clean-up, and construction close-out efforts.

Senator MCCASKILL. Let us talk a little bit about Guam. The 2012 NDAA contained a number of requirements that still must be met before any funds, including funds provided by the Government of Japan, may be obligated or expended. I will not go through all the requirements. I think that you probably know, Secretary Pfannenstiel. I am sure you are familiar with them.

Can you give us an update on where we are on those requirements, and do you think everyone understands that we do not want any money spent until those requirements are met?

Ms. PFANNENSTIEL. We do understand that.

The requirements are underway. There is an independent study, I understand the contract for that is about to be signed, and all of the other pieces. But a lot of it has to do with the outcome of the discussions that are underway between the U.S. Government and the Government of Japan on the alternate movement to Guam, how many marines and what time frame and all of those. Those discussions are happening virtually as we speak, and as that gets resolved, that then will allow us to put together the master plan, which I think is one of the primary requirements under the NDAA. So, yes, we understand that that is necessary and we are planning to work with Congress to meet those requirements.

Senator MCCASKILL. Just so that everyone is crystal clear that we do not want to go down the road. We do not want to even begin going down the road until we are sure where the road is going to lead at the end. So that is why we will continue to hold the line on any authorization for funds for any of those purposes until those requirements are met. I think this committee will remain as steadfast in that resolve as they were last year during the defense authorization when the decision was made.

Ms. PFANNENSTIEL. Understood.

Senator McCASKILL. Senator Ayotte?

Senator AYOTTE. Thank you very much, Madam Chair.

Secretary Yonkers, I wanted to ask you some questions about the process of developing the criteria for the selection of basing for the KC-46A, and I had the opportunity to discuss that with Secretary Donley, also with General Schwartz and General Johns. It is my hope that this is a very important decision, that it be done concurrently between our Guard and Active Duty because right now if you look at the refueling capacity of the KC-135, it is about 60 percent in the Guard and Reserve and 40 percent in the Active Duty. So I think this concurrent basing issue is very, very important.

I have a few questions for you from the installations perspective because I know you will have feedback on that end in the basing criteria. That is, when we look at an installation environment, when you have environmental concerns, that can drive up the real costs in the long term in terms of basing. So when you are putting out the criteria, when you are looking at the basing, will you take into account a lack of environmental concerns, for example, for a particular area? In other words, a base that does not have issues that will be costly in terms of environmental concerns, is that something you will consider?

Mr. YONKERS. By all means. I think it is fair to say that when we look through the basing criterion—and this is evolving. I mean, we did not get it all right the first time we did a basing decision. So we keep relooking at the criteria and it is weapons systems specific as well. But certainly looking at—one of the primary drivers here is cost and looking at the business case for how and what and how much it is going to cost to do it and just the operational imperative and can we optimize.

Senator AYOTTE. I am glad to hear you say that is one of the considerations that you are going to take into account. Obviously, military readiness, takes the primary concern, but costs are very important.

I know that one of the issues can be whether you already have an existing simulator, for example, for the KC-135 that could be converted to a KC-46A simulator for training. Is that something that would be considered in terms of a cost issue?

Mr. YONKERS. Well, it is a cost issue. So, yes.

Senator AYOTTE. So that would certainly be something important so that you did not have to install a new trainer on a base.

Then also, what about the runway and the capacity? It can be very costly to lengthen runways, expand parking ramps, or build jet fuel storage at some potential bases which would require additional investment at a very difficult fiscal time. To what extent will you look at the issues of length of runway, size of existing aircraft parking ramps, or presence of large existing jet fuel storage as you look at this criteria?

Mr. YONKERS. Ma'am, I think you have hit on a lot of key parameters here in terms of cost drivers, and they will be considered as we look across the entire spectrum of the enterprise to say where do those assets reside now, Guard, Reserve, Active Duty, and when we look at the cost analysis as we go through the site visits and those kinds of things to determine, from an overall cost point of

view, does it make sense to bed that weapons system down at that point, that base, or what have you.

Senator AYOTTE. Okay.

Other criteria I would say that are important criteria, proximity to deepwater ports, major interstate highways, also proximity to other military installations, and of course, combined with proximity to refueling tracks in key areas and also the capacity of the bases. So I am glad that you are going to look at the cost issue. I am hopeful, as I have told General Schwartz, as I have told Secretary Donley, as I have said to General Johns, that an open, objective, transparent, and concurrent with the Guard and also the Active Duty at the same time basing criteria will come forward.

I have to say I am very proud of our 157th air refueling unit on all these fronts because we have one of the longest runways in the Northeast, the largest Air National Guard ramp in the Northeast, the largest fuel storage capability in the Northeast, and existing tanker simulator that could easily be transitioned to a KC-46A simulator, an absence of any environmental issues, close proximity, of course, to our shipyard that Senator Shaheen talked about, and I am very supportive of what she has just said, Secretary Pfannenstiel, about the shipyard, and appreciate that the Navy will continue to look at the modernization efforts at our shipyard. One of the things that we are very proud of is it has the highest utilization rate in the Guard. So I am very confident that in an objective and transparent process that looks at these factors that the 157th will be one of the top candidates for this.

I understand this criteria is coming forward. I am looking forward to seeing it. I know Senator Shaheen is as well. We are both very proud of our unit, and I appreciate that you are going to look at these cost issues on the merits, that is the best way to make these decisions rather than—we talked about politics in BRAC. Well, we want objective, transparent criteria, and on the merits. That is how we hope that these basing decisions will be made.

Mr. YONKERS. Well, if I could just remark as a closer here. We are not veering from our strategic basing process. This will be as transparent as it has been in the past. As we develop the criteria, Kathy Ferguson sitting behind me will come over with a team. We will go through that with Members of Congress and the staff. As we develop then the candidates again, come down to the preferred yet again, and then we will go through the National Environmental Policy Act analysis once we kind of hone down the preferred.

But it is also of worthy note to consider that we are going to get—the buy is at 179 and that is the proposed number of aircraft for the KC-46. That is going to be metered out over 20 some odd years as we purchase the aircraft. So I think the going-in position is we will look at a training facility first, along with a first ops facility as well and not try to play out where all 179 aircraft are going to be because we do not want to usurp the authorities of those that will follow us in these decisions.

Senator AYOTTE. I certainly understand that. As we go forward though, I hope that the initial criteria will be concurrent. I know that is a very important decision that you have to make, but if you look at what our Guard and Reserve have done and the experience level of the pilots in the Guard and Reserve, to base all of the ini-

tial KC-46As in the Active Duty in my view would be a mistake and it would not be consistent with what we are doing now in terms of the talent in our Guard and Reserve that is ready to easily take on the new tanker and train on it and be prepared. So I appreciate what you are saying.

A very important question that I would like to make sure—if you would take it for the record because it is a very difficult time for DOD, and I understand. When I hear about the proposal for another BRAC round, there is no question in my mind that we handed you a number in the BCA and you are now proposing, for example, on BRAC to undertake that round as soon as 2013. That seems a lot faster than you probably otherwise would have appeared before us.

In addition to that, you are facing the potential of sequestration. It is very important for us to understand the risks that are inherent with that. So I would ask each of you to come up with a detailed analysis of how specifically, if sequestration were to go forward, what would happen in terms of our installations, the environment and energy programs, and the modernization that we certainly need for public shipyards. All of that is incredibly important so we know as Members of Congress. In my view this is not a risk that we can afford to undertake on behalf of our national security, as Secretary Panetta has articulated so well.

So can you please let us know what type of civilian layoffs we would face, what kind of contract terminations we would face, what kind of repairs would be put off, what type of modernization would be put off? Because if we do not take action before 2013, in January, you will be facing sequestration. I think we should stop it, but we need the information so that we can understand the risks that are involved with that.

Thank you.

[The information referred to follows:]

Mr. YONKERS. The fiscal year 2013 proposed budget is a balanced and complete package with little margin of error. If sequestration were to go forward, it would rive a large additional reduction above the first phase of the Budget Control Act reductions incorporated in the Air Force fiscal year 2013 budget request. A sequester could have devastating effect on our readiness and our workforce, and disrupt thousands of contracts and programs. Absorbing these, and other reductions would potentially “hollow out” the force while making our ability to cover any emergent execution year requirements (i.e. fuel price increase or Libya operations) extremely difficult. Since the Department of Defense (DOD) is not currently preparing for a sequestration and the Office of Management and budget has not directed agencies (including DOD) to initiate plans for sequestration, the Air Force has not performed any detailed level analysis on sequestration’s potential impacts.

Ms. PFANNENSTIEL. The Department is not currently preparing for sequestration, and the Office of Management and Budget has not directed agencies, including the Department of Defense, to initiate plans for sequestration. If sequestration occurs, automatic percentage cuts are required to be applied without regard to strategy, importance, or priorities, which would impact almost every program within the Department. Sequestration would result in reduced funding for civilian personnel.

Dr. ROBYN. The Department of Defense has received no guidance from the Office of Management and Budget to begin planning for sequestration.

Ms. HAMMACK. The Department of Defense has received no guidance from the Office of Management and Budget to begin planning for sequestration.

Senator MCCASKILL. Senator Shaheen, do you have any additional questions?

Senator SHAHEEN. I do. Thank you.

Again, since Senator Ayotte and I both represent New Hampshire, you will not be surprised, Mr. Yonkers, to know that her lines of questioning around basing decisions are ones that I support.

She actually raised a question that I would like to hear your response on talking about the experience that the Guard and Reserve bring to flying and whether or not, as you are looking at the MILCON decisions around basing, you also take into consideration things like training and some of the other personnel questions that, of course, contribute to the cost ultimately of those decisions.

Mr. YONKERS. Let me make sure I understand the question and try to respond in this fashion. When we look at the MILCON program, we look at it across the total force. I think the SECDEF and the Chairman of the Joint Chiefs of Staff have been fairly consistent in the discussion about trying to balance the total force. The Guard and the Reserve bring a tremendous amount of capability. We all know this. That is why we went to a total force construct almost 2 decades ago to, again, try and use that asset more than we had in previous years. So we look at the MILCON program from the entire enterprise point of view.

We try to go through, as I sort of talked about in my oral testimony, looking at certainly the highest priorities. We have priorities from our COCOM commanders. We have quality of life, and you will see a couple of dormitories in this year's program. We have beddown of new weapons systems like the JSF and the F-22, a move to Holloman and so forth. So we try to look at this from a point of view of what operationally makes the most sense, from a quality-of-life point of view, what makes the most sense, from a nuclear enterprise point of view, what makes the most sense, and of course, getting the biggest bang for the taxpayers' dollars by building new when the old is just so old and we are investing so much money in just trying to keep the thing running that it does not make sense to do it anymore.

So I do not know if that gets at the real answer to the question or not, ma'am.

Senator SHAHEEN. Well, sort of. But I guess I am suggesting that one of the other things that affects costs of some of these decisions are the human assets that are there, and that if we have—as you point out, the total force—if you look at the cost for Guard and Reserve versus the cost of Active Duty, there is a big difference. There is also a big difference if you are looking at training and education requirements for the new tanker, whether you have people who have some of that training already versus having to do it all new, whether those kinds of decisions are also included as you think about the basing decisions.

Mr. YONKERS. I would like to take the specifics for the record, if I could. But it is all in the mix, as I understand it. So, again, looking at the total force, we look at the assets the Guard brings to the table in terms of personnel, et cetera, and the Reserve, as well as the Active Duty and factor those things into the overall decision.

[The information referred to follows:]

Cost comparisons between the Active and Reserve components vary considerably depending upon which costs are included in the mix. Because costs for training, facilities, equipment, base support, and other elements are shared within the Total

Force, cost differences between components are not clear-cut. We want to build the most cost-effective force composition that meets mission needs, and many considerations will factor into that analysis and ultimate determination.

Senator SHAHEEN. Thank you.

Ms. Pfannenstiel, I want to go back to the energy hearing that we had because, as I said, I thought it was very impressive to see what is being done by the Navy. We had Secretary Mabus there talking about the work that is going on, and he mentioned two possible changes that would help with respect to energy use that I think are worth having the whole Armed Services Committee explore. One had to do with fuel contracts being limited to 5 years and the limits that that puts on the potential for biofuels. The other was the way the Congressional Budget Office currently scores fuel contracts.

So I wonder if you could talk a little bit more about those changes because clearly they affect costs.

Ms. PFANNENSTIEL. Let me talk first on the question of the 5-year alternative fuel contracts. What we have heard from the biofuel producers who would like to sell us their product is, if we can only write them a 5-year contract—that is actually the Defense Logistics Agency, can only write a 5-year contract—then these potential developers, because they are new, because they are largely start-ups, have trouble getting the financing to build the refineries that they need to get the contracts, or to get the feedstock that they need, if they only have a 5-year commitment from us. So they would prefer a 20-year, even a 10-year would be a lot better for them than 5. So we have been working on that. I think that that really is a big issue.

The scoring issue I am less knowledgeable about. Clearly, if there is a score, then that becomes a difficulty for us in terms of what the recommendation would be from the SECDEF, I will have to get back to you on that.

[The information referred to follows:]

Extending contract terms beyond 5 years will also make the advanced biofuels less expensive to the Department of Defense (DOD). To obtain financing, most facilities must recover their capital expenditures within the contract period that they have for delivery of their fuels (i.e. a financial entity will only lend for the period for which the producer can project/guarantee revenue). If this period is 10 years, the capital recouped per gallon produced is much less than it would be for a 5-year production run in a plant of the same size. This would lower delivered cost to the DOD.

The scoring issue relates to whether or not a biofuels long-term contract is viewed as an operating lease or as a capital lease. The Office of Management and Budget (OMB) scoring is dependent on whether an acquisition is characterized as a capital lease or an operating lease. If it is characterized as a capital lease, the rules require the agency to record up-front in its budget the full cost that the agency will incur over the lifetime of the project. Operating leases only require upfront budget authority in an amount sufficient to cover the contract payments for the first fiscal year during which the contract is in effect, plus an amount sufficient to cover any termination liability.

OMB Circular A-11 explicitly states that “multi-year purchase contracts for expendable commodities (e.g., aspirin) will be considered to be operating leases.” A-11, Exhibit “B” at 6. A-11 specifically identifies aspirin as an example of an expendable commodity; it does not otherwise define the term. Advanced biofuels—like aspirin and petroleum—are expendable, thereby meeting at least half of the definition, but are not easily argued as being a commodity as well by common definitions of the term.

If advanced biofuels are not able to be viewed as an expendable commodity, long-term advanced biofuel contracts must be reviewed against A-11’s operating lease criteria to determine whether they are treated as operating or capital leases. OMB

Circular No. A-11, Appx. "B" at 6. The following criteria are among those that distinguish operating from capital leases:

- Whether the ownership of the asset is transferred to the Government;
- Whether the present value of the minimum contract payments over the life of the contract exceeds 90 percent of the fair market value of the asset at the inception of the contract;
- Whether the term of the contract exceeds 75 percent of the economic value of the asset;
- Whether the asset is a general purpose asset or is built to a unique specification for the Government;
- Whether there is a private-sector market for the asset

With respect to the criteria of asset ownership, percentage of fair market value of the asset and percentage of economic life of the asset, it is likely that long-term biofuel contracts would be characterized as capital leases. The contracts would transfer ownership of the asset (i.e. the fuel) to the government for the full economic life of the asset, and the value of the contract payments would exceed 90 percent of the FMV of the fuel.

The general purpose test and private sector test would appear, however, to weigh in favor of defining the biofuels contracts as operating leases, provided that the specifications for the advanced biofuels purchased by the Navy are not different than those used or usable by commercial aviation and ship industries. In other words, if the drop-in jet and diesel fuel acquired for, and used by military planes and ships are usable in commercial planes and ships, the fuel asset should be deemed to be a general purpose asset with a private sector application. Both of these determinations would suggest that operating lease categorization is appropriate.

As A-11's operating lease criteria do not provide undivided criteria, we do not have sufficient visibility into OMB's methodology of prioritizing and weighing operating lease criteria, and are therefore unable to predict with certainty whether OMB would ultimately categorize long-term biofuel contracts as operating or capital leases. Long-term contracts for aspirin would likely fail to meet the asset transfer, economic life, and economic value criteria, and yet they are reviewed as operating leases. Aspirin, of course, clearly passes the general purpose and private-sector market tests. Accordingly, if advanced biofuels sufficiently penetrate the private sector fuel markets so as to pass the general purpose and private-sector market tests, advanced biofuel contracts should also be reviewed by OMB as operating leases.

Senator SHAHEEN. Thank you.

Thank you, Madam Chairman.

Senator MCCASKILL. Thank you. In consulting with Senator Ayotte, we both agree, and I do not know if it is good news or bad news that we could stay here all day. I guess it shows that we are capable of great nerdiness—[Laughter.]

—to stay here in the weeds on a lot of different subjects that frankly we are both prepared to talk about. But I am going to submit the remainder of my questions for the record.

I particularly am going to be interested in hearing from the Air Force about the \$900 million pause and why that is not being used to address backlog, and instead it is being shifted to other places in the budget. That is concerning to me and we will have a specific question about that and would ask for some detail on that.

There are some other issues in terms of the cleanups that I have questions about on the environmental side, and we will get those questions to you. I know that Senator Ayotte has some that she would also like to submit for the record.

We thank all of you for your hard work. We know this is a challenging time. We want you to do more and do it better. We want you to do it with a lot less and, by the way, with no politics while we are all yammering about how you cannot do anything to cut anything that is in any of our States. So good luck with that. We will continue to push as hard as we know how to make sure that

every dime is accounted for and every dime is being used wisely. We appreciate your time today.

This hearing is adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CLAIRE MCCASKILL

BASE REALIGNMENTS AND CLOSURES

1. Senator MCCASKILL. Dr. Robyn, the President's budget will request two future rounds of Base Realignment and Closure (BRAC), one in 2013 and the other in 2015. The most recent round of BRAC has just completed and we are awaiting various reports outlining lessons learned and quantifying savings. Early indications, however, show that the 2005 BRAC failed to achieve the cost savings originally forecasted. Also, many in Congress believe that, before authorizing new rounds of BRAC, we should close excess installations overseas, particularly in Europe. To the best of your knowledge, what analysis has been done to justify the request for two additional rounds of BRAC?

Dr. ROBYN. The Department has not undertaken an analytical effort to justify the President's request for two BRAC rounds because the need for BRAC is obvious. The math is straightforward: force structure reductions produce excess capacity; excess capacity is a drain on resources. Parametric techniques used to analyze various capacity measures in 2004 indicated that the Department had 24 percent excess capacity overall relative to the fiscal year 2009 force structure-based requirements. Because BRAC 2005 eliminated only about 3 percent of the Department's capacity, we believe we have significant excess capacity, and force structure reductions will only exacerbate this condition. Furthermore, periodic examinations of our infrastructure allow us to adapt it to evolving threats, technologies, and force structure changes.

In any event, the BRAC statute includes a mechanism to verify the need for each BRAC round before that round may proceed. The Department must first develop a 20-year force structure plan and compile a comprehensive installation inventory. Using those, the Department prepares a report for Congress in which it must describe the infrastructure necessary to support the force structure, identify areas of excess capacity, and conduct an economic analysis of the effect of closures and realignments to reduce excess capacity. Then, based on all of that, the Secretary must certify that BRAC is needed and that it will achieve savings—only then is the Secretary authorized to proceed with the BRAC round.

2. Senator MCCASKILL. Dr. Robyn, has the Department of Defense (DOD) quantified or measured in some way the perceived excess capacity that would necessitate any future round of BRAC?

Dr. ROBYN. In general, the Department believes that a periodic BRAC process is useful. Periodic examinations of our infrastructure allow us to adapt it to evolving threats, technologies, and force structure changes. Absent a process for closing and realigning bases, the Department will be locked in a status quo configuration that does not match its evolving force structure, doctrine and technology. Moreover, given the expense of our installation infrastructure, if we retain bases that are excess to strategic and mission requirements we will be forced to cut spending on forces, training, and modernization. Therefore, we do not believe there is any particular amount of excess capacity that is required to necessitate a future BRAC. That said, parametric techniques used to assess various capacity measures in 2004 indicated that the Department had 24 percent excess capacity overall relative to the fiscal year 2009 force structure-based requirements. Because BRAC 2005 eliminated only about three percent of the Department's capacity, we believe we have significant excess capacity and force structure reductions will only exacerbate this condition.

In any event, the BRAC statute includes a mechanism to verify the need for each BRAC round before that round may proceed. The Department must first develop a 20-year force structure plan and compile a comprehensive installation inventory. Using those, the Department prepares a report for Congress in which it must describe the infrastructure necessary to support the force structure, identify areas of excess capacity, and conduct an economic analysis of the effect of closures and realignments to reduce excess capacity. Then, based on all of that, the Secretary must certify that BRAC is needed and that it will achieve savings—only then is the Secretary authorized to proceed with the BRAC round.

3. Senator MCCASKILL. Dr. Robyn, in my opening statement I referenced some current numbers provided by the Government Accountability Office (GAO) on the most recent round of BRAC. In essence, costs to implement the most recent round grew by \$14.1 billion, or 53 percent, while 20-year net present value savings have shrunk from \$36 billion to \$9.9 billion, a 73 percent reduction. DOD completed the most recent round, the 2005 BRAC, on September 15, 2011—6 months ago. It is my understanding that GAO and DOD are still capturing lessons learned and have yet to fully analyze any data. However, given these initial figures provided by GAO, I find it hard to believe that we could characterize the most recent round of BRAC as a success. It has cost significantly more money to implement and saved far less money than originally estimated. I was struck to learn that GAO believes that 77 out of 182 approved BRAC 2005 recommendations, about 42 percent, are now not expected to even pay back in the 20-year period. Why was DOD so far off in estimating costs and savings from the 2005 BRAC round?

Dr. ROBYN. The cost of the 2005 round was far more than expected: the upfront investment costs (\$35.1 billion) exceeded the Department's original estimate by fully 67 percent. However, that increase was largely due to deliberate decisions by the Department (principally the Army) to expand the originally envisioned scope of construction and recapitalization—either to address deficiencies in our enduring facilities or to expand the capabilities they provide. In one case—namely, the reconfiguration of medical facilities in the National Capital Region—Congress added requirements that, while meritorious, increased the cost of construction and outfitting by \$1 billion. In sum, BRAC 2005 served as a needed engine of recapitalization for our enduring military facilities (military construction (MILCON) accounted for 70 percent of BRAC 2005 upfront investment costs in contrast to only 33 percent of those costs in prior rounds).

There are two other significant and related reasons for the increase in projected implementation costs. The Department decided to delay the implementation of BRAC 2005 because of competing budgetary priorities (in prior rounds, the implementation had always occurred early in the six-year window). That decision was expensive in and of itself because delay adds to the cost of inflation. In addition, delay meant that many of the large MILCON contracts were competed in 2007 and early 2008, just when construction costs spiked because of the rise in construction activity following Hurricane Katrina and because of an increase in the global demand for critical construction materials such as steel and concrete.

The net annual recurring savings decreased by a far smaller percentage. The original estimate was \$4.4 billion while the new estimate is \$3.9 billion. The decrease is mainly due to lower savings in personnel eliminations and overhead reductions.

4. Senator MCCASKILL. Dr. Robyn, in light of that performance, is there any reason why we should believe any estimates of costs and savings that you put forward to justify a new BRAC round at this time?

Dr. ROBYN. Because the focus of the BRAC 2005 round was on transforming installations to better support forces—as opposed to saving money and space—it is a poor gauge of the savings that the Department can achieve through another BRAC round. The prior BRAC rounds—which reduced capacity and paid off in 2 to 3 years—represent a better gauge of such savings. In those rounds, one-time costs ranged from \$2.7 billion to \$6.6 billion. These costs are essentially the investment which produced annual recurring savings of \$1 billion to \$2.7 billion.

FUTURE ENVIRONMENTAL PLANNING FOR GUAM

5. Senator MCCASKILL. Secretary Pfannenstiel, it's been well-publicized that the United States and Japan are reconsidering certain elements of the agreement to move marines off the island of Okinawa. Under the current plan, about 8,000 marines would have moved from Okinawa to Guam. Now, it appears that the number of marines moving to Guam will be closer to 4,700, although it is still not clear how many of those marine billets will be assigned permanently to Guam and how many will be rotational. What is clear, however, is that the military buildup on Guam will be different than what was contemplated in the Final Environmental Impact Statement (EIS) that was signed by the Navy in September 2010. So, it seems likely that some form of additional environmental planning will be required before construction on Guam can begin. Based on the ongoing discussions between the United States and Japan, and the parameters of what is now being considered for Guam in terms of a military buildup to accommodate marines, do you think an additional EIS will

be necessary—whether it’s a new EIS or perhaps a supplemental EIS—and what would a notional timeline be for such a study?

Ms. PFANNENSTEIL. Depending on the size of the reduction, a reduction in the number of marines relocating to Guam may enable the consideration of new sites that were too small or otherwise inappropriate for the relocation of 8,000 marines. The Department of the Navy would analyze these additional sites from both an operational and environmental perspective. Depending again on the size of the reduction, this may require a new National Environmental Policy Act (NEPA) document such as a Supplemental EIS. We would utilize previous study results to the maximum extent possible in order to save time and resources. Based on experience, if supplemental NEPA analysis is required, it would probably take about 2½ years to reach a new record of decision.

AIR FORCE MILITARY CONSTRUCTION BUDGET REQUEST

6. Senator MCCASKILL. Secretary Yonkers, this year’s budget request from the Air Force contains various MILCON projects valued at \$388.2 million. This is approximately \$900 million below historic averages and has been described by the Air Force as a deliberate pause in MILCON. It is my understanding that the Air National Guard and the Air Force Reserves have a combined backlog of MILCON projects valued at approximately \$830 million. Why did the Air Force decide to take this pause and reallocated budget authority instead of addressing this backlog?

Mr. YONKERS. We took a deliberate pause in MILCON to ensure we were making the right capital investment decisions while adjusting force structure in line with the emerging defense strategy while continuing to meet combatant command and New Mission requirements within fiscal constraints. The “deliberate pause” ensures critical requirements are met (e.g. F–35 beddown), prevents unnecessary investment (e.g. C–27 projects), delays early to need work (e.g. KC–46 beddown), and assumes risk in current mission areas.

All the components carry a backlog in their MILCON program, the ANG and Air Force Reserve are not the exception. The Air Force uses Plant Replacement Value (PRV) to evaluate allocation of MILCON investment. PRV is appropriate to use for evaluating MILCON investment equity because it gives credit to the component or major command responsible for recapitalizing the facility, regardless of ownership. While the Air Force strives to maintain component equity in the budget year, generally the highest priorities be they Active, Guard, or Reserve are funded while still attempting to support component equity.

FUTURE COST OF ENVIRONMENTAL CLEANUP

7. Senator MCCASKILL. Dr. Robyn, the DOD environmental restoration program is necessary, but expensive—costing about \$1.5 billion per year. The previous goal was to have remedies in place or responses complete at active installations by 2014. The new goal, issued in July 2011, is to responses complete at 90 percent of sites by the end of 2018 and 95 percent response complete by the end of 2012. We need to continue to keep pressing toward getting these cleanups done as soon as practical so we can begin to reduce costs associated with the cleanup of the legacy contamination at active and former DOD installations. Do you believe we are moving aggressively with the environmental restoration program?

Dr. ROBYN. Yes, I do believe we are aggressively moving forward with our cleanups. We have already finished cleanup activities at 25,303 sites out of our total inventory of 34,869 sites and are only monitoring. Our new goals now focus on finishing cleanup activities—response complete.

8. Senator MCCASKILL. Dr. Robyn, what do you see as the funding trends?

Dr. ROBYN. We appreciate the strong Congressional support for the steady level of funding that is essential to efficiently and effectively execute the long-term cleanup process. Between 2014 and 2016 we expect funding for the installation restoration program (hazardous waste cleanup) to ramp down as we finish cleanup activities at these sites. Concurrently, we expect to shift that investment to the military munitions response program (unexploded ordnance cleanup). After 2021, we expect 95 percent or more of our sites will have finished cleanup activities. We will need to monitor many of these sites to ensure they continue to protect human health and the environment. Costs for these monitoring activities will be significantly lower than today’s funding levels. However, the remaining 5 percent of the sites will be extremely complex and continue to require steady investments.

9. Senator MCCASKILL. Dr. Robyn, in light of these new goals, when do you believe we can reasonably expect to see the cost of the cleanup program begin to come down?

Dr. ROBYN. The DOD components are planning to effectively meet DOD's new goals of achieving response complete (finish cleanup activities) at 90 percent and 95 percent of hazardous waste and munitions response sites at active installations, and hazardous waste site at Formerly Used Defense Site properties in fiscal years 2018 and 2021, respectively. While uncertainties in cost estimate exist, particularly with complex cleanup sites, we anticipate that the total cleanup cost will decrease as we finish cleanup activities.

Additionally, DOD has developed advanced technologies to detect and identify unexploded ordnance, which we anticipate will further reduce program costs. Through working closely with our regulatory partners, we hope to begin adopting the new technology in fiscal year 2015.

MUNITIONS CLEANUP

10. Senator MCCASKILL. Dr. Robyn, there are some promising technologies that have the potential to significantly reduce the time and cost associated with detection and remediation of unexploded ordnance. What is the status of this technology, and what is your expectation for when, and if, this technology will be available for DOD munitions response?

Dr. ROBYN. These technologies are undergoing testing in coordination with Federal and State regulators under the Environmental Security Technology Certification Program (ESTCP). The ESTCP demonstration program is scheduled to run through fiscal year 2015 with the goal of understanding the range of sites to which these technologies are applicable. As we progress through this program, participation will shift from the developers of the technology to potential users in order to develop a contractor base trained to utilize these technology advances. At the same time, the regulatory community is preparing for their adoption. In parallel with these demonstrations, initial production implementation of these technologies is beginning.

CLEANUP AT TYNDALL AIR FORCE BASE

11. Senator MCCASKILL. Secretary Yonkers, environmental remediation at Tyndall Air Force Base (AFB) in Florida is an example of a cleanup effort that needs to move forward. Tyndall has been on the National Priority List since 1997. However, while some of the contaminated areas on the base have been cleaned up, negotiations between the Environmental Protection Agency (EPA), DOD, and the Air Force have been bogged down over enforcement issues in the Federal facilities agreement. As a result, Tyndall is one of just two military installations for which a Federal facility agreement (FFA) has not yet been signed. What is the holdup at Tyndall?

Mr. YONKERS. The Air Force is ready and willing to continue negotiations with EPA to reach agreement on a mutually acceptable interagency agreement, as required by the Comprehensive Environmental Response, Compensation and Liability Act, for Tyndall AFB. Until an agreement is reached, the Air Force is committed to continue the cleanup at Tyndall using the procedures in the DOD/EPA FFA template. Since the Air Force does not question EPA's oversight and enforcement authorities, those given by law or those contained within the FFA template, Tyndall will continue to request EPA review, comment and consultation on remedy selection, and the documents specified in the FFA template. The Air Force is preparing a letter to EPA which will provide a clear explanation of the outstanding issues with EPA Region 4's latest draft FFA proposed for Tyndall AFB. Once completed, we will provide the SASC a copy of the Air Force letter.

12. Senator MCCASKILL. Secretary Yonkers, what needs to be done to settle this matter and to keep the cleanup effort moving?

Mr. YONKERS. The Air Force is ready and willing to continue negotiations with EPA to reach agreement on a mutually acceptable interagency agreement, as required by the Comprehensive Environmental Response, Compensation and Liability Act, for Tyndall AFB. Until an agreement is reached, the Air Force is committed to continue the cleanup at Tyndall using the procedures in the DOD/EPA FFA template. Since the Air Force does not question EPA's oversight and enforcement authorities, those given by law or those contained within the FFA template, Tyndall will continue to request EPA review, comment and consultation on remedy selection and the documents specified in the FFA template.

IMPROVED CONTRACTING MECHANISMS

13. Senator McCASKILL. Secretary Yonkers, you testified that the Air Force is re-evaluating contracting mechanisms in the areas of MILCON and environmental cleanup and expects to achieve savings of up to 5 percent in MILCON and as much as 20 percent in environmental cleanup. Could you please describe the improved contracting mechanisms that you have adopted, or plan to adopt, to achieve such savings?

Mr. YONKERS. The Air Force has several efforts underway to optimize life cycle costs of facilities acquired through MILCON.

Design-Build contracts are being developed with increased performance-based specifications which allow use of market-driven structural systems and materials. This provides flexibility in design of building systems that do not impact the functionality of facilities and allows contractors to propose more cost effective design solutions, thereby allowing lower proposal costs.

We are also instituting a portfolio management approach to MILCON acquisition in order to optimize project delivery methods through strategies such as increased proposal periods, 2-step Requests for Proposals (RFPs) where appropriate, and full and open competition where more advantageous.

Additionally, standard designs and standard RFPs are being developed to consistently incorporate facility requirements and best practices, and reduce design efforts for future projects. Standard designs and RFPs will be utilized in an adapt-build acquisition strategy that will allow reduced design times and allow incorporation of lessons learned to reduce modifications during construction. Standard designs for five facility types are complete and eight facility types are in development.

We have also instituted a more rigorous change order management policy that provides increased scrutiny and control of user-requested changes, as well as required changes, emphasizing strict control of cost growth.

Regarding environmental cleanup, typically in the past at a given installation we have been awarding multiple time-and-material contracts or cost-plus-fee contracts, depending on the type of cleanup site and its phase within the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process, with the goal to reach the next phase within that multi-phase CERCLA process. Under our new strategy we are now awarding a single performance-based, firm-fixed-price contract that encompasses all cleanup sites at a given installation with the goal of reducing our long-term life-cycle cost and taking us as close to site completion as soon as possible within the period of performance of the contract. By using a performance-based contract that is awarded based on who can meet Air Force and regulatory requirements to get us to site completion the soonest and at the lowest cost, we incentivize contractors to find efficiencies through innovation and effective management practices. In addition, by including all cleanup sites at a given installation into one contract we aggregate risks associated with individual sites into a broader risk pool and create economies of scale in both time and money, thus improving our expected savings.

ENCROACHMENT ON TRAINING IN THE UNITED STATES

14. Senator McCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, all of the Military Services have to deal with constraints on training and training ranges around the country. These constraints, often referred to broadly as encroachment, take various forms, but have the general effect of limiting the ability of our military forces to train and prepare for military missions. Certain programs, like the Readiness and Environment Protection Initiative and the Army's Compatible Use Buffer Initiative are designed to help preserve training capacity while also protecting the environment. Nonetheless, the challenges of encroachment confront each of the Services. Could you please identify the biggest encroachment challenges they are currently facing?

Dr. ROBYN. DOD has a robust process in place to determine and manage encroachment issues. Though the issues vary by Service and even by installation, there are a number identified by all that need serious attention as DOD goes forward. The Sustainable Ranges Initiative (SRI) is an Integrated Product Team (IPT) composed of leadership from Installations and Environment, Readiness, and Test and Evaluation at the Office of the Secretary of Defense (OSD) level, as well as from each of the Services. The SRI IPT meets monthly at the senior staff level to address a wide variety of issues, today; there are five serious and ongoing encroachment issues before the SRI Team:

- (1) Development near airfields, gunnery ranges, tank ranges, maneuver areas, outlying landing fields and under low level flight routes;

- (2) Protection of threatened and endangered species and cultural artifacts on DOD training and testing ranges or operating areas, which can lead to modified use of lands;
- (3) Projected future loss of critical spectrum—this is the major issue for the test community, but also a serious and increasing threat to the training community;
- (4) Lack of dedicated airspace and the need for different types of airspace to support Unmanned Aircraft System training;
- (5) Sitting of renewable or other energy projects on or near DOD training and testing areas so that they do not interfere with the military mission. In light of the evolving defense strategy and tightening budget environment DOD faces, it is even more important that we meet these encroachment challenges in order to sustain our ability to test and train effectively and efficiently and preserve the readiness of our Armed Forces.

Ms. HAMMACK. Encroachment remains a challenge for the Army. The capacity of and accessibility of Army lands is decreasing while current and projected requirements for land exceed our training land holdings. There are significant encroachment challenges that must continue to be addressed in order to sustain training on Army land. The Army's top three encroachment challenges are: threatened and endangered species; cultural resources—specifically archeological sites; and air space.

For threatened and endangered species and archeological sites, restrictions result from legal compliance responsibilities associated with the Endangered Species Act and the National Historic Preservation Act (NHPA). The Army has 213 threatened and endangered species and over 80,000 archeological sites on our installations. Compliance with the Endangered Species Act and NHPA has resulted in managing military training areas for species conservation and archeological site preservation in addition to military training requirements. The environmental restrictions resulting from Endangered Species Act and NHPA compliance translate to overall reduced accessibility to training land. Such restrictions include; restricted time and duration of training events, restricted use or off-limits status placed on training lands and ranges; restricted or eliminated use of certain weapons, ammunition, pyrotechnics, or smoke.

Air space challenges continue to emerge. The increased development and siting of wind farms are presenting issues for Army Airfields, as they can affect air corridors, low level maneuver areas, and surveillance radars. In some localities power companies are seeking to construct high-tension electrical wires across Army installation ranges which can affect training routes and range utilization. Additionally, home-station Unmanned Aircraft System accommodation is becoming a challenge as many Army Airfields are surrounded by densely populated areas which complicate FAA Certificate of Authorization approval. This is a critical concern, due to the fact that large Army Unmanned Aircraft System platforms must base out of Army Airfields due to runway length requirements. Installation airspace will be used to a much higher degree for returning manned and unmanned platforms. Unmanned Aircraft System platforms are being fielded in Brigade Combat Teams and at the company level. Commanders will seek to integrate these platforms into Force-on-Force and Force-on-Target scenarios, significantly increasing their employment at home-station and increasing the need for more frequent use of higher altitude restricted airspace.

Ms. PFANNENSTEIL. The Navy faces a variety of encroachment or compatible development pressures. Some of the larger challenges include the development of renewable energy systems, frequency loss within the electromagnetic spectrum, and proliferation of Ocean Observing Systems (OOS).

- Wind energy development continues to pose challenges to training, testing, and readiness ashore and in the maritime domain. Wind turbines have the potential to cause interference with air traffic control and navigational aid systems, or become a physical obstruction hazard for flight operations, which can adversely impact pilot safety and the quality of live instrument flight training. Offshore wind, oil, and gas development can interfere with naval freedom to maneuver, tactical weapons employment, and crew certification.
- The reallocation from primary Federal use to non-Federal use of radio frequency spectrum will likely impact Navy's testing, training, and operations on a global basis, as additional frequencies are made available to commercial wireless broadband developers. The reallocation of Federal radio frequency may require relocation, retuning, and in some cases, redesign of military systems which can disrupt current and planned capabilities.

- Proliferation of OOS on or adjacent to ranges and operating areas has resulted in unavoidable risk to Navy national security interests. Navy training and readiness is impacted due to longer training cycles and increased cost to mitigate the effects of OOS capabilities.

Mr. YONKERS. The Air Force currently has three main areas of concern with respect to encroachment. The first is ensuring use of radio frequency (RF) spectrum for communications, navigation and other critical purposes are unhindered. A second concern is the balancing of Air Force mission compatibility with renewable energy efforts. Solar towers and wind turbines have the potential to introduce multiple compatibility considerations including physical obstruction, visual interference, and light emissions. In addition, such structures can also create Electromagnetic Interference (EMI) which disrupt ground and airborne radar. A third concern falls in the category of traditional compatibility issues at our airfields where incompatible development in our Clear Zones, Accident Potential Zones, and within noise contours can negatively affect public health and safety.

QUESTIONS SUBMITTED BY SENATOR KELLY AYOTTE

BASE REALIGNMENT AND CLOSURE

15. Senator AYOTTE. Dr. Robyn, DOD has asked Congress this year for the authorization to conduct two rounds of BRAC in 2013 and 2015. In your prepared remarks you state, “force reductions produce excess capacity, only through BRAC can we align our infrastructure with our defense strategy.” As you know, DOD has clearly stated that force reductions will be implemented with the idea of reversibility, which the Secretary of Defense has stated allows forces to “surge, regenerate, and quickly mobilize capabilities needed for any contingency.” How will DOD be able to quickly surge, regenerate, and mobilize without the capacity in facilities and infrastructure to absorb the additional forces?

Dr. ROBYN. As it has done in prior BRAC rounds, DOD will develop closure and realignment recommendations that provide it with the flexibility to adapt to changing circumstances, particularly surge requirements that can arise from contingencies, mobilizations, or extended changes in force levels. Specifically, DOD uses a 20-year force structure plan and has specific selection criteria¹ that capture the concept of surge capacity. Criterion one requires the Department to consider “current and future” mission capabilities, and criterion three assesses the “ability to accommodate contingency, mobilization, surge and future total force requirements.” Furthermore, through execution of prior BRAC rounds, and as verified in a 1999 study, DOD has demonstrated that it will retain within the U.S. installation infrastructure sufficient difficult-to-reconstitute assets to respond to surge, accommodate a significant reconstitution of the force, and support all forces, including those currently based outside the United States.

16. Senator AYOTTE. Dr. Robyn, is reversibility defined by a series of excess facility requirements?

Dr. ROBYN. Yes. In essence, “reversibility” concerns whether, after closing installations under a BRAC round, the Department still has the flexibility to adapt to

¹ Congress specified the following criteria for use in the 2005 BRAC round, and DOD has proposed to use the same criteria for the requested rounds in 2013 and 2015.

Military Value Criteria:

1. The current and future mission capabilities and the impact on operational readiness of the total force of DOD, including the impact on joint warfighting, training and readiness.
2. The availability and condition of land, facilities, and associated airspace (including training areas suitable for maneuver by ground, naval, or air forces throughout a diversity of climate and terrain areas and staging areas for the use of the Armed Forces in homeland defense missions) at both existing and potential receiving locations.
3. The ability to accommodate contingency, mobilization, surge and future total force requirements at both existing and potential receiving locations to support operations and training.
4. The cost of operations and the manpower implications.

Other Criteria:

5. The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs.
6. The economic impact on existing communities in the vicinity of military installations.
7. The ability of the infrastructure of both the existing and potential receiving communities to support forces, missions and personnel.
8. The environmental impact, including the impact of costs related to potential environmental restoration, waste management and environmental compliance activities.

changing circumstances—particularly surge requirements that can arise from contingencies, mobilizations and extended changes in force levels.

The Department develops closure and realignment recommendations in a manner that ensures it retains the flexibility to adapt to changing circumstances. Specifically, the Department uses a 20-year force structure plan and has specific selection criteria that capture the concept of the additional capacity it must retain to meet “surge” requirements. Furthermore, the Department retains within the U.S. installation infrastructure sufficient difficult-to-reconstitute assets to respond to surge, accommodate a significant reconstitution of the force, and support all forces, including those currently based outside the United States.

17. Senator AYOTTE. Dr. Robyn, you recently testified that, “if Congress does not authorize additional BRAC rounds, DOD will be forced to use its authority to begin to close and realign bases.” Is it DOD’s position that you will attempt to close military bases even if Congress does not believe it is in the best interest for national security at this time?

Dr. ROBYN. The United States is at a strategic turning point after a decade of war. The global security environment presents an increasingly complex set of challenges and opportunities. In his testimony before the House Armed Services Committee to support the defense budget request, the Secretary outlined new strategic guidance. With changes in strategy come changes—in this case reductions-in-force structure. Simply stated, the cuts in force structure that we are implementing must be accompanied by cuts in supporting infrastructure, including military bases. Absent a process for closing and realigning bases, DOD will be locked in a status quo configuration that does not match its evolving force structure, doctrine, and technology. Moreover, given the expense of our installation infrastructure, if we retain bases that are excess to strategic and mission requirements we will be forced to cut spending on forces, training, and modernization.

Absent the requested BRAC authority, we will be forced to use our existing authorities to begin the realignment and closure process within the framework of the strategic guidance and our force structure. One reason we want to avoid that approach is that, if it acts outside of the BRAC process, DOD is severely constrained in what it can do to help local communities.

18. Senator AYOTTE. Dr. Robyn, do you have a list of bases that you want to close?

Dr. ROBYN. No. BRAC is a meticulous statutory process that does not have a predetermined outcome. In accordance with the BRAC process, DOD will consider all installations within “the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands, American Samoa, and any other commonwealth, territory, or possession of the United States” equally for closure or realignment. Using statutory selection criteria that emphasize military value and a force structure plan looking out 20 years, DOD will complete a comprehensive review before it determines which installations should be realigned or closed. The list will then be reviewed by an independent commission that can (and has in the past) add to, delete from, or otherwise change DOD’s recommendations. The commission then sends its recommendations to the President who must accept or reject them on an all or nothing basis. If approved, the President sends the commission’s recommendations to Congress, which has 45 days to enact a joint resolution of disapproval (on an all or nothing basis). Absent such a resolution, DOD is bound by the BRAC Act to close and realign all installations as recommended by the commission. It is only after the completion of this thorough process that DOD will have a list of BRAC closures and realignments.

19. Senator AYOTTE. Dr. Robyn, what analysis has DOD conducted?

Dr. ROBYN. The Department has not undertaken an analytical effort to justify the President’s request for two BRAC rounds because the need for BRAC is obvious. The math is straightforward: force structure reductions produce excess capacity; excess capacity is a drain on resources. Parametric techniques used to analyze various capacity measures in 2004 indicated that the Department had 24 percent excess capacity overall relative to the fiscal year 2009 force structure-based requirements. Because BRAC 2005 eliminated only about 3 percent of the Department’s capacity, we believe we have significant excess capacity and force structure reductions will only exacerbate this condition. Furthermore, periodic examinations of our infrastructure allow us to adapt it to evolving threats, technologies and force structure changes.

In any event, the BRAC statute includes a mechanism to verify the need for each BRAC round before that round may proceed. The Department must first develop a 20-year force structure plan and compile a comprehensive installation inventory.

Using those documents, the Department prepares a report for Congress in which it must describe the infrastructure necessary to support the force structure, identify areas of excess capacity, and conduct an economic analysis of the effect of closures and realignments to reduce excess capacity. Then, based on all of that, the Secretary must certify that BRAC is needed and that it will achieve savings—only then is the Secretary authorized to proceed with the BRAC round.

KC-46A AIR REFUELING TANKER BASING

20. Senator AYOTTE. Secretary Yonkers, the Air Force is in the process of developing the criteria for the selection of bases to station the KC-46A air refueling tanker. As I discussed with the Secretary and Chief of Staff of the Air Force, as well as with General Johns of Air Mobility Command, it is important that the KC-46A basing decisions are made in an objective and transparent manner. The decision must be based on the merits of the many variables associated with an installation and the unit. This decision must be guided by objective metrics that will standup to the inevitable scrutiny that will follow the Air Force's KC-46A decisions. From an installations perspective, can you describe what priorities you are looking for with regard to tanker basing?

Mr. YONKERS. The Air Force is currently developing criteria for the KC-46A and plans to brief the criteria to interested congressional staffers in the spring of 2012. While the criteria are not yet finalized, they will assess areas such as mission requirements, installation capacity, cost, and environmental considerations.

21. Senator AYOTTE. Secretary Yonkers, addressing installation environmental concerns can be a costly endeavor over the long-term. To what degree will the basing criteria for the KC-46A take into account environmental considerations?

Mr. YONKERS. The Air Force is currently developing criteria for the KC-46A and plans to brief the criteria to interested Congressional staffers in the spring of 2012. While the criteria are not yet finalized, they will assess areas such as mission requirements, installation capacity, cost, and environmental considerations. Typically, the environmental criteria assess air quality, existing environmental issues, noise, encroachment, land use, et cetera.

22. Senator AYOTTE. Secretary Yonkers, will a lack of environmental concerns for a prospective KC-46A base be taken into account?

Mr. YONKERS. While the basing criteria for the KC-46A are not yet finalized, they will assess areas such as mission requirements, installation capacity, cost, and environmental considerations. Typically, the environmental criteria assess air quality, existing environmental issues, noise, encroachment, land use, et cetera.

23. Senator AYOTTE. Secretary Yonkers, some potential candidates for the KC-46A have an existing KC-135 simulator which saves money and reduces environmental impact. Some of these existing KC-135 simulators could be easily converted to a KC-46A simulator at a much lower cost than building a new KC-46A simulator facility. To what extent will the presence of an existing simulator facility on the installation be taken into account in the basing criteria?

Mr. YONKERS. The Air Force is currently developing criteria for the KC-46A and plans to brief the criteria to interested congressional staffers in the spring of 2012. While the criteria are not yet finalized, they will assess areas such as mission requirements, installation capacity, cost, and environmental considerations.

24. Senator AYOTTE. Secretary Yonkers, clearly, lengthening runways, expanding parking ramps, or building jet fuel storage at some potential bases would require the investment of millions of taxpayers' dollars. To what extent will the length of the existing runway, size of the existing aircraft parking ramp, or presence of large existing jet fuel storage be taken into account in the basing criteria?

Mr. YONKERS. The Air Force is currently developing criteria for the KC-46A and plans to brief the criteria to interested congressional staffers in the spring of 2012. While the criteria are not yet finalized, they will assess areas such as mission requirements, installation capacity, cost, and environmental considerations. Installation capacity generally considers items such as runways and ramp space.

25. Senator AYOTTE. Secretary Yonkers, given the cargo capacity of the KC-46A, to what extent will the basing criteria consider an installation's proximity to deep water ports or major interstate highways?

Mr. YONKERS. The Air Force is currently developing criteria for the KC-46A and plans to brief the criteria to interested Congressional staffers in the spring of 2012. While the criteria are not yet finalized, they will assess areas such as mission requirements, installation capacity, cost, and environmental considerations.

26. Senator AYOTTE. Secretary Yonkers, to what extent will the basing criteria take into account an installations proximity to other military installations that would provide cost-effective joint basing and efficiency opportunities?

Mr. YONKERS. The Air Force is currently developing criteria for the KC-46A and plans to brief the criteria to interested congressional staffers in the spring of 2012. While the criteria are not yet finalized, they will assess areas such as mission requirements, installation capacity, cost, and environmental considerations.

The KC-46A Fleet Basing Strategy dictates that associations exist at all operational locations. The Formal Training Unit (FTU) classic association will be worked through the Total Force Enterprise process.

U.S. MARINES ON GUAM AND OKINAWA

27. Senator AYOTTE. Dr. Robyn, on February 8, 2012, the Governments of the United States and Japan issued a joint statement on the U.S. strategic review of its defense posture in Asia. The two governments are now negotiating changes to the agreement regarding moving marines off Okinawa, including delinking land returns from progress on the construction of a replacement facility for Marine Corps aviation resources stationed on Okinawa. Since 8,700 marines and their families will still be leaving Okinawa, where will they go?

Dr. ROBYN. Approximately 9,000 marines will relocate from Okinawa to Guam, Hawaii, Australia, and CONUS. Of these, roughly 5,400 are permanent personnel, not all of whom have dependents on Okinawa. The remaining 3,600 are rotational personnel who deployed to Okinawa under the Unit Deployment Program and in the future will deploy to Guam or Australia instead.

28. Senator AYOTTE. Dr. Robyn, the plans call for mostly rotating forces to Australia or Guam. How many rotational forces will be deployed to Guam and where will they come from?

Dr. ROBYN. Approximately two thirds of the nearly 5,000 marines that will occupy future Marine Corps Base Guam will be rotational forces deploying to Guam under the Marine Corps' Unit Deployment Program. They will deploy to Guam from bases in CONUS and Hawaii.

29. Senator AYOTTE. Dr. Robyn, how much will it cost to build facilities at the new locations announced by DOD?

Dr. ROBYN. The Department has developed a preliminary rough order of magnitude estimate as reflected in the chart below. This estimate is based on a per capita methodology at all locations other than Guam. The estimate for Guam is based on an actual project list. A refined cost estimate of budget level quality will require detailed facility planning, base master planning, determination of potential host nation support from the government of Australia and completion of environmental studies at all geographical locations.

AFFORDABILITY TARGET (CONSTANT YEAR-FISCAL YEAR 2012)

[In billions of dollars]

Geo-Location	Guam	Hawaii	Australia	Japan	CONUS	Total
MILCON	6.8 ¹	2.1	1.3	0.0	0.3	10.5
Non-MILCON	1.8	0.4	0.3	0.6 ²	0.1	3.2
Total	8.6	2.5	1.6	0.6	0.4	13.7

¹ Guam MILCON based on preliminary facility list at Finegayan cantonment. Potential savings from alternative DOD sites cannot be quantified at present.

² Japan preliminary non-MILCON estimates include U.S. Government O&M/Procurement for Iwakuni and FRF AIP execution

- U.S. contribution is \$10.6 billion.
- Australia's contribution is undetermined.
- GOJ contribution is \$3.1 billion.
- Non-MILCON costs include O&M, procurement requirements, and Guam Integrated Civil-Military Utilities.

30. Senator AYOTTE. Dr. Robyn, when will we get the updated plan for that facility construction?

Dr. ROBYN. The Department continues to work on the master plan for the relocation of marines from Okinawa to Guam now that we have negotiated a revised laydown with the Government of Japan (GOJ). We are now providing to the committees detailed estimates but budget level quality data will require detailed facility planning, base master planning, determination of potential host nation support from the Government of Australia and completion of environmental studies at all geographical locations.

31. Senator AYOTTE. Dr. Robyn, will DOD abide by the requirements in section 2207 of the National Defense Authorization Act (NDAA) for Fiscal Year 2012?

Dr. ROBYN. Yes, the Department will abide by the requirements in section 2207 of the NDAA for Fiscal Year 2012.

U.S. MARINE CORPS AVIATION ON OKINAWA

32. Senator AYOTTE. Dr. Robyn, you write in your opening statement regarding Marine Corps aviation operations on Okinawa that, "we remain committed to the construction of a replacement facility for Marine Corps Air Station Futenma as the only viable way forward. We believe the two sides must invest in the Futenma facility in the near-term, to ensure both safety and combat readiness." Since we've been trying to get a new base for the past 20 years, how is the announcement to separate the construction of a replacement facility from other moves on Okinawa considered a continued commitment?

Dr. ROBYN. Both the U.S. and GOJ defense representatives have, on numerous occasions, reconfirmed their view that the Futenma Replacement Facility (FRF) at Camp Schwab remains the only viable solution to the relocation of Marine Corps Air Station Futenma. In 2006, both sides agreed to link progress on the FRF to the movement of marines to Guam and the resultant return of land on Okinawa to the GOJ; the thought being this would provide positive incentives to move forward on both projects. However, the moves to Guam and the FRF have both proven to be difficult to implement, and the linkage has not provided the expected positive incentives, rather it was beginning to cause both projects to stall. In delinking these two actions, we remain committed to both, but they will be allowed to move forward separately. The GOJ is responsible for constructing the FRF, and understands that the U.S. Marine Corps will continue to operate out of Futenma until such a time as the FRF is operational.

33. Senator AYOTTE. Dr. Robyn, if we're committed to a replacement facility, why are we advocating for continued investment in a facility we all agree we are going to close?

Dr. ROBYN. Under a best case scenario, the FRF will not be operational for nearly 10 years. Since necessary maintenance and recapitalization of Marine Corps Air Station (MCAS) Futenma has largely been deferred since the original agreement in 1996, there are certain investments required to allow us to continue to operate safely with an acceptable quality of life at MCAS Futenma for the near future.

34. Senator AYOTTE. Dr. Robyn, are you proposing to use U.S. taxpayers' funds to invest in a facility to be closed?

Dr. ROBYN. Only for such repairs, refurbishments, and minor MILCON projects necessary to sustain safe operations and quality of life at MCAS Futenma for the near future.

35. Senator AYOTTE. Dr. Robyn, when do you believe the Governor of Okinawa will agree to the construction of a replacement facility?

Dr. ROBYN. The GOJ will only be able to submit the landfill permit request to the Governor of Okinawa after they have responded to the points he recently raised in the environmental reports. I understand that this is not likely to occur until the latter part of the year, but it is solely under the control of the GOJ in consultation with the Governor.

FUNDING NON-DOD REQUIREMENTS IN THE DEFENSE BUDGET

36. Senator AYOTTE. Dr. Robyn, there is a proliferation of requests in this budget to spend DOD funds on programs that have not historically been the responsibility of DOD or a core mission of the military. Items like: \$51 million to construct, ren-

ovate, repair, or expand schools that are owned and operated by local school districts; \$106.4 million for civilian water and wastewater infrastructure capital improvements on Guam; and \$33 million to construct regional public health laboratories and mental health facilities to serve local civilian beneficiaries with no military association. In addition, the Secretary of the Navy recently committed \$170 million to spark development of the commercial biofuels industry. At the same time, the administration proposes to cut eight Army brigades and their enablers, over 120,000 military personnel, and numerous Air Force squadrons, all of which increase risk for our military forces in order to find savings within a constrained discretionary budget. When families or small businesses have a tight budget, they must establish priorities and make tough decisions about what they can afford and what they cannot afford. It should be the same way with the Federal Government and with DOD. While some of the initiatives I listed could be worthwhile, I think it is difficult to argue, for example, that we should be spending \$170 million on biofuels when we are slashing the size of our ground forces to save money. Why are these requests included in the DOD budget request in a year when the administration has cut the defense top line by \$27 billion from last year?

Dr. ROBYN. The fiscal year 2013 funding request for Guam is part of DOD's share of the improvements needed to support the impact of the MILCON and force realignment program on the Territory. The Navy's "Guam and Commonwealth of the Northern Marianas Islands Military Relocation Final Environmental Impact Statement" acknowledges the direct, indirect, and induced impact the military build-up will have on Guam's social services including educational, medical, and artifact preservation facilities due to the added DOD military and civilian population demand.

With respect to the \$51 million request for schools, while the fiscal year 2011 and 2012 funding will address the most pressing needs as DOD works its way down the Priority List of capacity and facility condition deficiencies of public schools located on military installations, there are additional public schools on military installations with serious deficiencies that still must be addressed. While DOD does not own these schools, we do arguably have a vested interest in them because the respective student bodies are predominantly military-connected children.

37. Senator AYOTTE. Dr. Robyn, given the uncertain status of forces to be assigned or rotated to Guam, why is DOD requesting \$139.4 million for improvements to civilian facilities and infrastructure on Guam?

Dr. ROBYN. This funding is part of the Department's share of the improvements needed to support the impact of the MILCON and force realignment program on Guam. The Navy's "Guam and Commonwealth of the Northern Marianas Islands Military Relocation Final Environmental Impact Statement" acknowledges the direct, indirect, and induced impact the military build-up will have on Guam's social services including educational, medical, and artifact preservation facilities due to the added DOD military and civilian population demand.

38. Senator AYOTTE. Dr. Robyn, who determined that they are priorities for our national security?

Dr. ROBYN. The fiscal year 2013 President's budget is based on an intensive review to establish defense priorities and to ensure adequate resource levels. This was achieved based on strategic guidance from the President, and reflects the recommendations of the DOD senior military and civilian leadership. A balanced approach evolved, which incorporates all areas from potential savings, to force structure enhancements, modifications and adjustments.

AIR FORCE CONSTRUCTION PLANS FOR GUAM

39. Senator AYOTTE. Secretary Yonkers, the Air Force has a plan to rotate global strike assets at Anderson Air Base. This plan calls for over \$2.9 billion in new construction mostly on the north side of the runways to build hangars and squadron facilities that will be empty between deployments. Coincidentally, the Marine Corps is planning to build the same types of facilities right next door for Marine Corps aircraft being restationed from Okinawa. Considering the fact that the Air Force MILCON request for fiscal year 2013 is the lowest in over 25 years, what is the status of this plan?

Mr. YONKERS. The Air Force has been rotating global strike assets to Joint Region Marianas-Andersen for roughly 10 years, and will continue to do so in the future, although due to lack of dedicated facilities, work-arounds have been required. Independent of the Marine Corps Pacific laydown and despite the deliberate pause in

MILCON in fiscal year 2013, the Air Force still requires infrastructure to support these assets at Andersen. While there may be some gaps in the Air Expeditionary Force rotation, there is a near-continuous deployment presence at Andersen. Marine facilities are being constructed to meet Marine requirements, and are not redundant to Air Force requirements, and vice-versa.

Regarding the status of the Air Force plan, all facilities requested to date are necessary to operate from Andersen for the foreseeable future. But the Air Force is evaluating the need to harden facilities and to what level of protection, as there are vertical facilities that must be hardened, and the Air Force is taking steps within the Future Years Defense Plan (FYDP) to do this. The \$2.9 billion figure you reference is only an estimate at this point in time.

40. Senator AYOTTE. Secretary Yonkers, is it fully funded in the Air Force's 5-year spending plan?

Mr. YONKERS. No. The Guam Strike program is an important enduring requirement, but in fiscal year 2013, we took a deliberate pause in MILCON and absorbed a large reduction in the overall MILCON program across the FYDP. Frankly, depending on the ultimate number of facilities constructed at Guam and the level of hardening required, the Guam Strike program could potentially absorb a very large portion of the FYDP. For the short term, the Air Force has placed \$254 million in the FYDP against Guam Strike in fiscal year 2014 and fiscal year 2015, and will adjust this amount in the future, as necessary.

41. Senator AYOTTE. Secretary Yonkers, is this an example of wasteful duplication?

Mr. YONKERS. No sir, not in the least. Marine construction is to meet Marine aircraft requirements, and the Air Force construction is to meet Air Force requirements, and neither service is building "surplus" space. Additionally, the Air Force and Marine aircraft infrastructure requirements are different. The Air Force has a mix of fighters, tankers, and bombers, while the marines will generally have a mix of fighters, helicopters, and MV-22 Ospreys. Marine facilities will not be sized and nor the pavements stressed to handle Air Force aircraft, nor should they be.

42. Senator AYOTTE. Secretary Yonkers, have the Air Force and Marine Corps explored the possibility of saving money by developing a joint facility at Anderson Air Base?

Mr. YONKERS. We looked at the possibility of joint construction and shared infrastructure whenever it made sense. For example, the electrical, water, and sewer infrastructure for the North Ramp were sized to handle both Service's requirements. However, the Air Force and Marine facility requirements are service specific, and each service's construction program is geared to handle a specific number of different aircraft ... no more, no less. But we will continue to be on the lookout for opportunities to save money wherever we can, be it within the Air Force program, or through joint efforts with the marines.

43. Senator AYOTTE. Secretary Yonkers, does the Air Force have a plan for strategic lift at Anderson Air Base to address the needs of Marine Corps forces coming to Guam, in addition to Air Force requirements?

Mr. YONKERS. The Air Force will provide strategic lift of Marine Corps forces at Andersen AFB through the established priority-based system managed by Air Mobility Command as the air component to U.S. Transportation Command. Peace-time movements of forces will be scheduled and paid for by the Marine Corps per business rules established in the Transportation Working Capital Fund. Contingency scheduling will be in accordance with Time-Phased Force Deployment Document associated with the contingency or the Combatant Command's Request for Forces.

FUNDING FOR HISTORICAL REQUIREMENTS ON U.S. BASES

44. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, the NHPA of 1966 requires all Federal entities to maintain all buildings that are on, or eligible for inclusion on, the National Register of Historic Places. DOD must ensure that repairs, renovations, or alterations to historic military facilities comply with requirements imposed by local and State historic preservation offices. This can result in higher than average costs, which detract from funding for other critical facility sustainment and repair requirements. The Military Services have established a monumental adjustment factor that requires a facility installation to have most of eight characteristics to qualify for funding. But in the

case of the Portsmouth Naval Shipyard, as with most older bases with multiple historic facilities, about 25 percent of the buildings on or eligible for the registry meet the criteria, although most of these historic facilities are used for critical shipyard operations. Should installations have the resources to comply with the laws to sustain historic facilities without having to sacrifice other critical facilities projects?

Dr. ROBYN. The proper maintenance of historic properties does not need to sacrifice other critical facilities projects. DOD reviews annually its maintenance requirements in light of other important priorities and the degree of risk that is acceptable to ensure missions are not jeopardized.

Ms. HAMMACK. Maintaining historic properties does not have to be at the expense of other critical facilities projects. The Army continually reviews all its maintenance requirements to determine the degree of risk that is acceptable to ensure missions are not jeopardized.

Ms. PFANNENSTEIL. The proper maintenance of historic properties does not need to sacrifice other critical facilities projects. However, the Navy annually reviews its maintenance requirements in light of other important priorities and the degree of risk that is acceptable to ensure missions are not jeopardized.

Mr. YONKERS. The proper maintenance of historic properties does not need to sacrifice other critical facilities projects. However, the Air Force reviews annually its maintenance requirements in light of other important priorities and the degree of risk that is acceptable to ensure missions are not jeopardized.

45. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, why do the criteria for enhanced facility sustainment funding not allow full funding to meet this Federal mandate?

Dr. ROBYN. We assume that “enhanced facility sustainment funding” refers to the “monumental architecture” premium within the DOD Facilities Sustainment Model (FSM), and that “Federal mandate” refers to the NHPA of 1966.

The “monumental architecture” premium within FSM recognizes the additional cost of sustaining facilities that meet the criteria for monumental architecture—such as high ceilings and ornamental hardware. This cost applies whether or not the facilities are historical. FSM calculates a sustainment premium for these buildings, which increases the estimated overall sustainment requirement for the given DOD component. Historic facilities that do not meet the criteria for monumental architecture do not necessarily cost more to sustain than non-historic facilities. Therefore, the FSM makes no adjustments for historic buildings that are not monumental in nature.

We do not think that our premium for monumental architecture in the FSM in any way inhibits our ability to meet Federal mandates of the NHPA for historic buildings.

Ms. HAMMACK. The DOD FSM allows for an incremental increase in funding facilities that are monumental architecture. The monumental architecture premium within FSM recognizes the additional cost of sustaining facilities that meet the criteria for monumental architecture—such as high ceilings, thick walls, and ornamental hardware. This cost applies whether or not the facilities are historical. Historic facilities that do not meet the criteria for monumental architecture do not necessarily cost more to sustain than non-historic facilities.

Ms. PFANNENSTEIL. We do not think that our premium for monumental architecture in the DOD FSM in any way inhibits our ability to meet Federal mandates of the NHPA for historic buildings.

The “monumental architecture” premium within FSM recognizes the additional cost of sustaining facilities that meet the criteria for monumental architecture—such as high ceilings and ornamental hardware. This cost applies whether or not the facilities are historical. FSM calculates a sustainment premium for these buildings, which increases the estimated overall sustainment requirement for the given DOD Component. On the contrary, historic facilities that do not meet the criteria for monumental architecture do not necessarily cost more to sustain than non-historic facilities.

Mr. YONKERS. We assume that “enhanced facility sustainment funding” refers to the “monumental architecture” premium within the DOD FSM, and that “Federal mandate” refers to the NHPA of 1966.

The “monumental architecture” premium within FSM recognizes the additional cost of sustaining facilities that meet the criteria for monumental architecture—such as high ceilings and ornamental hardware. This cost applies whether or not the facilities are historical. FSM calculates a sustainment premium for these buildings, which increases the estimated overall sustainment requirement for the given DOD Component. On the contrary, historic facilities that do not meet the criteria for monumental architecture do not necessarily cost more to sustain than non-his-

toric facilities. Therefore, the FSM makes no adjustments for historic buildings that are not monumental in nature.

We do not think that our premium for monumental architecture in the FSM in any way inhibits our ability to meet Federal mandates of the NHPA for historic buildings.

46. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, can you review the criteria for your Service and provide a response regarding whether you believe they are adequate to allow bases to be credited with the expense required to sustain all historic facilities?

Dr. ROBYN. We reviewed the criteria for monumental architecture to identify buildings with higher sustainment costs and believe them to be appropriate.

Ms. HAMMACK. The Army participates in periodic reviews of the criteria for monumental architecture to identify buildings with higher sustainment costs.

Ms. PFANNENSTEIL. We reviewed the criteria for monumental architecture to identify buildings with higher sustainment costs and believe them to be appropriate.

Mr. YONKERS. We reviewed the criteria for monumental architecture to identify buildings with higher sustainment costs and believe them to be appropriate.

RESOURCES FOR RENEWABLE ENERGY PROJECTS

47. Senator AYOTTE. Dr. Robyn, it is apparent that a priority for this administration has been to advance renewable energy initiatives across all Federal agencies, including DOD. As a result, the second highest priority for the Secretary of the Navy is to sail the Great Green Fleet by 2016 on synthetic fuels. The Air Force has 131 operational renewable energy projects and another 50 under construction across a wide variety of renewable energy sources. The Army is investing in 17 installations that by 2020 will consume only as much energy or water as they produce and eliminate solid waste to landfills. The Navy recently pledged defense funds of \$170 million as their share of a \$510 million effort to construct or retrofit biofuel refineries in order to create a commercially viable market. Are any of these initiatives subject to economic analysis to determine whether they are an efficient use of taxpayers' funds?

Dr. ROBYN. Energy projects funded with appropriations are evaluated using the Building Life Cycle Cost tool, which uses capital investment, operation & maintenance costs, local utility rates and projected cost savings to calculate savings to investment ratio (SIR) and simple payback. Typically, cost savings are derived from reduced utility payments or reduced maintenance. As a general rule, projects funded with direct appropriations have an SIR greater than 1.0. Occasionally, the Department funds renewable energy projects with SIRs less than 1.0, when those projects provide improved energy security at a military base.

Much of the renewable energy investment is being made with initial capital financing by non-DOD entities through Power Purchase Agreements (PPAs), Energy Savings Performance Contracts (ESPCs), or Utility Energy Service Contracts. The other party finances and builds the project and the DOD pays for the projects over time either through its energy bills or, in the case of an ESPC, by applying the savings in its energy bill. Financial evaluation of such projects is more complex, but in all cases the projects are expected to have a positive ROI.

48. Senator AYOTTE. Dr. Robyn, do any of them demonstrate a pay back over a certain amount of time?

Dr. ROBYN. As described in the answer to question 47, nearly all of the projects funded with direct appropriations have SIRs over 1.0, meaning they have a positive pay back over time. On average, small scale renewable energy projects—such as those recently funded through the Energy Conservation Investment Program—have a SIR of 1.7 with a payback of less than 12 years, meaning projects break even at 12 years and return a total of \$1.70 for every \$1.00 invested over the life of the projects.

49. Senator AYOTTE. Dr. Robyn, can you provide a list of the renewable energy generation projects that will actually contribute to DOD's energy security goals, by being able to power critical military missions during a commercial power outage?

Dr. ROBYN. On-site energy is critical to making our bases more energy secure. The deployment of advanced microgrid systems along with on-base energy generation and energy storage systems will allow a military base to maintain its critical operations "off-grid" for weeks or months if the commercial grid is disrupted. There are multiple DOD Energy Test Bed projects integrating the elements of the microgrid

model, including renewable energy generation. These include projects at Marine Corps Air Ground Combat Center Twentynine Palms and Fort Bliss, which are multi-year efforts. Future microgrids will enable other renewable energy projects across DOD to power critical loads.

Currently, the existing renewable energy systems are grid-tied and must, for safety purposes, shut down when there is a commercial power outage. However, the Department is taking into consideration the integration of energy security into renewable energy projects. The Services are required to take energy security into consideration as they develop their renewable energy plans. The Department also is reviewing current industry standards that allow more flexibility into the design of renewable energy projects, such as the Institute of Electrical and Electronics Engineers (IEEE) Standard 1547.4, IEEE Guide for Design, Operation, and Integration of Distributed Resource Island Systems with Electric Power Systems.

50. Senator AYOTTE. Dr. Robyn, in December 2011, the Navy purchased 450,000 gallons of biofuel at \$26.75 a gallon, the single largest purchase of biofuel in government history. Do you believe this is an acceptable price to pay per gallon for military training?

Dr. ROBYN. For the long term, our military will need alternatives to petroleum, particularly for our legacy fleet of ships and planes, which will be with us for decades to come.

Recent oil market volatility also emphasizes the need for these longer term solutions. DOD estimates that for every \$1 increase in the price of a barrel of oil, we incur an additional \$130 million in fuel costs.

That is why the military departments have purchased test quantities to certify their platforms for use with advanced alternative fuels. The military services are positioning themselves to take advantage of these fuels when they are cost-competitive with conventional fuels.

The test quantities that we've purchased are expensive because they are essentially prototype fuels and our domestic industry's production capability is still maturing. But looking beyond these testing and certification efforts or demonstrations, the Department will not pay such premiums for the purchase of large-scale, operational quantities of these fuels.

51. Senator AYOTTE. Dr. Robyn, what do you believe is an acceptable price to pay for a gallon of biofuels to be used for military operations or training?

Dr. ROBYN. The military services are positioning themselves to take advantage of these fuels when they are cost-competitive with conventional fuels.

The test quantities that we've purchased are expensive because they are essentially prototype fuels and our domestic industry's production capability is still maturing. But looking beyond these testing and certification efforts or demonstrations, the Department will not pay such premiums for the purchase of large-scale, operational quantities of these fuels.

52. Senator AYOTTE. Dr. Robyn, can you describe the efforts across DOD to uses ESPCs and power purchase agreements to invest in billions of dollars of renewable energy projects?

Dr. ROBYN. The Military Services are using a variety of financing mechanisms to develop renewable energy. For large scale renewable energy projects, the Services are primarily pursuing contracts under the authority in 10 U.S.C. § 2922a, and Enhanced Use Leases contained in the leasing authority of 10 U.S.C. § 2667. The Services are also actively developing PPAs. Section 2922a contracts are different from PPAs. Under section 2922a, a developer installs a renewable energy system on agency property or private property under an agreement that the Department will purchase power generated by the system. Typically, PPAs are used for just the purchase of energy.

ESPCs are primarily used to invest in energy efficiency projects; however renewable energy projects, on a smaller-scale, have been developed under ESPCs. ESPCs allow the Services to accomplish energy improvement projects without upfront capital costs. An energy services company (ESCO) designs and constructs the project and arranges financing to pay for it. The ESCO guarantees the improvements will generate savings sufficient to pay for the project over the term of the contract.

In response to the President's 2 December, 2011 memo calling on the Federal Government to initiate \$2 billion worth of these performance-based contracts over the next 2 years, the Department has established its own goal to meet at least half of that commitment. ESPCs will account for a large percentage of this goal and DOD plans to execute \$1.2 billion worth of contracts by the end of fiscal year 2013.

53. Senator AYOTTE. Dr. Robyn, while these projects predominantly rely on private investment and private sector risk, what is the risk to the Federal Government by entering into these long-term contracts?

Dr. ROBYN. The nature of the liabilities the Department assumes with a project will depend on the terms of the individual project. For contracts under 10 U.S.C. 2922a, Enhanced Use-Leases (EULs), and PPAs, there is typically not a standard format or set of universal requirements. The consistent major requirement, a liability to some, is that the Department enters into these contracts for a longer than typical term, e.g., 20 or more years. This may include a requirement to have land encumbered and a purchase of energy at set rates for a lengthy period of time.

The Department cannot cancel these obligations without assuming termination costs, which tend to be roughly equivalent to the cost of completing the contract. In other words, the Department is locked into the contract term. A benefit of this is that it allows the Department to plan for and lock in energy rates for the period of the contract. The reliability is that, the extent that the Department is not actually purchasing any energy but is simply a passive lessor, as in the case of an EUL, the land is encumbered for the period of the lease. Thus, if the Department wanted to take the property back before the lease has expired, it would have to pay the value of the leasehold plus improvements.

ESPCs have contract terms that are significantly different from section 2922a contracts, PPAs, or EULs. The Department terms that pays off the cost of an ESPC through the savings realized from energy efficiency measures carried out under the contract. The ESCO is required to guarantee these savings and provides measurement and verification to demonstrate the savings. The liability for the Department is limited in that the ESCO guarantees the financial savings of the overall project. In accordance with the Federal Acquisition Regulation, ESPCs include a termination clause with a liability schedule.

OVERSEAS BASING REVIEWS

54. Senator AYOTTE. Dr. Robyn, DOD currently has at least four studies underway on the capacity and need for U.S. military bases overseas. Regarding force structure in Europe, you stated in your opening statement that, "we are working with the European Command theater commander, his component commanders, and service leadership here in Washington to measure the capacity of all of our European installations. This inventory will allow us to analyze how much capacity can be shed and where." Do you anticipate that this study will be completed by the fall of 2012?

Dr. ROBYN. We expect to identify preliminary options and recommend next steps by fall of 2012. Comprehensive data collection, analysis, and recommendation development will require additional time.

55. Senator AYOTTE. Dr. Robyn, will this study result in another round of overseas BRAC?

Dr. ROBYN. We believe additional consolidation in Europe can and should be done in light of upcoming force structure changes.

56. Senator AYOTTE. Dr. Robyn, when do you anticipate these announcements would occur?

Dr. ROBYN. We expect to identify preliminary options and recommend next steps by Fall of 2012. Comprehensive data collection, analysis, and recommendation development will require additional time.

57. Senator AYOTTE. Secretary Hammack, aside from eliminating two Army Brigade Combat Teams that are currently located in Europe, do you have a firm indication of the number of Army forces to be removed from Europe?

Ms. HAMMACK. The Army will reduce approximately 7,000 soldiers associated with the reduction of two Brigade Combat Teams (BCTs) over the next 2 years. An additional reduction of approximately 2,500 soldiers associated with enabler units is anticipated over the next 5 years.

58. Senator AYOTTE. Secretary Hammack, when will this be announced?

Ms. HAMMACK. An announcement on specific force structure actions is expected sometime before, or in conjunction with, submission of the President's fiscal year 2014 Budget in early February 2013.

59. Senator AYOTTE. Secretary Hammack, how can DOD clearly identify excess capacity at military installations overseas without knowing for sure the number of U.S. forces that will be stationed overseas in the long term?

Ms. HAMMACK. The United States is rebalancing priorities and seeking ways to improve U.S. presence in key regions to ensure access and assure allies. DOD utilizes Theater Posture Plans which provide a long term view to forecast force posture by region in accordance with national policy and strategy. Combatant Commands determine what is regionally required to shape, deter, and respond in order to defeat aggression and meet any future threats. Service components then conduct analysis to determine the appropriate number and mix of forces in order to best support the requirement while optimizing efficiency for training, maintenance, deployability, and quality of life. The Army will continue to make necessary adjustments to force posture in coordination with DOD to ensure our posture remains in line with current strategy and supportive of regional commitments. This process enables Army and DOD to appropriately posture forces at military installations overseas with a long-term view.

FACILITY SUSTAINMENT

60. Senator AYOTTE. Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, regarding annual funding in the budget for the sustainment of facilities, DOD has established a goal that the Services budget for 90 percent of the known requirements for funds required to sustain facilities at an adequate level of preventative and recurring maintenance. The Army, "views 90 percent sustainment funding as the absolute bedrock of proper facilities stewardship, and is an essential objective of the Army facilities investment strategy. The Army has chosen not to take risk in the sustainment of our facility inventory." The other Services have chosen another course by underfunding the budget request for facility sustainment to only 80 percent of the requirement. This underfunding defers critical facility maintenance activities and drives larger bills for eventual facility repairs or replacement. Do you agree with the Army that 90 percent sustainment funding is the absolute minimum that can be allocated in order to be good stewards of our military facilities?

Ms. HAMMACK. Fully funded and executed sustainment prevents deterioration of facilities. Sustainment funded at 90 percent of the modeled requirement assumes acceptable risk, while less than 90 percent funding can accelerate deterioration. Facility sustainment is critical in supporting Installation Readiness by providing resources for maintenance and repair activities necessary to keep facilities in good working order over their expected service lives.

Ms. PFANNENSTEIL. To resource critical warfighting capabilities and current readiness, Navy continues to take a deliberate and appropriate level of risk in our facilities sustainment posture by funding facility sustainment to 80 percent of the OSD FSM. We mitigate this risk by directing our sustainment investments toward the highest priority mission-critical infrastructure.

In addition to investing in our facilities through Sustainment (O&MN/O&MNR), Navy uses MILCON (MCN/MCNR) and Restoration and Modernization (O&MN/O&MNR) funding to recapitalize existing infrastructure and provide major facility upgrades.

Mr. YONKERS. Use of asset management principles allows us to be good stewards of Air Force facilities while funding Facility Sustainment at just over 80 percent of the FSM and funding Restoration and Modernization at 90 percent of historic levels.

We use asset management principles to make more effective use of existing resources, thereby reducing facility risk. This requires improved asset visibility. Based on an increasingly fiscally constrained environment, the fiscal year 2013 budget focuses on ensuring investment in the most critical facility requirements to support Air Force priorities, while continuing to enable streamlining of business operations and enhancing operational efficiencies. The Air Force will fund Facilities Sustainment at just over 80 percent of the calculated OSD FSM to continue driving efficiencies while ensuring the proper level of support. Centralization and prioritization of replacement and repair projects using Asset Management tools will ensure investment in the most critical facility requirements. Additionally, the increased emphasis on consolidation and demolition will result in long-term avoidance of facility investment costs on unnecessary infrastructure and enable continued support to the Air Force and Joint warfighter missions.

61. Senator AYOTTE. Secretary Pfannensteil and Secretary Yonkers, for how long will the Air Force and the Navy continue to take this risk by underfunding facility sustainment?

Ms. PFANNENSTEIL. To resource critical warfighting capabilities and current readiness in fiscal year 2013, the Navy continued our fiscal year 2012 position to take a deliberate and appropriate level of risk in our facilities sustainment posture by funding facility sustainment to 80 percent of the OSD FSM.

We are currently conducting several studies to determine the long-term impacts of reduced sustainment to our shore infrastructure. This analysis will be used to inform future budget submissions.

Mr. YONKERS. We are not underfunding Facility Sustainment. We continue to fund Facility Sustainment at just over 80 percent of the FSM and we have funded Restoration and Modernization at 90 percent of historic levels.

We use asset management principles to make more effective use of existing resources, thereby reducing facility risk. This requires improved asset visibility. Based on an increasingly fiscally constrained environment, the fiscal year 2013 budget focuses on ensuring investment in the most critical facility requirements to support Air Force priorities, while continuing to enable streamlining of business operations and enhancing operational efficiencies. The Air Force will fund Facilities Sustainment at just over 80 percent of the calculated OSD FSM to continue driving efficiencies while ensuring the proper level of support. Centralization and prioritization of replacement and repair projects using Asset Management tools will ensure investment in the most critical facility requirements. Additionally, the increased emphasis on consolidation and demolition will result in long-term avoidance of facility investment costs on unnecessary infrastructure and enable continued support to the Air Force and Joint warfighter missions.

62. Senator AYOTTE. Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, doesn't this underfunding degrade readiness over time?

Ms. HAMMACK. Yes, less than 90 percent sustainment funding may increase the Army's backlog and accelerate the degradation of facilities. Any reduction can severely impact the quality of Army infrastructure and cause an operational impact. Less than 90 percent sustainment funding will result in the reversal of the positive trend of reducing poor and failing infrastructure (Q3/Q4) which is contrary to impending OSD guidance to reduce Q3/Q4 infrastructure.

Ms. PFANNENSTEIL. To resource critical warfighting capabilities and current readiness, the Navy continued our fiscal year 2012 position to take a deliberate and appropriate level of risk in our facilities sustainment posture by funding facility sustainment to 80 percent of the OSD FSM. In addition to investing in our facilities through Sustainment (O&MN/O&MNR), Navy uses MILCON (MCN/MCNR) and Restoration and Modernization (O&MN/O&MNR) funding to recapitalize existing infrastructure and provide major facility upgrades.

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63. Senator AYOTTE. Secretary Yonkers, can you assure me that the decision by the Air Force to take risk in both the facility sustainment accounts and in the MILCON accounts will not continue in the budget request for 2014?

Mr. YONKERS. We continue to fund Facility Sustainment at just over 80 percent of the FSM and we have funded Restoration and Modernization at 90 percent of historic levels.

To meet 80 percent FSM, civil engineering transformation initiatives employ an enterprise-wide, centralized asset management approach. At each level (base, major command, headquarters Air Force), asset management plans with integrated priority lists developed to target limited resources on highest priorities. We also established multiple "focus" funds both in the fiscal year 2012 PB and in fiscal year 2013 PB. The "mission critical, worst first" approach balances risk across broad facilities/infrastructure portfolios looking through both a mission lens (how dependent is the mission on that facility/infrastructure system) and engineering lens (quality of the facility).

Based on an increasingly fiscally constrained environment, the fiscal year 2013 budget focuses on ensuring investment in the most critical facility requirements to support Air Force priorities, while continuing to enable streamlining of business operations and enhancing operational efficiencies. The Air Force will fund Facilities Sustainment at just over 80 percent of the calculated OSD FSM to continue driving efficiencies while ensuring the proper level of support. Centralization and prioritization of replacement and repair projects using Asset Management tools will ensure investment in the most critical facility requirements. Additionally, the increased emphasis on consolidation and demolition will result in long-term avoidance of facility investment costs on unnecessary infrastructure and enable continued support to the Air Force and Joint warfighter missions.

We anticipate returning MILCON to historical funding levels in fiscal year 2014 to accomplish National Military Strategy and support Air Force priorities while continuing to meet the pressures of the current fiscal environment.

HOUSING PRIVATIZATION

64. Senator AYOTTE. Dr. Robyn, for years, many of our Active Duty servicemembers have been forced to live in substandard housing. When servicemembers and their families step forward and volunteer to defend our country, we owe it to them that their quality of life reflects the quality of their service and sacrifice. That is why I am pleased to see that the housing privatization program has provided our military members with significant improvements in the quality of family housing. We are in the process of shifting from the initiation of new ventures to the long-term maintenance and management of current partnerships. While many of these new housing complexes are impressive and provide the quality of life our servicemembers and their families have earned, if we do not manage these partnerships carefully, maintenance will suffer, the quality of life for our servicemembers and their families will decline, and we will ultimately waste the taxpayers' investment in this new housing. We must ensure that does not happen. What challenges do we face in the management of these partnerships over time to ensure our military families continue to have access to quality housing?

Dr. ROBYN. We agree that the long-term viability and health of these projects is critical in ensuring the continued availability of suitable, affordable housing to military members and their dependents. The greatest challenge facing these projects is uncertainty with respect to housing market conditions (e.g., demand/supply, operating costs, et cetera) over the long term. Recognizing this challenge, both OSD and the Services are taking an in-depth look at the current and projected health of these projects. We have multiple opportunities built into tracking how the partner is progressing with the physical work of turning substandard housing into housing that improves the quality of life for military members and their families. This is accomplished by keeping the military services involved in gathering and interpreting the data received from each of the 83 projects. This information is used to complete the Program Evaluation Plan (PEP) provided to Congress. There are frequent meetings held that allow the partners and the services housing leaders to discuss issues that affect the projects; ways to efficiently provide great customer services to the home renters; ways to reduce costs ensuring a future stream of funding; how best to collect rents owed by service members upon departure from an installation or from the service; and ways to help those injured in the line of duty. Services interact with the partners in reviewing their operating budgets, their financial reports, and their adherence to the business agreements in retaining funds in the lockboxes for future renovations or new construction to ensure housing remains in a desirable state for families to want to rent these facilities.

In September 2011, our office started its analysis of how best to set out on a monitoring course to ensure that projects will maintain all privatized facilities, just as you suggest, so that military families continue to have access to quality housing. We are committed to continuing to review these projects and communicate with the Services and the partners to ensure the initial and changing requirements for housing are met and maintained.

65. Senator AYOTTE. Dr. Robyn, do you see any negative trends with the health and use of Reserve accounts in each deal? If so, how are we addressing the trend?

Dr. ROBYN. Because of the checks and balances that have been built into the government oversight, any trends that may negatively impact Reserve accounts are immediately noted and addressed. Major Decision processes are in place that will allow Reserve accounts, in rare cases, to be used for short term project health. These safeguards do not necessarily prevent issues, but they do alert us so that appropriate

actions can be put in place. Additionally we work with the services to review their status of projects.

66. Senator AYOTTE. Dr. Robyn, are we extending the program into the construction and operation of unaccompanied personnel housing for the lower ranks?

Dr. ROBYN. DOD currently has two Navy projects that target unaccompanied service members in grades E1–E6. These projects, located at Hampton Roads, VA and San Diego, CA, were selected as pilots under 10 U.S.C. 2881a, because unaccompanied junior (E1–E3) Sailors, assigned to sea duty, are not entitled to a Basic Allowance for Housing (BAH), this pilot authority was needed in order to use the privatization authorities to target this demographic need. This authority has since expired.

The Army and its partners also used the privatization authorities to venture into providing accommodations for unaccompanied senior enlisted service members and junior officers. The four Army locations providing this service are at Fort Drum, NY, Fort Bragg, NC, Fort Stewart, GA and Fort Irwin, TX. Demand for these accommodations remains high.

The Army, along with its partner at Fort Meade, MD, is currently reviewing the need to provide a more cost efficient solution to accommodate up to 816 single servicemembers. Many of these servicemembers are involved in national security duties, on the installation. This program would provide affordable housing vice requiring these junior enlisted servicemembers to seek housing outside the installation. The rents for available housing often exceed the member's housing allowances, causing financial hardships.

67. Senator AYOTTE. Secretary Yonkers, the Air Force has three planned family privatization projects underway. Can you provide an update on the status of these three remaining projects: Continental Group, Northern Group, and ACC Group III?

Mr. YONKERS. Continental Group: In May 2011, the Air Force selected Picerne Military Housing as the Highest-Ranked Offeror (HRO) for the six-base project, which includes Edwards AFB, CA; Eglin AFB and Hurlburt Field, FL; Eielson AFB, AL; McConnell AFB, KS; and Seymour Johnson AFB, NC. In July 2011, protests were resolved/withdrawn; however, the project was placed on hold pending evaluation of potential force reductions which were announced in February 2012. On April 11, 2012, Picerne was notified of the proposed personnel changes and of the Air Force's intent to resume exclusive project negotiations. Pending successful negotiations with Picerne and development of a viable revised project scope, the Air Force anticipates closing the Continental Group project by the end of calendar year 2012.

Northern Group: In October 2011, the Air Force selected Balfour Beatty Communities (BBC) as the HRO for the six-base project, which includes Cavalier Air Force Station, Grand Forks AFB and Minot AFB, ND; Ellsworth AFB, SD; Cannon AFB, NM; and Mountain Home AFB, ID. The Air Force received two GAO protests which were resolved/withdrawn by January 2012. The Air Force is currently conducting exclusive negotiations with the BBC. OMB is currently reviewing the Scoring Report. Once approved, OSD will notify the Committees of the intent to transfer funds into the FHIF. The Air Force anticipates closing the Northern Group project with BBC no later than September 2012.

ACC Group III: In October 2011, the Air Force selected BBC as the HRO for this project, which includes the second phase of housing privatization for Dyess AFB, TX; and Moody AFB, GA. The Air Force received a GAO protest on the project which was denied in March 2012. OSD is preparing the notification to the committees of the intent to transfer funds into the FHIF. Exclusive negotiations with BBC are on hold pending HAF decisions on scope (pending the validation of a new Housing Requirements and Market Analysis, which reduced the family housing requirement from 589 to 427), and potential siting changes, which could delay the current projected closing of the ACC Group III project beyond September 2012.

68. Senator AYOTTE. Secretary Yonkers, does the Air Force expect these projects to close in fiscal year 2012?

Mr. YONKERS. The Air Force anticipates closing the Northern Group privatization project in fiscal year 2012. The Air Force anticipated closing the ACC Group III housing project in fiscal year 2012, but potential changes to the scope of the project may delay the closing into fiscal year 2013. At the same time, while exclusive negotiations with the Highest Ranked Offeror on the Continental Group just resumed, the Air Force anticipates closing the project by the end of calendar year 2012.

IMPACT TO DOD FROM RULINGS BY THE EPA

69. Senator AYOTTE. Dr. Robyn, on September 28, 2011, the EPA issued a contentious final health assessment for trichloroethylene (TCE) under its Integrated Risk Information System (IRIS) risk assessments. The assessment may require a potential revisiting of TCE-related cleanup standards at over 1,000 former and current military sites for soil, groundwater, and vapor intrusion at and adjacent to contaminated properties, including those previously granted regulatory closure. It may also require revision of the maximum contaminant levels for drinking water, allowable levels of emissions from industrial facilities, and from a variety of consumer products in which even small levels of TCE are typically used. The level of 1 part per billion in the final assessment is below the levels widely criticized by industry and DOD in the 2001 draft assessment and may result in an increase of cleanup costs by billions of dollars. Have you assessed the impact of this ruling on DOD's efforts and timeline to clean up and dispose of former military sites?

Dr. ROBYN. No, we have not fully assessed the impact of the change in Integrated Risk Information System (IRIS) toxicity value for TCE yet. Impacts must be determined on a site by site basis and this will take many years.

We do not expect additional work to be required at every site where TCE has been detected, since in many cases the cleanup systems now in place will continue to be effective. For sites where we are still studying the contamination and developing the cleanup solution, we will consider the new IRIS TCE toxicity value in the development of the cleanup solution and cost estimate. For sites with cleanup systems already in place, DOD conducts a review at least every 5 years to determine if the site continues to protect human health and the environment. DOD will consider the new toxicity value during the 5 year review process. This assessment is part of the standard cleanup program process.

70. Senator AYOTTE. Dr. Robyn, what additional cost will DOD incur as a result of this ruling?

Dr. ROBYN. The Department cannot estimate any additional costs at this time because we need to assess the impact of the revised TCE toxicity value on a site-specific basis in collaboration with our regulatory partners.

We do not expect additional work to be required at every site where TCE has been detected, since in many cases the cleanup systems now in place will continue to be effective. For sites where we are still studying the contamination and developing the cleanup solution, we will consider the new IRIS TCE toxicity value in the development of the cleanup solution and cost estimate. For sites with cleanup systems already in place, DOD conducts a review at least every 5 years to determine if the site continues to protect human health and the environment. DOD will consider the new toxicity value during the 5 year review process. This assessment is part of the standard cleanup program process.

71. Senator AYOTTE. Dr. Robyn, given competing requirements and declining budgets, what flexibility does DOD have in responding to the ruling?

Dr. ROBYN. The CERCLA and its implementing regulations offer sufficient flexibility for DOD to assess risk human health and the environment on a site-specific basis. Only if there is an increased risk to human health and the environment, would we be required to conduct additional cleanup actions. In other words, even though the toxicity level for TCE has changed, there may be no risk to human health and the environment for a specific site.

72. Senator AYOTTE. Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, how would you characterize your Service's interaction and coordination with the EPA in your efforts to clean up or dispose of former or excess military sites?

Ms. HAMMACK. The Army has generally had a cooperative relationship with EPA. As evidence of this cooperation, the Army expects to meet the goals set by the OSD for DOD cleanup programs; expecting to achieve greater than 90 percent "response complete" by 2018 and 95 percent "response complete" by 2021 at Active Army cleanup sites. "Response complete" is achieved with regulator concurrence. We continue to work with OSD and the Service components to establish new goals for BRAC installations.

Recently the Army has been working with EPA to better understand their requirements under the Resource Conservation and Recovery Act (RCRA) regarding characterization of soil impacted by properly applied pesticides when property use changes. I have been in continuing dialog with Assistant Administrator Mathy Stanislaus of the Office of Solid Waste and Emergency Response of EPA regarding

this topic. The discussions with EPA on the issue of properly applied pesticides have focused on two Army sites (Sunflower Army Ammunition Plant (AAP) and Kansas AAP). The financial impact to Federal and other land holding entities could be significant if EPA's current interpretation, that soil containing properly applied pesticide must be sampled and removed upon a change in use of a property, were adopted nation-wide.

It is notable that EPA is not always the primary regulator at transferring sites; their direct involvement being limited to those sites on the National Priorities List (aka Superfund) and to those States where EPA has not delegated their RCRA authority. Currently, 43 States and Territories have been delegated RCRA corrective action (remediation) authority. EPA regulatory policy and guidance has significant influence on State-level regulations and regulatory agencies, and are usually mandatory for delegated States and Territories.

Ms. PFANNENSTEIL. EPA and the Navy have a professional and cordial relationship. Most cleanups are managed under Federal Facilities Agreements that layout the steps and schedules for cleanup and describe the process for resolving disputes. This process is rarely needed, but has been effective. Our BRAC interactions have been primarily focused in EPA Regions I, IX, and X. EPA Region I BRAC interactions have been highly successful at returning property to productive economic reuse. EPA Region IX BRAC interactions have been successful at solving short term goals, while continuing efforts to reach site closure. Munitions cleanup at EPA Region X has been complicated and has required frequent coordination regarding cleanup decisions. Overall, Navy and EPA interactions have been effective at achieving clean up and disposal of former military sites.

Mr. YONKERS. Air Force BRAC's interaction and coordination with the EPA has been successful in supporting site remediation for protection of human health and the environment to facilitate property transfer. EPA has been and continues to be instrumental in facilitating cleanup and property transfer actions for individual BRAC bases. EPA regional offices provide Remedial Project Managers who are directly involved in BRAC Cleanup Teams for individual bases. In addition, BRAC Program Managers meet with Headquarters EPA on a quarterly basis to discuss issues related to cleanup and property transfer.

73. Senator AYOTTE. Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, is the interaction causing you to delay any transfers or to spend additional DOD funds to meet EPA's requirements? If so, can you provide examples?

Ms. HAMMACK. Our ongoing discussions regarding pesticides have lengthened the process to transfer the Kansas Army Ammunition Plant (KSAAP) in Parsons, KS. While negotiations continue between the Army and the local reuse authority (LRA) to complete the transfer at KSAAP, the discussions regarding pesticides have not resulted in significant additional expenditures for the Army at this point, although it may adversely impact the LRA's costs and the marketability and use of the property.

The clean-up effort at Sunflower AAP has been delayed as a result of significant resources being expended by the LRA to characterize and remove soil impacted by properly applied pesticides at the time of application. This requirement was placed on the LRA by Kansas regulators at the behest of EPA Region 7. This position on pesticide application could adversely impact the success of redevelopment. The Army's view is that pesticides applied properly around buildings to protect them from insect damage, do not require characterization and/or remediation upon transfer to others. Army is working with EPA to resolve requirements under the RCRA regarding characterization of soil impacted by properly applied pesticides when the buildings are no longer usable, are "slated for demolition," or are transferred to a private entity such as an LRA who intends to demolish the buildings. The ongoing dialog between Army and EPA is aimed at avoiding future delays and/or expenditures.

Ms. PFANNENSTEIL. Our professional and cordial interactions with the EPA have not caused a delay or significant cost increase to our transfer of BRAC properties. The Navy will continue to work effectively with the EPA to clean up and transfer the remaining BRAC properties as quickly and economically as reasonably possible.

Mr. YONKERS. Generally, the interaction between Air Force BRAC and the EPA does not cause major delays or the expenditure of additional DOD funds over those anticipated by law or regulation. Over the past year, however, Air Force BRAC did experience one transfer delay stemming from this interaction. The issue causing the delay has been resolved (former Plattsburgh AFB, NY).

MILITARY CONSTRUCTION SCOPE OF WORK VARIATIONS

74. Senator AYOTTE. Dr. Robyn, on February 27, 2012, the DOD Inspector General (IG) issued a report titled: Guidance Needed to Prevent Military Construction Projects from Exceeding the Approved Scope of Work (DODIG-2012-057). The IG found that the scope of work variations permissible by section 2853, Title 10, U.S.C., is unclear and inconsistently applied within DOD. As a result, DOD officials and Congress do not have assurance that MILCON projects are built consistent with congressional intent and in accordance with legislative requirements. As you might imagine, the finding is unsettling for those of us on the committee who assume that DOD is faithfully and legally carrying out MILCON projects as specifically authorized by Congress. Have you assessed the source and extent of the problem throughout the Services and the contracting agencies? If so, please provide your assessment.

Dr. ROBYN. The Department did not conduct a comprehensive assessment of the findings in the February 2012 DOD IG report. Consistent with the recommendation in that report, I will be issuing a policy memo, which will be incorporated into a new DOD Instruction; clarifying the cost and scope requirements established in section 2853 and establishing milestones for the DOD components to validate that each project's scope stays within the authorized limits.

75. Senator AYOTTE. Dr. Robyn, what are you doing to immediately address this problem to ensure that taxpayers' funds we authorize are carried out for their intended purpose?

Dr. ROBYN. I will be issuing a policy memo, which will be incorporated into a new DOD Instruction, clarifying the cost and scope requirements established in section 2853, and consistent with the findings in the DOD IG's February 2012 report. This clarifying guidance will be coordinated with the military departments to ensure DOD components design and construct facilities that do not exceed authorized scope levels.

76. Senator AYOTTE. Dr. Robyn, have you issued clarifying guidance as the IG recommended? If so, please provide that guidance.

Dr. ROBYN. We are in the process of developing a policy memo, which will be incorporated into a new DOD Instruction, clarifying the cost and scope requirements established in section 2853; and it is consistent with the findings in the DOD IG's February 2012 report. This clarifying guidance will be coordinated with the military departments to ensure DOD components design and construct facilities that do not exceed authorized scope levels.

77. Senator AYOTTE. Dr. Robyn, do you have any mechanisms in place to ensure that the clarifying guidance and other corrective measures will be effective and lasting?

Dr. ROBYN. Once I issue the policy memo, which will then be incorporated into a DOD Instruction, the military departments and defense agencies will establish the appropriate implementation mechanisms. The DOD IG report recognized this in recommending that the Commander, U.S. Army Corps of Engineers, and the Director, Air Force Center for Engineering and Environment develop and implement procedures to perform scope verifications to ensure compliance with the clarifying guidance. Although not addressed by the DOD IG report, the Commander, Naval Facilities Engineering Command, will develop implementing procedures as well.

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN

78. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, the NDAA for Fiscal Year 2012 restricted the use of MILCON funds to design and construct military facilities to a gold or platinum construction standard called Leadership in Energy and Environmental Design (LEED), unless the LEED certification imposes no additional cost to taxpayers. I am concerned by recent press statements that despite this restriction, the Services are continuing to direct funds to meet a LEED gold or platinum standard. Can you all confirm your intent to comply with the language in the NDAA for Fiscal Year 2012?

Dr. ROBYN. The Department understands and is abiding by the restriction. DOD components understand LEED Gold and Platinum are not to be specified in contract solicitations, and no fiscal year 2012 money can be spent to design or construct to Gold or Platinum standards unless a waiver is granted by the Secretary of Defense and Congress is notified. No requests for a waiver have been submitted to date.

Ms. HAMMACK. The Army will comply with the NDAA for Fiscal Year 2012 for all fiscal year 2012 and beyond projects. The Act allows for higher levels of certifi-

cation if there is no increase in cost. No project shall have a goal or objective to achieve anything other than LEED Silver. If a project arrives at Gold or Platinum, we will document costs, if any, that were incurred beyond those required for LEED Silver. The U.S. Army Corps of Engineers reissued an Engineering and Construction Bulletin that provides updates to High Performance Energy and Sustainability, LEED and Energy certification guidance to reinforce the objective of LEED Silver.

Ms. PFANNENSTEIL. The Department of the Navy (DON) is complying with the NDAA for Fiscal Year 2012 language pertaining to expenditure of funds for achieving LEED Gold or Platinum certification.

Mr. YONKERS. The Air Force intends to comply with the NDAA for Fiscal Year 2012 restriction on the use of MILCON funds to design and construct military facilities to a gold or platinum construction standard called LEED.

79. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannensteil, and Secretary Yonkers, can you meet DOD goals for facility energy efficiency without achieving a LEED gold or platinum standard?

Dr. ROBYN. In most cases, a LEED Silver (or equivalent) level of certification will be sufficient to allow the DOD to meet statutorily mandated building performance targets. In other cases, DOD may design a facility to address a site specific energy or water challenge without regard to the resulting level of LEED certification.

Ms. HAMMACK. Yes, the Army is working to meet DOD goals for facility energy efficiency and does not require LEED gold or Platinum certification. In order to meet DOD facility energy requirements, the Army must build high-performance buildings that include life-cycle cost-effective measures for energy and water efficiency. The Army has adopted American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) 189.1, which is a private sector developed, high performance building standard, providing detailed guidelines to achieve LEED Silver. This standard prioritizes energy and water efficiency measures and facilitates compliance with Federal energy and water efficiency mandates. On some projects, when complying with Federal mandates, the Army may incidentally achieve LEED Gold levels of building certification at no additional cost to LEED Silver.

Ms. PFANNENSTEIL. The Navy remains committed to achieving their energy and sustainment goals while remaining in compliance with the NDAA for Fiscal Year 2012 language pertaining to expenditure of funds for achieving LEED Gold or Platinum certification. In coordination with OSD and the other Services, DON is finalizing a formal facility energy sustainable design policy which will reflect the NDAA for Fiscal Year 2012 LEED language and its limitations. As required by the NDAA, the DON is reviewing energy-efficiency and sustainability standards. The results of that review will be consolidated into the OSD report due to the congressional defense committees later this year.

Mr. YONKERS. Yes, the USAF can achieve the energy efficiency mandates (Energy intensity reduction, specifically) without mandating LEED Gold or Platinum standards. The USAF has an internal policy to construct buildings to LEED Silver standard, when practicable, and have adopted ASHRAE 90.1 and High Sustainable building practices (E.O 13514). The USAF is actively seeking to reduce facility energy usage by 30 percent beyond industry standards on all major renovations and all MILCON. We are also seeking to divest ourselves of the most inefficient or excess buildings with a goal to demolish or divest of our 20 percent our real property inventory by 2020. These efforts achieve the energy intensity metric you alluded to, and do not constrain us as LEED Gold or Platinum would.

80. Senator AYOTTE. Dr. Robyn, I understand that your office is undertaking a review of DOD's current green building policy in order to update the Unified Facilities Code. Can you describe this new green building policy?

Dr. ROBYN. The new green building policy will be codified in the Unified Facilities Criteria (UFC) for High Performance Buildings and will define the minimum construction standards for new buildings, major renovations, or leased facilities. The UFC will be a tool for project manager, architects, and construction contractors to ensure new, recapitalized, or leased buildings meet all Federal mandates for energy and water efficiency, as well as sustainability.

81. Senator AYOTTE. Dr. Robyn, will it reference LEED, Green Globes, National Green Building Standard, or any other green building certification system?

Dr. ROBYN. Every new UFC document must first draw from existing commercial standards to the maximum practical extent. In this case the new UFC for High Performance Buildings will make reference to the ASHRAE 189.1 standard. It will not reference any third party rating systems.

82. Senator AYOTTE. Dr. Robyn, the ASHRAE has developed a standard, ASHRAE 189.1, to provide an objective total building sustainability package for the design, construction, and operation of buildings that incorporate site sustainability, water use efficiency, energy efficiency, indoor environmental quality, and the building's impact on the atmosphere, materials, and resources. Does DOD plan to adopt that standard?

Dr. ROBYN. While the new UFC for High Performance Buildings will make reference to ASHRAE 189.1, there are some elements of the standard that may not be cost effective for application in the DOD and therefore will not be incorporated in the new UFC. In a parallel effort, the Department has partnered with the National Research Council to study the cost-effectiveness of ASHRAE, LEED, and Green Globes as required by 2012 NDAA, section 2830. The results of the study will be used to assess the cost effectiveness of future capital investments.

[Whereupon, at 12:26 p.m., the subcommittee adjourned.]

**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2013 AND THE FUTURE YEARS DEFENSE
PROGRAM**

THURSDAY, MAY 10, 2012

U.S. SENATE,
SUBCOMMITTEE ON READINESS AND
MANAGEMENT SUPPORT,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

CURRENT READINESS OF U.S. FORCES

The subcommittee met, pursuant to notice, at 10:04 a.m. in room SR-232A, Russell Senate Office Building, Senator Claire McCaskill (chairman of the subcommittee) presiding.

Committee members present: Senators McCaskill, Ayotte, and Inhofe.

Majority staff members present: Jonathan D. Clark, counsel; John H. Quirk V, professional staff member; Peter K. Levine, general counsel; and William K. Sutey, professional staff member.

Minority staff members present: Lucian L. Niemeyer, professional staff member; Bryan D. Parker, minority investigative counsel; and Christopher J. Paul, professional staff member.

Staff assistant present: Mariah K. McNamara.

Committee members' assistants present: Gordon Peterson, assistant to Senator Webb; Jason Rauch, assistant to Senator McCaskill; Anthony Lazarski, assistant to Senator Inhofe; and Brad Bowman, assistant to Senator Ayotte.

**OPENING STATEMENT OF SENATOR CLAIRE McCASKILL,
CHAIRMAN**

Senator McCASKILL. The Readiness and Management Support Subcommittee of the Senate Armed Services Committee will come to order.

I will have brief opening remarks.

Welcome to our important witnesses today. Thank you, all four of you, for taking time from what I know are heavy demands on your time to spend some time visiting with us this morning about the overall, holistic readiness of our military. We look forward to your testimony.

We are pleased to be joined by General Lloyd J. Austin III, USA, Vice Chief of Staff of the Army; Admiral Mark E. Ferguson III, USN, Vice Chief of Naval Operations; General Philip M. Breedlove,

USAF, Vice Chief of Staff of the Air Force; and General Joseph F. Dunford, Jr., USMC, Assistant Commandant of the Marine Corps. Gentlemen, I sincerely appreciate each of you adjusting your schedules at the last minute after we could not hold this hearing on the original date because we were voting.

Turning to the issue at hand, after more than a decade of combat operations in Iraq and Afghanistan, reported readiness levels of our Armed Forces have steadily declined, even as defense spending has grown dramatically. Our non-deployed forces have experienced serious readiness shortfalls in terms of personnel, equipment, and training. Even our deploying units have struggled with not enough time to train for full-spectrum missions.

Now we are entering an era of declining budgets, force structure, and new strategies. As a result, our Military Services face a new set of challenges as they seek to balance the drawdown of forces, vital reset of equipment and personnel, and continuing combat operations in Afghanistan. I am interested in hearing from the witnesses the extent of current readiness funding backlogs and the risks posed by these backlogs. We have been told in the past that the reset of our forces will require a few years of additional funding after the end of combat operations. I would like the witnesses to provide us with their latest estimates, timelines, and amounts in that regard.

I am pleased that the Navy budget would fully fund the ship depot maintenance requirement for the first time in many years. It is my hope that this increased level of funding will lead to a decrease in the number of unsatisfactory inspection results from the Navy's Board of Inspection and Survey (INSURV). At the same time, I am disappointed that the Navy has failed to meet the 6 percent capital investment objective established by Congress, the only Military Service that has failed to do so. I would like to hear from the Navy what their long-term plans are for making up this gap in investment.

I am also pleased that the Army and Marine Corps have funded facilities sustainment, restoration, and modernization (FSRM) at the 90 percent level, which is the Department of Defense (DOD) stated goal. Unfortunately, the Air Force and Navy funded this same FSRM at 82 and 80 percent, respectively. I would like to hear from the Air Force and the Navy what level of risk they are taking on as a result of these lower funding levels and what steps they plan to take to avoid large bills down the road.

Finally, we have learned that DOD will face at least a \$1.3 billion bill as a result of the rise in fuel prices. This price increase has been exacerbated by the continued closure of the Pakistan border forcing supply convoys for our force in Afghanistan to use the northern distribution network (NDN) at an increased expense of about \$38 million per month.

Given all of these challenges we face, we must strive to protect our readiness accounts, but we can also do a better job in managing funds like operation and maintenance. We can improve the execution rates and unobligated balances in these accounts, in addition to our operational readiness models. As the Services continue to identify efficiencies in overhead, support, and other less mission-essential areas, I challenge you to better balance the dif-

ference between cost savings and cost avoidance, as we owe it to the American people to be much better stewards of their tax dollars.

Gentlemen, I cannot thank you all enough for your dedicated service and the sacrifices you have made on behalf of our country, and the sacrifices your families have made. I thank you all for taking the time to have this critical discussion, and I look forward to your testimony. I know each of you have prepared statements, which will be included in the record. So we can have a full opportunity for an in-depth discussion, I would ask you to please try to summarize so we will have plenty of time for questions.

Senator Ayotte, do you have a statement you would like to make at this time?

STATEMENT OF SENATOR KELLY AYOTTE

Senator AYOTTE. Thank you, Madam Chair. Thank you for calling this important hearing on the current readiness of U.S. forces in review of the Defense Authorization Request for Fiscal Year 2013 and the Future Years Defense Program (FYDP).

I foremost want to thank the witnesses that are before us today. As we confront challenges around the world, I know that each of you have been tremendous leaders, and all of the soldiers that serve below you deserve our respect and admiration. I thank you all for what you are doing in very difficult times, both fiscally and also with the national security challenges we face, so thank you.

On March 23, 1983, President Ronald Reagan delivered an important speech in the Oval Office. In his speech he said: "What seems to have been lost in all this debate is the simple truth of how a defense budget is arrived at. It isn't done by deciding to spend a certain number of dollars. We start by considering what must be done to maintain peace and review all the possible threats against our security. There is no logical way that you can say, let's spend X billion dollars less. You can only say, which part of our defense measures do we believe we can do without and still have security against all contingencies? Anyone in Congress who advocates a percentage or a specific dollar cut in defense spending should be made to say what part of our defenses he would eliminate, and he should be candid enough to acknowledge that his cuts mean cutting our commitments to allies or inviting greater risk or both."

As I consider the national security threats facing our country and as I review the President's proposed fiscal year 2013 defense budget, I worry that we are falling into the very trap that President Reagan warned us to avoid. I worry that President Obama's proposed defense budget is based more on, in my view, what was irresponsible in what we did in the Budget Control Act (BCA) and what the Office of Management and Budget has handed you in terms of a number that treats all Federal expenditures the same, rather than a clear-eyed, objective assessment of our U.S. national security interests and the kind of military that we need to protect those interests and the American people.

As I consider this year's budget request, I have some serious concerns and a lot of questions that I look forward to discussing today. Let me quickly highlight some of my leading concerns for each of the Services.

While we would certainly expect an Army end strength drawdown after withdrawal from Iraq and with a phased drawdown from Afghanistan, I would like to know what the reductions of 72,000 from our Army end strength do for our forces and our national security needs. At a time when much of the Army has failed to achieve sufficient dwell time between deployments that is essential to allowing units to reset and retrain, I have serious questions about the 72,000 number. I am also concerned about the Army's plans to involuntarily separate thousands of mid-career officers and noncommissioned officers in order to achieve this drawdown. We talk about not breaking faith with our troops, and I am concerned that with this drawdown and with the position that we are taking in our plans to provide many of our mid-career officers involuntary separations—what does this do in terms of the morale of our All-Volunteer Force and also the strength of that force?

At a time when there is consensus that our military needs to do more, frankly, with the risks around the world, that we need to be more agile and responsive, I am also concerned not only looking at the 72,000 reduction in the Army, but I would also like to have the same questions answered with respect to the 20,000 reduction of the Marine Corps, as well as the Marine Corps' decision to eliminate one maritime prepositioning squadron, which we have talked about at length before.

At a time when we are increasing focus on the maritime-dominated Asia and Pacific region, when the Navy has approximately 30 fewer ships and subs than it has said previously our national security requires, and when the Navy is failing to meet 39 percent of our combatant commander requirements for attack submarines, I also remain concerned about postponing the procurement of the *Virginia*-class submarine. I am also concerned about the mismatch between our stated strategy that features an increased emphasis on the Asia Pacific and the Navy's continued shortfall in ships and submarines. I think these are important questions that we need to understand and the American people need to understand what risks we are incurring under this budget.

At a time when the Air Force is working through the wear and tear of 20 consecutive years of combat operations with a fleet that is already 32 percent smaller and 43 percent older than in 1991, my concerns there are about our Air Force reducing their end strength by 10,000 airmen and cutting 246 aircraft from the Air Force's inventory.

To be clear, I am not one who opposes all cuts to the budget of DOD or our military. There is no question that there are reductions that need to be made. But as we seek to address our Nation's fiscal crisis and reduce Federal spending, there is no doubt that we need to understand what decisions are being made here, in light of our constrained resources, and what risks we are taking on as a Nation. I am concerned that there is a disconnect between our military capabilities and the number in the budget that you have been handed under the BCA from Congress.

Secretary Panetta said, "Let me be clear. You can't take a half trillion out of the defense budget and not incur additional risk. There is no margin for error."

As President Reagan said in 1983, we must make sure that any adversary who thinks about attacking the United States or our allies or our vital interests concludes that the risk to him outweigh any potential gains.

I do not believe that creating a U.S. military with no margin for error is the best way to assure our allies or to deter our potential enemies, and that is what I am worried about. America and the world are safer and more prosperous when the United States maintains military power and strength beyond challenge.

I think it is the preeminent purpose of this subcommittee and today's hearing, as much as is possible in this unclassified context, to drill down and ensure Congress and the American people understand the risk of this budget that we would incur with what you have proposed today and to our warfighters and to our country.

Finally, Secretary Panetta has described the defense sequestration cuts as catastrophic, inflicting severe damage to our national defense for generations. He compared the cuts to shooting ourselves in the head. Even with these compelling statements, I am still amazed that Congress has not mustered the courage to make the tough decisions now to avoid these serious risks to our national security. Based on these statements by our Secretary of Defense, we need to hear from the witnesses and the leaders that are before us today about the impact of the \$500 billion in defense sequestration cuts on each of your respective Services. I would also like to hear from each of the Services when you have to start planning for this, because I think there is a view around here that we can wait until December on the sequestration issue. But there is a lot of planning that would have to go into this, not only for you, but for the defense industrial base. So I would like to know how urgent this is in terms of Congress addressing this issue.

While I recognize that DOD must play a responsible role in overcoming our debt and the spending crisis we face, which is no doubt, as Admiral Mullen said, the greatest threat to our national security, I am concerned that the size and scope of the budget cuts will expose our military forces to an unacceptable level of risk. This risk is being assumed at the precise time we are asking our military leaders to plan for an increasingly difficult set of circumstances around the world against a widening array of risks and question marks in terms of things that are happening around the world right now. We cannot repeat the mistakes of history by cutting our forces so much that we are unprepared for future contingencies. Our military and the American people deserve better, and it is my hope that today we can discuss these important issues.

I thank all of the witnesses for being here, and I want to thank the chair for holding this important hearing.

Senator McCASKILL. Thank you, Senator Ayotte.

We will begin the testimony now, and first we will hear from General Lloyd Austin, Vice Chief of Staff for the U.S. Army. Welcome, General Austin.

STATEMENT OF GEN LLOYD J. AUSTIN III, USA, VICE CHIEF OF STAFF, U.S. ARMY

General AUSTIN. Good morning, Chairman McCaskill, Ranking Member Ayotte, and Senator Inhofe, thank you for the opportunity

to appear here today to discuss the current readiness of your U.S. Army. I have submitted a statement for the record and I look forward to answering your questions.

These continue to be challenging times for our Nation's military, and we have been at war now for over a decade. In fact, at no other time in history have America's service men and women fought for so long a period with an All-Volunteer Force. As you are well aware, we are still heavily engaged in operations in Afghanistan. We recognize that our military and interagency efforts there are extremely important.

In spite of the heavy demands placed on our personnel and equipment, I am pleased to report that ours remains a remarkably resilient force. Our soldiers are continuing to do an outstanding job, and they and their families have routinely done what we have asked of them. After more than a decade of war, hard fought in two separate theaters, America's All-Volunteer Force is highly capable and well led. This is due in no small part, to the encouragement and the strong support of Congress. I want to take this opportunity to thank all of you for your continued and steadfast commitment to our soldiers, Army civilians, and their families.

We are certainly proud of all that we have accomplished as a national security team, which is comprised of our Military Services, our interagency partners, and allies and friends around the world. We also recognize that much work lies ahead of us, and while our priority continues to be the fight ongoing in Afghanistan, we are doing everything we can here at home to help heal and alleviate some of the stress on our personnel.

Likewise, we have begun to retrograde, replace, and reset our equipment. The demands of the uncertain future security environment dictate that we continually prepare for the next fight, and accordingly, we are reshaping our Army and making necessary adjustments to our force structure and our training programs, recognizing that as the Army continues to adapt, we must be ready and capable of responding to a broader range of missions with fewer people.

In the years ahead, America's Army will be smaller and leaner. Yet, it will also be sufficiently agile, adaptable, and responsive. This is critical to ensuring our ability to deter aggression and to decisively defeat any opponent. These characteristics will also enable us to grow capacity as needed in response to unforeseen contingencies.

Key to our success, as you have frequently heard from our Secretary, Secretary McHugh, and our Chief of Staff, General Odierno, is balancing the three rheostats of force structure, modernization, and readiness, and that is where we are focusing our efforts.

One area in particular where we will need Congress' help is ensuring continued overseas contingency operations (OCO) funding for end strength above 490,000. This funding is imperative to our ability to manage a gradual reduction to our end strength over the next 5 years from 560,000 to 490,000. Lack of OCO funding will drive us to a steeper drawdown, primarily through involuntary separations and other means, that could result in significant hardship for thousands of Army combat veterans and their families and generates a large bill for unemployment and other related costs.

Likewise, we will need to fund reset for 2 to 3 years after we have completed the retrograde of equipment from Afghanistan. This is a request that this subcommittee has heard many times, but it bears a bit of repeating. Absent this funding, we will be required to accept risk in other areas at significant cost with a negative impact on readiness.

We are confident that the strategy we have developed will enable us to achieve our objectives. That said, we must continue to work together to ensure our battle-tested Army remains the Nation's force of decisive action, ready today and prepared for tomorrow. I am confident that we are on the right path to do so at this time.

Madam Chairman and members of the subcommittee, I thank you again for your continued support and demonstrated commitment to the outstanding men and women of the U.S. Army and their families. I look forward to your questions.

[The prepared statement of General Austin follows:]

PREPARED STATEMENT BY GEN LLOYD J. AUSTIN III, USA

Chairman McCaskill, Ranking Member Ayotte, other distinguished members of the subcommittee, I thank you for the opportunity to appear before you today to discuss the readiness of your U.S. Army. This is my first opportunity to appear before this committee as Vice Chief of Staff of the Army. I look forward to working with you, and I pledge always to provide you with an honest and forthright assessment based upon my own experiences and best military judgment.

On behalf of our Secretary—the Honorable John McHugh and our Chief of Staff—General Ray Odierno, I would also like to take this opportunity to thank all of you for your continued, strong support and demonstrated commitment to our soldiers, Army civilians, and family members. At no other time in history have our soldiers fought for as long a period. Throughout this decade of conflict their families have served alongside them, supporting them. In spite of the heavy demands placed on them, ours remains a remarkably resilient force. Today, our soldiers are better trained, better equipped, and more experienced than ever before. Our battle-tested Army remains the most agile, adaptable, and capable army in the world. This is largely due to the encouragement and congressionally-supported investment over the past 10-plus years of war. We thank you.

Today, our shared focus remains to provide the best trained and most ready land forces necessary to win the current fight, while also maintaining adequate responsiveness for unforeseen contingencies. The reality is we have not fought the 'war to end all wars.' While we recognize our force will be smaller and leaner in the years ahead, we must take the necessary steps to ensure it is still able to confront aggression and decisively defeat any opponent—anytime, anywhere. Ultimately our ability to do so will depend upon our overall level of readiness. Readiness is all about balance.

The Army—operating as part of the Joint Force—is committed to providing combatant commanders with the capabilities, capacity, and diversity needed to be successful across a wide range of operations. To satisfy this enduring requirement, we have three rheostats that must be continuously assessed and adjusted: force structure, readiness and modernization. Clearly, these factors are interrelated. More importantly, decisions we make on each of them today will have a profound impact on the posture of the Army in the future. As I speak to you about readiness today, you'll see how providing for the readiness of the Army requires us all to retain the right perspective based upon our understanding of the past, present, and future.

We are all well aware of the impact of prolonged demand and high operational tempo on our people and equipment. The strain on both, after fighting two wars in two separate theaters for more than a decade, is significant. A large percentage of our soldiers have deployed multiple times in support of operations in Iraq and Afghanistan, and other locations around the world. Many remain in Afghanistan where we are still heavily engaged in operations. Our primary focus as an Army continues to center on the fight ongoing in theater. We recognize that our military and interagency efforts there are extremely important. Likewise, the eventual transition out of Afghanistan will prove a very challenging, yet strategically important endeavor to the United States.

Meanwhile, back at home we are focused on the many challenges and opportunities that we, as an Army, face after more than a decade of war. These include preserving and sustaining the health of the force—addressing issues, to include behavioral health injuries (e.g., post-traumatic stress, traumatic brain injury), the disability evaluation system, and transition services. The reality is the demand on our people and equipment over the past 10-plus years has been tremendous. We are taking the steps necessary to address the full range of health and discipline issues affecting our soldiers and family members. We also remain focused on strengthening soldiers' resiliency and coping skills through our Comprehensive Soldier Fitness and Master Resiliency Trainer programs. We must continue to be proactive in our efforts to help soldiers better deal with the stressors and challenges they are faced with in the current operational environment. Overall, our priority will continue to be providing soldiers and their families with a quality of life commensurate with their service. We also recognize that in coming years we will be required to retrograde, replace and reset much of our equipment. Ultimately, our goal in these parallel efforts is to sustain the high quality of our All-Volunteer Force—Active, Guard and Reserve—in order to defend the United States and its interests, while reshaping our force to prepare for a wider range of contingencies in the complex and unpredictable environments we find ourselves in today and for the foreseeable future.

We also recognize we must accomplish all of these various tasks with limited resources and fewer people. We believe the strategy we have developed, based on the current situation and those future challenges we're able to identify, will enable us to achieve our objectives. Over time, as we transition out of Afghanistan, we will gain additional trade space and we will also continue to look for ways to do things more efficiently and more effectively. That said, as we prepare to address the next challenge or challenges facing us, we must ensure we always maintain the ability to regenerate capability very quickly. In other words, while we believe we are sufficiently resourced and prepared to meet the challenges currently ahead of us, adjustments may become necessary in the event that unforeseen contingencies or unexpected changes to the current situation arise in coming days.

In the meantime, as you are all well aware, we are making reductions to our end strength and proceeding in a thoughtful, yet deliberate manner. As Secretary McHugh stated, "What's critically important is that no matter what the force ultimately looks like, we have sufficient time to ramp down, to ensure that we do it in a balanced way, that we have what is necessary for training, equipment and resets." The Army must ultimately maintain the full capability to conduct Unified Land Operations: to seize, retain, and exploit the initiative through the decisive action of offensive, defense or stability operations. Our Nation demands we be prepared to operate successfully across this expansive mission set.

FORCE READINESS

Readiness is non-negotiable and our top readiness challenge is to ensure that next-to-deploy units have the resources and training needed to accomplish their assigned missions. To date, we are meeting our priority requirements, specifically those requested by geographic combatant commanders in theater. However, due to sustained demand against programmed availability, Army units have been achieving the required levels of training and readiness closer and closer to required deployment dates. This has increased the risk to geographic combatant commanders by reducing operational flexibility.

As demand for forces continues to decline we do expect the readiness of those next to deploy forces to improve earlier in their deployment cycle. Of course this is dependent upon a reduced demand on the force, and will continue to be carefully assessed especially given the projected reductions to end strength. As part of the new Department of Defense (DOD) Strategic Guidance (DSG), the Army will reduce end strength in two components. The Active component will draw down 79,000 soldiers to 490,000 by the end of fiscal year 2017. In the Reserve component, by fiscal year 2018, the Army National Guard will draw down 8,000 to 350,200. The Army has conducted extensive analysis and has concluded that we will maintain sufficient capability with end strength at 490,000 to meet the demands described in the DSG.

The readiness of Army units is tied to the Army's Force Generation (ARFORGEN) model which allows units to build and synchronize readiness over time in order to meet mission requirements. The ARFORGEN model has served us well in recent years in support of operations in Iraq and Afghanistan. However, we recognize that we will have to modify this model to ensure we are able to effectively meet the demands of the future security environment. We envision a progressive readiness model which will better align our Active and Reserve component units to leverage

their unique capabilities and be responsive to geographic combatant commander requirements.

A key component of the ARFORGEN model is training. Training is the cornerstone of Army readiness. Over the past 10-plus years, Congress has provided the necessary resources to prepare our soldiers and our formations properly. For example, Overseas Contingency Operations (OCO) funding has allowed our brigade combat teams to execute mission rehearsal exercises at the Army's Combat Training Centers. The quality of pre-deployment training at the National Training Center, the Joint Readiness Training Center and the Joint Multinational Readiness Center has been extraordinary. These centers—which have transformed and adapted themselves—enable our leaders and soldiers to validate their tactics, techniques and procedures prior to deploying, leverage lessons learned and foster adaptability. Over the past decade of war, this training has undoubtedly saved lives in Iraq and Afghanistan.

The Army must retain the flexibility to conduct a broad range of missions including: regular and irregular warfare, humanitarian assistance operations, security force assistance, and support to civil authorities in a hybrid environment marked by uncertainty and complexity. As pressures for cuts in defense spending and force structure increase, the Army will assess which capabilities to emphasize, how many of each, and at what level, recognizing that finding the right mix will be a challenge.

Finally, our Reserve component (RC) forces are a crucial element of the Army's overall deployable strength and warfighting team. Over the past decade of war they have provided essential operational capabilities and specific functions in support of the Army. To ensure we are able to maintain the readiness of our RC forces, the Army included resources for the National Guard and Army Reserve within the fiscal year 2013 base budget, including additional resources for collective training, full-time manning, and medical/dental readiness. We remain committed to ensuring our citizen-soldiers and their families receive the support they deserve, both while they are serving on active duty and after they have returned to their communities back home.

MATERIEL READINESS

Our ability to outfit the men and women of our Army with the best equipment in the world remains fundamental to our overall readiness. Over the past decade, we have maintained operational readiness rates in theater exceeding 90 percent for ground systems and 75 percent for aviation systems. Since November 2008, all three components—our Active component, National Guard, and Army Reserve—have significantly improved in terms of equipment-on-hand readiness. These improvements have come about as a result of your investment in our Army. Our soldiers, civilians, and contractors have done an exceptional job restoring the readiness of our equipment returning from harsh environments.

As Commander of U.S. Forces-Iraq, I oversaw the transition of mission and the retrograde of people and equipment out of Iraq after nearly a decade of war. It was a complex endeavor from which we learned many valuable lessons. These lessons will certainly be applicable in Afghanistan, recognizing that the challenge there will, in all likelihood, be more complex—given the difficult terrain and the tyranny of limited infrastructure. The Army has carefully planned and refined our retrograde, reset, and redistribution process to be synchronized with the ARFORGEN process to ensure the right equipment gets repaired and redistributed to the right units.

Reset is a cost of war and it prepares our equipment for an unpredictable future and evolving threats. The Army would not be as ready as it is today without the tremendous level of support received from Congress for equipment reset. In fiscal year 2012, Congress appropriated \$4.3 billion for reset. For fiscal year 2013, the Army requested \$5.445 billion for reset. The Army's reset request for fiscal year 2013 anticipates a higher level of effort than fiscal year 2012, due to the retrograde of equipment from Iraq and increasing need to recapitalize or replace combat equipment. Our need to reset does not end when troops leave the theater of operations. In fact, it will likely continue for 2 to 3 years after our troops return home to ensure equipment readiness is restored for future contingencies.

Army Prepositioned Stocks (APS) remain a key strategic source for force projection. APS equipment sets have been used several times in the last 10 years and will continue to be a strategic asset in the future. Thanks to continuous support of Congress, the Army is on track and funded to reconstitute all APS sets by 2015. We are currently reassessing our APS strategy in light of new DSG and emerging needs of combatant commanders. The flexibility provided by these critical assets ultimately enables us to further reduce our strategic risk, thus contributing significantly to the future readiness of our Army.

FUTURE READINESS

As we transition the Army to align with new strategic guidance, we recognize that we must balance end strength/force structure, readiness, and modernization in order to maintain our ability to respond as needed to unforeseen contingencies and to achieve maximum operational strategic flexibility. Again, as our Chief—General Odierno has said, our force will be smaller and leaner in the years ahead, but also more agile, flexible, deployable and technologically advanced. It must be tailored to ensure it is capable of meeting a wider range of contingencies and emerging threats. In part, this will be achieved by strengthening our key alliances and partnerships through regional alignment, overseas rotational deployments, and other innovative ways identified to sustain our presence around the world.

Equally important will be our continued investment in our training and modernization programs. The Army's ability to enter an operational environment and dominate hinges on the equipment available to our soldiers and the training conducted prior to joining the fight. Too often in our Nation's history our forces have found themselves unprepared for the first battle. As we look ahead and plan for the next fight, we must ensure we have resourced our training programs properly and invested sufficiently in our research, development, and modernization efforts to ensure that the Army is prepared to win the next first battle decisively. To be sure, this is not solely about resources. It is also about leadership, doctrine, and adapting training strategies. We must ensure we continue to take the necessary steps to ensure our soldiers' are trained, resourced, and equipped to succeed in the future.

WHERE WE NEED CONGRESS' HELP

Critical to our success will be Congress' continued support of operations ongoing in theater. In particular, we will require OCO funding for end strength above 490,000 (Active component) in order to support a gradual ramp over the next 5 years. This will enable us to take care of our soldiers and maintain flexibility while providing necessary support to forces in Afghanistan. As I mentioned earlier, we will need to fund reset for 2 to 3 years after we have completed the retrograde of equipment from Afghanistan. Reset is a true cost of war. The length of reset depends upon the pace of retrograde, volume of equipment to be reset, and repair cycle time of major systems (e.g., 240 days for aviation assets). Likewise, future cost estimates ultimately depend upon force structure decisions, condition of equipment, and plans for redistribution of equipment to the Afghan National Security Forces.

Overall, while recognizing the Nation's deficit challenges, it is imperative that any future reductions to the Army's budget be based on comprehensive strategic analysis. We must preclude hollowing the Army by maintaining balance in force structure, readiness, modernization efforts and commitments to our All-Volunteer Force. Simply stated, we must remain an agile Army able and capable of winning the current fight while also meeting future challenges.

Necessary to maintaining this balance is avoiding sequestration that would subject the Army to massive cuts that will have a devastating effect and carry the very real risk of producing a hollow, unbalanced, or weaker force. Such reductions would adversely impact our modernization efforts, the defense industrial base, and ultimately, our ability to respond to worldwide threats and unforeseen contingencies. Additionally, we would be forced to reduce military construction and operations and maintenance which would result in risk to training and our overall readiness. Moreover, we risk breaking faith with our soldiers and family members who have performed superbly over 10-plus years of conflict. Sustaining the All-Volunteer Force is absolutely essential to our ability to support our Nation's defense.

CONCLUSION

With Congress' support, we have built a remarkable force that has performed magnificently in all endeavors over the past decade of war. It is better trained and equipped and our young leaders are better prepared than at any other time in history. Your Army, together with our joint partners, will continue to serve as a bulwark against the compounding risks inherent in an uncertain and rapidly changing world. These continue to be challenging times for our military and for our Nation. Leaders throughout our Army remain focused on effectively addressing current challenges, particularly with respect to fiscal demands and health of the force, while also determining the needs of the force for the future.

While we all recognize the requirement to make tough choices and necessary sacrifices in the days ahead, we also recognize that we must do so responsibly in order to ensure that what remains is a force able and capable of successfully meeting our national security requirements. Whatever its size, our Army must remain highly-

trained, equipped, and ready. Maintaining credibility based on capacity, readiness, and modernization is essential to averting miscalculations by potential adversaries. Our Nation can accept nothing less.

Madam Chairwoman, members of the subcommittee, I thank you again for your steadfast and generous support of the outstanding men and women of the U.S. Army, our Army civilians, and their families. I look forward to your questions.

Senator McCASKILL. Thank you so much.

Next we will hear from Admiral Mark Ferguson, Vice Chief of Naval Operations, U.S. Navy.

STATEMENT OF ADM MARK E. FERGUSON III, USN, VICE CHIEF OF NAVAL OPERATIONS, U.S. NAVY

Admiral FERGUSON. Madam Chairman, Senator Ayotte, and distinguished members of the subcommittee, it is an honor to represent the men and women of the Navy and review the readiness of the force with you today.

As we prepared our fiscal year 2013 budget request, our decisions were driven by the new defense strategy and our sailing directions for the Navy, emphasizing warfighting, operations forward, and readiness. We focused on funding the critical elements of readiness as we balanced our investments in future capability, operations and maintenance, personnel, training, and spares.

Our budget proposes reductions in force structure and delays in the procurement of some new platforms to ensure the wholeness of our remaining force. Importantly, we invested in maintaining a sustainable deployment model to allow for the reset and stride of our forces between rotational deployments as well as in selected ordnance and training for the fleet.

We also focused on enhancing our forward presence to mitigate a reduced force structure such as placing four *Arleigh Burke*-class destroyers in Rota, Spain, and planning for the forward stationing of littoral combat ships in Singapore.

Quite simply, we prioritized readiness and capability over capacity to ensure we deliver a ready and relevant Navy now and in the future.

This budget submission, which includes baseline and OCO funding, supports the requirements of the combatant commanders as adjudicated by the Joint Staff in the global force management (GFM) process with some available capacity to provide surge forces in support of our major operational plans and other emergent needs.

It is important to note the combatant commander demand for naval forces is much higher than approved in the GFM process and is steadily growing. We have been operating at a wartime tempo for over 10 years and continue to stress the force as we draw down from two land campaigns. Our forces are ready but show the strain of this pace. Let me give you an example.

Today, the Navy is surging to provide two aircraft carrier strike groups in the Middle East while at the same time sustaining a continuous carrier strike group presence in the western Pacific. In response to heightened tensions, we are augmenting our forces in the U.S. Central Command area with additional mine countermeasures assets, patrol craft, and a float-forward staging base support vessel, the refitted USS *Ponce*.

This agility of naval forces to respond to crises is preserved through our investments in maintenance and training. Supporting this current level of surge above our program budget levels is not sustainable over the long term within our current level of resources. To sustain this high operational tempo (OPTEMPO), we will face the choice between reducing the maintenance on our platforms and shortening their expected service lives, reducing the training in our personnel, or increasing the stress on our force through longer deployments.

Today, we are dependent upon the receipt of OCO or similar supplemental funding to sustain our readiness. This year, the added cost of providing these surge forces, given fuel cost increases, is placing added pressure on our readiness accounts and execution. We are working with DOD to address the challenge of these additional costs without affecting our overall readiness.

Madam Chairman, Senator Ayotte, and distinguished members of the subcommittee, you can be proud of the exceptional service of the men and women of our Navy. Our sailors are the highest quality force in our history and they make us the finest Navy in the world. I appreciate the support of the subcommittee for our Navy and its readiness and appreciate the opportunity to testify and look forward to answering your questions. Thank you.

[The prepared statement of Admiral Ferguson follows:]

PREPARED STATEMENT BY ADM MARK E. FERGUSON III, USN

Chairman McCaskill, Senator Ayotte, and distinguished members of the Senate Armed Services Subcommittee on Readiness and Management Support, it is my honor to appear before you to testify on the readiness of our Navy.

Our fiscal year 2013 budget request seeks to meet operational requirements while sustaining the readiness of our ships and aircraft over the course of their expected service lives. We viewed readiness through the lens of Admiral Greenert's three tenets—"Warfighting First, Operate Forward, and Be Ready"—in his "Sailing Directions" for the Navy. The new Defense Strategic Guidance and the fiscal limits dictated by the Budget Control Act of 2011, guided our choices. We reduced force structure and reduced procurement of new platforms to ensure "wholeness" of our existing force structure. We focused on enhancing our forward presence to mitigate reduced force structure, placing four *Arleigh Burke* class destroyers in Rota, Spain and planning for the forward stationing of Littoral Combat Ships (LCS) in Singapore and additional patrol craft and minesweepers in Bahrain. Our decisions prioritized readiness and capability against emerging threats over force structure to deliver a ready and relevant Navy now and in the future.

We remain fully able to meet the combatant commander requirements as adjudicated through the Secretary of Defense-directed Global Force Management (GFM) process. As we respond to emergent requests for forces, the Navy is prepared to source these requests with combat-ready forces. To be clear, the global demand for naval forces is much higher than approved in the GFM process, and exceeds our sustainable capacity over the long term. Supporting this higher demand above programmed levels will require additional funding or reprogramming actions in the current year, and could impact the service life of our platforms should we compress maintenance timelines. Should this demand continue unabated, our potential risk would be reduced surged capacity in the future and increased stress on the force due to longer deployment lengths. As an example of the impact of this higher demand, the USS *Bataan* recently returned from a nearly 11 month deployment supporting operations in the European, African, and Central Command areas of operation. While sustaining our overall global presence levels, the Navy is also responding to the heightened tension in the Central Command region. We have deployed two Carrier Strike Groups, and are preparing to deploy additional staff, surface combatants, mine sweepers, mine clearance helicopters, patrol craft, and the USS *Ponce* as a deterrent force. The cost of providing these additional forces forward, together with fuel cost increases, have placed pressure on our readiness accounts. Every \$1 increase in the price per barrel of fuel results in approximately \$31 million

of additional cost annually above our budgeted level. The deployment of additional forces forward will cause us to divert resources from other accounts to fund this bill. We are actively exploring means to ensure we can continue to provide the high levels of readiness we enjoy today while still meeting this demand within our budget.

A READY NAVY TODAY

We are ready today to respond to contingencies with the highest quality force in our history. As previously discussed, we continue to experience high operational tempo globally, and sustaining it remains dependent upon the receipt of overseas contingency operations (OCO) or similar supplemental appropriations. We are taking risk in the readiness of our nondeployed forces to maintain very high levels of readiness in our deployed forces. The fiscal year 2013 budget, including OCO funding, supports the anticipated needs of the combatant commanders, as adjudicated through the GFM process, with some capacity to provide surge forces in support of their major operational plans and other emergent needs. We are dependent on OCO funding in the near term to sustain these readiness levels.

The Navy manages force generation using the Fleet Response Plan (FRP). This plan establishes a sustainable cycle of deployment, sustainment, maintenance, and training for individual units and task groups. With this process, the Navy generates the capacity to provide forces required to meet global presence demands and supports a force for surge response for contingencies, homeland defense, and training. The plan operates as a cycle, so that forces undergo maintenance, training, and then deployment periods in defined periods.

For over 10 years, Navy forces have been operating at a war-time pace, which has resulted in more underway days, deferred maintenance, missed training, and increasing deployment lengths. A critical element of our fiscal year 2013 budget is the adjustment of the FRP cycle to ensure the long-term readiness of the fleet. This realignment provides additional time for training and maintenance while providing greater deployment availability. The flexibility of this approach enables the Navy to better surge forces in response to contingencies.

SHIP OPERATIONS

The baseline fiscal year 2013 budget request, plus OCO, funds the Ship Operations account at 96 percent of our projected requirement. This funding profile enables the Navy to meet the operational requirements of the combatant commanders for our forward forces and to conduct FRP training and certification requirements with manageable risk. It provides for a nominal 2.5 Carrier Strike Group presence, 2.6 Expeditionary Strike Group/Amphibious Strike Group presence, and 34 independent surface combatant presence with an average ship's OPTEMPO of 58 steaming days per quarter (deployed) and 24 steaming days per quarter (nondeployed). This level of funding also supports two Carrier Strike Groups ready to surge within 30 days and one Carrier Strike Group ready to surge within 90 days. Measures such as increased use of simulators, concurrent training and certification events while underway, and the judicious use of fuel, are used to mitigate this risk.

AIR OPERATIONS (FLYING HOUR PROGRAM)

The fiscal year 2013 baseline budget, plus OCO, funds the Flying Hour Program (FHP) to 100 percent of our requirement for the operation, maintenance, and training of 10 Navy carrier air wings, 3 Marine Corps air wings, Fleet Air Support (FAS) squadrons, training commands, Reserve Forces, and support activities. It is resourced to achieve an operational availability of three Carrier Air Wings deployed, two Carrier Air Wings ready to surge within 30 days, and two Carrier Air Wings ready to surge within 90 days. Our individual Navy and Marine Corps aviation units are funded to achieve a defined training-rating level for deployment or surge operations. We are increasing the use of simulation to use non-deployed flying hours most effectively, and continuing to invest in new simulators. To preserve aircraft service life, we are also upgrading existing simulators to reduce aircraft flying hours.

FLEET TRAINING AND TRAINING RANGES

To support ready Navy, we continue to invest in new or improved training capabilities. Our budget submission requests funding for the upgrade of the Navy Continuous Training Environment (NCTE) network that supports our Fleet Synthetic Training program, and extends the NCTE to support the four ballistic missile defense-capable guided missile destroyers to be forward stationed in Rota, Spain. Live training is enhanced by the accelerated procurement of high speed maneuverable

surface targets and electronic warfare threat emitters, while we continue development of threat representative enhanced air targets. This budget also supports expanded live fire training on our ranges with surface-to-air missiles to ensure operator proficiency.

To ensure that proficiency and confidence in our ability to use our weapons and sensors, we shifted procurement, research and development, and readiness funds toward selected weapons systems, sensors, and tactical training that can be rapidly fielded to the fleet. Key investments include increases in quantity for Evolved Sea Sparrow Missile, MK 48 Heavy Weight Torpedo, sonobuoys, Advanced Precision Kill Weapon System, and Hellfire. We increased funding for exercise ordnance to increase live-fire training and improve operator proficiency across the force.

A READY NAVY TOMORROW

Our fiscal year 2013 Navy budget submission balances the need to meet today's operational requirements with the need to sustain our force and develop the capabilities needed for emerging threats. Our shipbuilding and aviation construction investment is focused on designs that promote readiness of the future force. This budget supports our proven sustainment models for nuclear aircraft carriers and submarines, continues our investment in the readiness of our surface combatants, and supports the transition and integration of new capabilities into naval aviation.

There are three major attributes that we incorporated in the future force: adaptability, ability to remain forward, and inherent training capability. Platforms such as the *Freedom* and *Independence* class LCS, *Virginia*-class submarines, and the P-3A Poseidon maritime patrol and reconnaissance aircraft, incorporate adaptability to support future capability evolution through new payloads. LCS also improves our ability to remain forward through rotational crewing while Joint High Speed Vessels and Mobile Landing Platforms will be able to spend three times as long forward deployed as today's frigates and destroyer because of their rotational civilian crews. Our shipbuilding and aviation investments will also provide for onboard capability for simulation and training in platforms such as the P-8A and *Arleigh Burke* destroyers.

Our baseline budget request, plus OCO, fully funds ship maintenance requirements and reduces surface ship maintenance backlog during mid-life availabilities. Reaching expected service life requires an integrated engineering approach to plan, fund, and execute the right maintenance. Over the last 2 years, we have made significant progress to better define the maintenance requirement necessary to improve surface ships material readiness and achieve expected service life.

The Surface Maintenance Engineering Planning Program (SURFMEPP) has established ship maintenance requirements based on disciplined engineering processes, similar to those used by our carrier and submarine communities. Since its inception in 2010, it has developed Technical Foundation Papers for five of our seven major combatant ship classes. The last two, Mine countermeasures and LCSs, are scheduled to be completed by fiscal year 2014. These documents specify the periodicity, size, duration, and scope of the maintenance required for each class. The fiscal year 2013 budget submission was informed by this level of detail for CG-47, LPD-17, LHD-1, DDG-51, and LSD-41/49 classes. Under this new process, availability planning, execution, and certification are codified; all required maintenance actions are tracked to completion; and all proposed maintenance deferrals are formally reviewed to ensure adjudication by the appropriate technical authority and rescheduling in a follow-on availability or other appropriate window of opportunity.

The maintenance community has also focused on becoming better at "condition-based" planning through documentation and analysis. For example, ship tank condition has been identified as a key factor to reducing growth work and maintenance availability extensions, so it is now aggressively monitored. Tank corrosion prevention and repairs have been incorporated into individual ship life cycle maintenance plans. The goal is to document the condition of 95 percent of all tanks by the end of fiscal year 2014. The Navy is also continuing our partnership with the American Bureau of Shipping in performing detailed surface ship structural surveys using commercially proven processes and procedures.

We have also addressed manpower concerns, restoring some billets previously removed from our ships to provide them with the capacity and capability to improve their operational and material readiness. This process began in fiscal year 2012 with an increase of 1,105 technically skilled sailors returning to sea duty. An additional 1,107 billets will be added to seagoing commands in the coming year. The increase in both sailor and civilian manning at our Regional Maintenance Centers (RMCs) also continues under this budget submission. This increased staff provides the RMCs with appropriate skill-sets to execute Navy maintenance, supports quality

shore duty for Sea/Shore rotation, and establishes a journeyman training continuum for sailors that will increase a ship's capability to document and fix maintenance issues.

Navy is also committed to the right level of ship maintenance at the most efficient cost. We continue efforts to reduce the total cost of ownership of the fleet, as we have done with SSN 688 and SSN 774 class submarines, through continued analysis of engineered technical requirements and assessment of recently completed availabilities.

The cyclic nature of ship and submarine depot availabilities from year to year continues to cause variations in budget requests and annual obligation levels. Surface ship availabilities are conducted almost exclusively in the private sector, while submarine and aircraft carrier availabilities are primarily conducted in the public sector, with selected availabilities completed by nuclear-capable private shipyards. Whenever practical, maintenance is performed in the ship's homeport to minimize the impact on our sailors and their families. The Navy recognizes maintenance organizations need a stable and level workload to maximize efficient execution. We continue to level the workload to the maximum extent practicable within operational constraints.

AVIATION MAINTENANCE

The Naval Aviation Enterprise applies continuous process improvement (CPI) tools to deliver readiness with greater efficiency. CPI produces readiness by increasing the speed, reliability, and predictability of processes associated with integrated maintenance and supply chain replenishment. The fiscal year 2013 budget submission supports continuing CPI efforts, such as those which developed repairs for high cost consumable items for the FA-18 and MV-22, providing measurable savings. Additionally, our fiscal year 2013 budget request invests in long-term enhancements to the overall material condition of naval aircraft, such as corrosion prevention teams.

Our budget request for depot airframe and engine workload supports 94 percent of the aviation depot maintenance fleet and Reserve requirement. This achieves an acceptable balance between funding for the full range of Navy requirements and operational risk. It will result in 720 airframe and 2,070 engine depot inductions during the year, and a projected backlog of 14 airframes and 273 engine depot requirements. This is assessed to be an acceptable level of risk, and the program will be monitored during the execution year to ensure fleet readiness requirements are met.

NAVY EXPEDITIONARY FORCES

Although a smaller part of the overall Navy operations and maintenance budget, Navy expeditionary forces support global missions by deploying security, construction, logistics and training units. Our fiscal year 2013 budget request for Navy Expeditionary Combat forces, of which 50 percent is OCO, fully funds operational requirements, such as Explosive Ordnance Disposal, Maritime Expeditionary Forces, and Naval Construction Forces.

SHORE OPERATIONS

The Navy's shore infrastructure—both in the United States and overseas—provides essential support to our fleet. In addition to supporting operational and combat readiness, it is also a critical element in the quality of life and quality of work for our sailors, Navy civilians, and their families. The fiscal year 2013 budget submission emphasizes ship and air operations, as well as sailor and family readiness.

Our fiscal year 2013 budget submission funds port and flight line operations, safety and security, and family support programs within Base Operating Support. Meanwhile, we continue to target our Facilities Sustainment, Restoration, and Modernization funding toward facilities directly supporting operations, such as airfields, hangars, piers, and barracks.

The Navy's planned fiscal year 2013 shipyard investment of \$248 million is in compliance with the National Defense Authorization Act (NDAA) 6 percent investment requirement for infrastructure improvements. However, based on modifications to the accounting roles for minimum capital investment in the 2012 NDAA enacted December 2011, our Fleet Readiness Centers are below that level. Planned fiscal year 2013 Navy average investment level is now 5.3 percent, and we are currently reviewing options to increase depot investment during fiscal year 2013 execution to ensure compliance. We continue to sustain and recapitalize our shipyards within today's fiscally constrained environment, focusing on mission-critical facilities such as production shops, piers, wharves, and dry docks. We mitigate the level of

deliberate risk we take in the sustainments of our infrastructure by prioritizing projects for repair.

FAMILY READINESS PROGRAMS AND CHILD AND YOUTH PROGRAMS

The Navy's Family Readiness programs enhance mission readiness by assisting commanding officers, sailors, and their families in managing the demands of the military lifestyle. This budget request increases funds for warfighter and family readiness programs to include child development centers, services for exceptional family members, sexual assault prevention, and Wounded, Ill, and Injured Warriors. Our Navy Child and Youth Programs provide high-quality educational and recreational programs for Navy children ages 6 weeks through 18 years in multiple venues. All programs are operated in accordance with the Military Child Care Act, and are Department of Defense-certified and nationally accredited. We recently expanded our childcare facilities by 7,000 spaces, and will meet the Secretary of Defense's goal of providing for at least 80 percent of the "potential need" by the end of this year.

HOUSING

Our budget request also sustains funding for quality housing which significantly impacts sailor retention, productivity, and individual and mission readiness. Our Bachelor Housing program is focused on providing Homeport Ashore housing for our junior sea-duty sailors by 2016, and attaining the Office of the Secretary of Defense (OSD) goal of 90 percent of our bachelor housing evaluated as being "adequate" on a quality scale rating. We have requested \$195 million in fiscal year 2013 to improve the condition of our existing barracks to continue progress toward this goal.

We maintained funding for the operation and maintenance of Navy Family Housing in this budget. Navy is on track to achieve OSD's goals of 90 percent "adequate" family housing inventory by 2017. Our fiscal year 2013 budget submission funds family housing improvements, planning, and design, in addition to the operation and maintenance of our approximately 10,000 Navy-owned and 3,000 leased homes. We have privatized 97 percent of our continental United States and Hawaii family housing inventory and continue to perform oversight of our privatized housing to ensure Navy sailors and their families benefit from quality housing and services.

CONCLUSION

We will continue to ensure our Navy remains ready to meet the demands of the national security strategy with acceptable risk. Our sailors are the highest quality, most diverse force in our history and make us the finest Navy in the world. On behalf of all these men and women—Active, Reserve, and civilian—thank you for your continued support of the U.S. Navy.

Senator MCCASKILL. Thank you, Admiral Ferguson.

Next we will have General Joseph Dunford, the Assistant Commandant of the U.S. Marine Corps. Welcome, General.

STATEMENT OF GEN. JOSEPH F. DUNFORD, JR., USMC, ASSISTANT COMMANDANT, U.S. MARINE CORPS

General DUNFORD. Madam Chair, Ranking Member Ayotte, members of the subcommittee, thank you for the opportunity to represent your marines this morning. I would like to begin by just making a few key observations regarding our current and our future readiness.

Today, of the 197,000 marines on Active Duty and the 39,000 in the selected Marine Corps Reserve, 26,000 are forward deployed, 18,000 of those are in Afghanistan.

Our number one priority is ensuring that our forward-deployed forces are well-manned, trained, and equipped, and as a result of your support, I can assure you that those marines and sailors that are forward deployed are at the highest state of readiness.

But our forward-deployed units have personnel and equipment requirements that exceed standard allowances. The additional equipment is due to the nature of the fight in Afghanistan and the

very distributed nature of operations. The additional personnel are required to support staffs and trainers for Afghan security forces. We meet these additional requirements by pulling equipment and personnel from units at home station.

As Madam Chair mentioned in her opening remarks, our units at home station continue to experience significant personnel and equipment shortages. In fact, over the past several years, approximately two-thirds of our units at home station have been in a degraded state of readiness. Home station readiness is a particular concern for the Nation's expeditionary force in readiness. The forces at home station represent our capability to respond to unexpected crises and contingencies. Over the past 2 years, units at home station have responded to several unplanned requirements. In these cases, marines have days and in some cases hours to respond, and we are reminded that crisis response is a "come as you are" event.

As we draw down our forces in Afghanistan, we will begin to address these deficiencies at home station and improve our ability to respond to unexpected crises and contingencies. The critical element in improving our readiness is the reset of equipment coming out of Afghanistan. We currently estimate the ground equipment reset liability at \$3.2 billion. This is our strategic reset liability. This forecast is primarily based on the replacement of combat losses, the restoration of items into serviceable condition, and the extension in service life of selected items. We believe it will take 2 to 3 years of overseas contingency funding to complete reset once our equipment returns from Afghanistan.

In addition to the strategic reset, we have asked for \$1.3 billion in our fiscal year 2013 budget request, and this is to cover what we call operational reset. It addresses the current cost of war to include replenishing missiles, ammunition, depot level repair of certain equipment, and the replacement of destroyed equipment.

As we work to meet current requirements and set the conditions to improve readiness, we are also ensuring that we have the right training, organization, and modernization to meet future challenges. Our current plan is to develop and maintain an Active Force of 182,000 marines and the selected Marine Corps Reserve of 39,500 marines. We believe that structure, filled with high-quality marines and combined with our aviation and ground modernization initiatives, will allow us to meet the requirements of the new strategy. With your continued support, that force will be manned and equipped as a force of readiness. It will be designed to be forward deployed and forward engaged and it will be prepared for a wide range of crises and contingencies.

Thank you. I look forward to your questions.

[The prepared statement of General Dunford follows:]

PREPARED STATEMENT BY GEN. JOSEPH F. DUNFORD, USMC

Today's marines are thoroughly trained, combat proven and are meeting all Operation Enduring Freedom (OEF) and combatant commander requirements. The approximately 18,000 marines deployed in Helmand Province under Regional Command South-West remain our top priority. Rotation after rotation, their professionalism and morale remain high. In the last several years they have successfully created the conditions for the Afghan National Security Forces to grow and mature, and they have given the Afghan people an opportunity for a better future. Outside of Afghanistan, marines have been ready and able to respond to a range of inci-

dents, from natural disasters to civil uprisings, and they stand ready and able to respond to future incidents that threaten our Nation's interests regardless of the location or the nature of the occurrence.

CURRENT READINESS

Readiness comes at a cost, and the high readiness of the deployed forces comes at the expense of our nondeployed units' readiness. The Marine Corps can sustain its current operational requirements on an enduring basis; however, to maintain the high readiness of our forward deployed units, we have globally sourced equipment and personnel for Afghanistan and other emerging threats from our non-deployed units. The nondeployed forces' principal readiness detractor is the reduced availability of equipment at home stations with which to outfit and train units. The manning of our home station units also suffers due to the need to properly resource deploying units and meet the personnel requirements for Individual Augments and Security Force Assistance Teams. The primary concern with the out-of-balance readiness of our operating forces is the increased risk in the timely response to unexpected crises or large-scale contingencies, since the nondeployed forces likely would be the responders.

RESETTING THE FORCE

Reset is a subset of reconstitution and comprises the actions taken to restore units to a desired level of combat capability commensurate with the units' future missions. After more than a decade of combat, this will require an unprecedented level of effort. The Marine Corps is resetting its forces "in stride" while fighting the war in Afghanistan and transitioning to the new Defense Strategic Guidance (DSG). Unlike previous post-conflict periods, such as after Operation Desert Storm, we do not anticipate taking an "operational pause" to reset as we transition from OEF.

The Marine Corps' Operation Enduring Freedom Ground Equipment Reset Strategy, released in January 2012, will serve to identify the equipment we will reset or divest. We currently estimate, subject to change, that the ground equipment reset liability is in excess of \$3 billion.¹ This forecast is primarily based on the replacement of combat losses, the restoration of items to serviceable condition, and the extension in service life of selected items. The Strategy prioritizes investment and modernization decisions to develop our middleweight force, per the DSG.

Our reset effort is underway and it maximizes the Marine Corps' depot capacity, where we expect the bulk of reset execution to occur. Notably, the reset of our equipment is expected to extend 2 to 3 years beyond the end of our involvement in OEF due to the time it will take to bring all of our equipment back to the continental United States and move it through our depot system. The continued availability of our ground equipment depot capacity at both Barstow, CA, and Albany, GA, is essential for reset, for our ability to both self-generate readiness and surge in response to demand. Continued congressional support over the next several years will be critical to the Marine Corps' equipment reset efforts.

RECONSTITUTION

The Marine Corps has a strategic trajectory to reconstitute to a ready force by fiscal year 2017.² Our reconstitution efforts will restore and upgrade our combat capability and will ensure our units are ready for operations across the range of military operations. To ensure we are organizing for the emerging security environment and its inherent and implied challenges, the Commandant of the Marine Corps directed a Total Force Structure Review in 2010. This Review aligned our force to meet the needs of the Nation and took into consideration the realities of constrained spending levels; the strategic defense guidance; and the lessons learned from 10 years of war, particularly the requirements to conduct distributed operations. Addi-

¹ This \$3 billion liability is our "strategic" reset liability; or simply, the cost to reset our Afghanistan equipment set to a zero-hours/zero-miles condition. In addition to strategic reset we have a \$1.3 billion overseas contingency operations is requested in fiscal year 2013, primarily to cover cost of war issues, but some of which is slated for strategic maintenance for reset. How much of the \$1.3 billion will be used for reset is dependent upon both the quantity of equipment that flows out of Afghanistan and our depot capacity.

² Reconstitution consists of the actions beyond reset, taken during or after operational employment to restore and/or upgrade combat capability to full-spectrum operational readiness. Reconstitution includes personnel, equipment, and training. Force reconstitution spans activities from normal sustainment (rearm, refuel, recover (dwell), repair, and replace), through reorganization and regeneration of units to redeployment.

tionally, reconstitution will rebalance and sustain home station readiness so that our units are ready to deploy on short notice.

To meet the DSG within the fiscal realities, we will decrease our Active Duty end strength from 202,100, beginning this fiscal year, to 182,100 by the end of fiscal year 2016.³ We will retain our Reserve component at 39,600 marines. The Active Duty end strength reductions will occur at the rate of approximately 5,000 per year. We have no plan to conduct a reduction-in-force. These end strengths will retain our capacity and capability to support steady state and crisis response operations; while the pace of the reductions will account for the completion of our mission in Afghanistan and provide the resiliency that comes with sufficient dwell times. Reshaping the Active Duty component to 182,100 marines will entail some risk relative to present and future capacity requirements; but it's manageable, particularly as we maintain the Reserve component's operational capability.

We are also examining future requirements with an ongoing comprehensive review of the Marine Corps' equipment inventories to validate reset strategies, future acquisition plans, depot maintenance programming, and modernization initiatives. This review will incorporate the lessons we learned from more than a decade of combat and will enable us to upgrade our tables of equipment to reflect the way we expect to conduct operations in the future.

FIVE READINESS PILLARS

To achieve institutional readiness, sustain operational requirements, and be prepared for crisis and contingency response, we must restore and maintain a balance across five pillars:

- High quality people
- Unit readiness
- Capacity to meet combatant commander requirements
- Infrastructure sustainment
- Equipment modernization

HIGH QUALITY PEOPLE

The recruiting and retention of high quality people is essential to attain a highly ready and professional force. We need the right quantities and occupational specialties to fulfill our role as an expeditionary force in readiness. In fiscal year 2011, the Corps achieved 100 percent of its officer and recruiting goals for the Active and Reserve components, while exceeding Department of Defense quality standards for Tier 1 High School Graduates and Mental Categories I–IIIa. We expect to achieve the same in fiscal year 2012. The Marine Corps also achieved its retention mission in fiscal year 2011 and anticipates doing so again in fiscal year 2012. We rely on Congress' continued support with tools such as adequate compensation, incentive pays, and selective reenlistment bonuses to meet future recruiting challenges, position the force for the impending drawdown, and shape the All-Volunteer Force to meet the new defense strategy.

Civilian marines are an integral part of our Total Force, supporting the Corps' mission and daily functions; they constitute less than 5 percent of our fiscal year 2012 budget. Already we have begun to shape this force by reducing it from 21,000 direct funded full time equivalents to 17,501, without drastic downsizing impacts. We will hold the civilian workforce at fiscal year 2010 end-of-year levels, with some exceptions for critical growth areas such as cyber, information technology, and security. Marine civilians are a "best value" for the defense dollar, are shaped to support the Corps into the future, and are the leanest civilian workforce within DOD, with only one civilian for every 10 marines.

UNIT READINESS

This pillar upholds maintaining and shaping the readiness of the operating forces, to include the necessary operation and maintenance (O&M) funding to train to core missions and maintain equipment. The Marine Corps has, and always will, source our best trained, most ready forces to meet combatant commander requirements. The challenge is to maintain the readiness of the nondeployed forces so they can respond to crises and contingencies with the proper balance of equipping, manning, and training.

As our forces return from Afghanistan, our focus will be on training to our core expeditionary and amphibious mission capabilities. We anticipate incremental in-

³Our programmed fiscal year 2013 Active Duty end strength is 197,300 marines.

creases in the core training readiness of units as marines and equipment flow back from Afghanistan over the next 24–36 months.

After the drawdown from Afghanistan, we expect to be increasingly engaged around the world—training, engaging, deterring, and responding to all manner of crises and contingencies. O&M funding is essential for our readiness to conduct steady state operations, including amphibious and Maritime Prepositioning Ships Squadron (MPSRON) operations, provide support to the combatant commanders, and provide for our supporting establishment’s sustainment for the operating forces. As operations in Afghanistan wind down, we anticipate overseas contingency operations funding will correspondingly ramp down. However, we know that future requirements to maintain readiness will increase demand on O&M funding. The irregular battlefields of today and tomorrow necessitate more distributed operations and decentralized command—both of which will drive training costs higher.

Sufficient O&M funding will be essential in the Pacific as we resume our unit deployment program in Japan; provide rotational forces in Australia and Guam; and engage throughout the region. It will also be needed to cover the transportation costs for bringing together the widely dispersed Marine Expeditionary Brigade and Marine Expeditionary Force (MEF) elements for training and exercises.

CAPACITY TO MEET COMBATANT COMMANDER REQUIREMENTS

Force-sizing to meet Geographic Combatant Commander requirements, with the right mix of capacity and capability, is the essence of our third readiness pillar. Decisions made in our Force Structure Review will provide a better depth of Marine forces capable of executing a single major contingency operation and optimized for current operations and crisis/contingency response. The capacities of our organic intelligence, surveillance, and reconnaissance; command and control; and unmanned aircraft systems will be increased. Our critical capacity versus requirement concerns include: shifting forces to III MEF in the Pacific, ensuring we retain a global crisis response capability, and the availability and readiness of amphibious shipping and maritime prepositioned assets to meet training and contingency requirements. We are also reshaping organizations, capabilities, and capacities to increase aggregate utility and flexibility across the range of military operations, to include enhanced support to U.S. Special Operations and U.S. Cyber Commands.

INFRASTRUCTURE SUSTAINMENT

Infrastructure sustainment is the investment in real property, maintenance, and base infrastructure to support the mission sets of tenant commands. We must adequately resource the sustainment of our bases and stations to maintain our physical infrastructure and the complimentary ability to train and deploy highly ready forces. As we rebalance toward the Pacific, we will ensure we make the proper investments in ranges and facilities to maintain the training readiness of deployed forces. Sustainment, recapitalization, and operations funding must also be balanced to maintain quality infrastructure. We request Congress’ continued support for facilities sustainment and demolition funds, essential military construction funding (Joint Strike Fighter (JSF), MV-22, Marine Corps Security Forces, Marine Corps University), family housing, and environmental restoration.

EQUIPMENT MODERNIZATION

In this austere fiscal environment, we are conducting only essential modernization, focusing especially on those areas that underpin our core competencies. We are mitigating costs by prioritizing and sequencing our equipment modernization and sustainment programs to maintain their readiness in a fiscally responsible manner. To maintain operational capabilities and readiness, modernization is critical in the areas of ground combat tactical vehicles; aviation; amphibious and pre-positioning ships; expeditionary energy; and intelligence, surveillance, and reconnaissance. Our modern expeditionary force will require fixed wing aircraft capable of supporting our Marine units. The JSF is the best aircraft to provide that support in the future security environment. Likewise, a core capability of our expeditionary forces is the ability to project forces ashore from amphibious platforms and to maneuver once ashore. We remain committed to developing and fielding an Amphibious Combat Vehicle that meets this critical need. We request Congress’ continued support for modernization to maintain the high level of future readiness our Nation will need.

PREPARED TO SUPPORT THE DEFENSE STRATEGIC GUIDANCE

The Navy-Marine Corps team and our inherent naval forward basing, crisis response capabilities, and theater engagement capacity make us ideally suited to sup-

port the new strategic defense guidance's focus on the Pacific Command region. The Marine Corps will rebalance its unit deployment program to 2001 levels during fiscal year 2013 and fiscal year 2014. We recently deployed a company of Marines from Hawaii to Australia to usher in a rotational presence that will grow to a Marine Expeditionary Unit sized Marine Air Ground Task Force, with associated units and equipment, during fiscal year 2016 to fiscal year 2017. Our rotational presence throughout Asia will serve to reassure our allies, strengthen our ties, and demonstrate our commitment to the region. The sea-basing capability provided by our MPSRONS provides the flexibility to deploy forces anywhere, without reliance on mature infrastructure to include ports and airfields. Simply, sea-basing is uniquely suited to this theater where a vast amount of the area is water and does not have readily available port infrastructure to support less expeditionary capability.

Sea-based and forward deployed naval forces provide day-to-day engagement, crisis response, and assured access for the joint force in a contingency. Partnered with the Navy, we will continue to pursue innovative concepts for maritime expeditionary operations with platforms such as the Joint High Speed Vessel and the Mobile Landing Platform. As new maritime prepositioning force ships are integrated into the MPSRONS, they will provide additional operational benefits to the Combatant Commanders, such as an over-the-horizon surface connector capability and better selective access to equipment and supplies.

PARTNERED WITH THE NAVY

A critical component in building and maintaining readiness for expeditionary, amphibious operations is the availability and readiness of amphibious ships. Amphibious ships are a foundational requirement for expeditionary force projection. The Navy has acknowledged that low amphibious ship readiness can present a significant challenge to the training readiness of our Marine units and it is addressing this maintenance readiness shortfall. The recent return of the Bataan Amphibious Ready Group, which was deployed for more than 300 days, demonstrates the imperative to maintain maintenance cycles. Continued congressional support for the Navy's shipbuilding and surface ship to shore connector plans will prove vital to the Nation's ability to retain and maintain an adequate fleet of modern amphibious ships and project power across the globe.

Our prepositioning programs are a unique strategic capability, giving us the ability to quickly respond to a wide scale of global crises and contingencies. These programs, particularly the MPSRON, will require continued congressional support. In order for sea-basing to be effective, using both amphibious ships and MPSRONS, the amphibious connectors will also require modernization.

SUMMARY

On behalf of the marines and sailors that provide this Nation with its versatile, middleweight force in readiness, I thank Congress for its unwavering awareness and recognition of our challenges. Your continued support is requested to provide a balance across the five readiness pillars that maintain our institutional readiness.

Senator MCCASKILL. Thank you, General.

Finally, General Philip Breedlove, Vice Chief of Staff of the U.S. Air Force. Welcome, General.

STATEMENT OF GEN. PHILIP M. BREEDLOVE, USAF, VICE CHIEF OF STAFF, U.S. AIR FORCE

General BREEDLOVE. Thank you. Madam Chairman, Senator Ayotte, distinguished members of the subcommittee, thank you for the opportunity to be here today and tell our Air Force story. These are challenging times and I commend you for your leadership and for your efforts to ensure we have the best-equipped and best-trained military on the globe. It is an honor to be here on behalf of our 690,000 Active Duty, Guard, Reserve, and civilian airmen who selflessly serve our Nation alongside their fellow soldiers, sailors, marines, and coastguardsmen.

I would like to take this opportunity to share two important items with you today. First, the readiness of your airmen after more than 20 years of continuous combat operations, and second,

the steps we are taking to ensure a superbly trained and equipped force which is ready to support our new Defense Strategic Guidance (DSG) and bottom line, to avoid a hollow force while balancing risk.

The American people are fully aware that our Nation has been at war for over a decade. For our Air Force, however, we have been conducting combat operations continuously for well over 2 decades. December 17, 2011, marked the first time in 20 years that the Air Force did not fly an air tasking sortie over Iraq.

Madam Chairman, Senator, I would like to point out that over two-thirds of our uniformed airmen that have taken an oath to defend our Nation have joined our Service during a time of war, during a time of continuous operations, and for that, I could not be more proud to serve alongside these dedicated airmen and Americans. These airmen are fully joined to the fight and consistently demonstrate their commitment to this joint team you see in front of you, and in support of our combatant commanders and our Nation's interests.

Last year, we saw this commitment at full capacity as our airmen simultaneously provided humanitarian support to our friends in Japan, executed a large presidential airlift in South America, supported the North Atlantic Treaty Organization no-fly zone to protect lives in Libya, and all the while, fully employed with counterinsurgency operations in Iraq and Afghanistan. Our force capacity of the future may not support this high level of sustained, simultaneous operations. I am immensely proud of how our airmen have performed for the past 20 years and across all spectrums and with what you have seen, a very high OPTEMPO.

This intense level of performance has not come without a cost. Our force is stressed. We have continually gotten smaller. Next year we will be the smallest we have been since the inception of the U.S. Air Force in 1947. Our aircraft are old, older than they have ever been, with the average age of our fighters at 22 years, bombers at 35 years, and tankers, the oldest of the fleet, at 47 years.

What really concerns me are the challenges we face to get our full-spectrum training. We are proficient in the current counterinsurgency fight. We have had to put high-end full-spectrum training on the back burner which has the greatest effect on our combat air forces.

Other more recent concerns are the increase in fuel prices and higher-than-expected OCO costs. Together, they have resulted in a current year bill that is significantly greater than we expected. We are working hard with DOD leadership to address the shortfall to avoid actions that might harm readiness. But if we are unable to reallocate funds with congressional approval, we will have little choice but to shift resources within our operation and maintenance accounts which could have detrimental effects on our readiness.

Despite these fiscal pressures, there continues to be an increasing demand for air, space, and cyber capabilities, which is evident in our Nation's new DSG. In order to keep faith with the American people and provide our unique capabilities upon which the entire joint team so greatly relies, it is imperative that we balance our force structure to preserve our readiness and maintain a risk-bal-

anced force. In doing so, we must rebalance our Active and Reserve component mix to ensure we can meet Joint Force requirements while not exceeding deployed-to-dwell ratios across the Total Force.

While no plan is free of risk, our analysis tells us that we are at an increased but manageable risk as measured against this new DSG. We are concerned that efforts aimed at retaining force structure are out of balance with our strategic guidance or not accompanied by sufficient support in funding will lead us to the road of a hollow force. Force structure is key to our future.

As we responsibly rebalance this force, we remain committed to advancements in technology and future investments to continually sharpen our sword. Although we will be smaller, we will remain an effective and ready force.

Madam Chairman and subcommittee members, I am confident in our ability to succeed through the tough times ahead because I believe in our Nation's airmen who, like their fellow soldiers, sailors, marines, and coastguardsmen, are dedicated to excellence, selfless service, and sacrifice. Thank you for your continued support of your U.S. Air Force and of your airmen. I look forward to your questions.

[The prepared statement of General Breedlove follows:]

PREPARED STATEMENT BY GEN. PHILIP M. BREEDLOVE, USMC

After over a decade of sustained combat operations and faced with a continually evolving economic and security environment, the United States faces a moment of transition. As a result, the President and Secretary of Defense have provided strategic guidance to preserve our global leadership and defend our national interests now and in the future. The unique Air Force capabilities that are critical to the priorities of the new strategic guidance are: domain control of air, space, and cyberspace; global intelligence, surveillance, and reconnaissance (ISR); rapid global mobility; and global strike.

CURRENT OPERATIONS

The Air Force has demonstrated its commitment to supporting combatant commanders and their operations across the globe for over 2 decades through continuous combat operations. Our enduring commitment to readiness and the joint fight is a reflection of our unique air, space, and cyberspace capabilities across the full spectrum of operations, capabilities upon which our Service partners and allies have come to rely.

Since September 2001, the Air Force has flown more than 455,000 sorties in support of Operations Iraqi Freedom and New Dawn and more than 350,000 sorties in support of Operation Enduring Freedom. Last year, our airman averaged approximately 400 sorties every day, with December 17, 2011, marking the first day in 20 years that the Air Force did not fly an air tasking sortie over Iraq.

As a critical component of our Nation's strategic deterrence, we have maintained our Nation's 450 intercontinental ballistic missiles (ICBM) on continuous strategic alert at a greater than 99 percent readiness rate, exceeding U.S. Strategic Command's requirement. We have also achieved a record 84 consecutive successful National Security Space launches since 1999.

Our Total Force of 690,000 Active Duty, Guard, Reserve, and civilian airmen continue to support daily combatant commander operations with over 30,000 airmen deployed to over 230 locations around the globe. Of our deployed airmen, 24,000 directly contribute to operations in the U.S. Central Command (CENTCOM) area of responsibility (AOR), including almost 9,000 airmen in Afghanistan. An additional 57,000 airmen, 8 percent of the force, are forward-stationed overseas. From home stations in the United States, approximately 134,000 airmen provide daily support to worldwide operations: standing nuclear alert; commanding and controlling our satellites; analyzing intelligence, surveillance, and reconnaissance data; and much more. In total, 219,000 airmen directly support combatant commanders every day.

While this high operations tempo (OPTEMPO) has proven our level of commitment to today's joint fight, it has inevitably taken a toll on our weapons systems

and people, putting a strain on the overall readiness of the force. We have continued to see a steady decline in unit readiness since 2003, the primary drivers being personnel and training. These factors continue to stress 17 key enlisted specialties as well as 9 officer specialties.

In terms of deployments, 50 percent of the force is scheduled to rotate at a reasonable rate where they are home at a minimum of three to four times as long as they are deployed. Ten percent of the force is scheduled to rotate at our maximum targeted rate, meaning they are home twice as long as they are deployed. Twelve percent of our force is scheduled to rotate at a rate that keeps them home at or less than 50 percent of the time, an exceptionally high rate. Twenty-five percent of our forces are enablers who simply deploy as needed (i.e., mobility aircrew and Special Operations Forces), which tends to be higher than most metrics.

In spite of aircraft divestments and reduction in personnel, we are committed to ensuring that America's Air Force remains ready to execute its mission every day—a mission that is indispensable to carrying out current missions and overcoming existing and emerging threats as outlined in the new Defense Strategic Guidance.

WEAPONS SYSTEMS SUSTAINMENT

Over the past several years, the overall Air Force weapons systems sustainment (WSS) requirement has increased due to several factors such as our sustainment strategy, the complexity of new aircraft, operations tempo, force structure changes, and growth in the depot work packages for legacy aircraft. Although the Air Force plans to retire some combat, mobility, and ISR force structure, our overall WSS requirements continue to increase. This increase is primarily due to the cost of contract logistics support, as well as higher costs due to content increases in depot work packages for legacy aircraft. We are not procuring aircraft at a rate that is fast enough to even begin to reduce the average age of our aircraft inventory. In addition, our fleets are smaller than at the end of post-Cold War downsizing, with the average age of fighters at 22 years, bombers at 35 years, and our tankers—the oldest of the fleet—at 47 years. These cost increases have resulted in a slight decrease in the percentage of WSS requirements funded in the next 2 years. WSS is funded at 79 percent of requirement in the fiscal year 2013 budget.

We maintained our readiness capability in the portfolio areas most directly affecting readiness, such as aircraft, engines, and missiles. We are taking some risk in areas that are less readiness-related in the short-term such as technical orders, sustaining engineering, and software. Additionally, the Air Force continues to conduct requirements reviews and streamline organizations and processes to reduce maintenance and material costs, develop depot efficiencies, and manage weapons systems requirements growth. The goal of these efforts is to sustain current WSS performance levels for the future.

Despite our high OPTEMPO and ongoing contingency operations, the Air Force must continue to deliver and maintain combat ready forces at the highest level. For instance, maintaining aircraft availability rates, vehicles, and war reserve materiel requirements to meet operational demands is critical.

Our Air Logistics Centers (ALC) continue to meet warfighter expectations, an example is how we monitor weapons systems due date performance, a metric that tracks how soon weapons systems are back to the warfighter after receiving routine or upgrade maintenance. Significant improvements have been made in this area resulting in 21 of 24 weapons systems meeting their due date targets. The Air Force is focusing on lean processes to get these weapons systems to their target. In fiscal year 2011, Oklahoma City-ALC completed maintenance on 64 KC-135s, more than any year since 1991, and reduced engine cycle time by 30 percent. Warner Robins-ALC produced 1.7 million hours of avionics upgrade maintenance, five percent above plan, performed upgrade maintenance on 30 C-17s (28 on-time and two early), and delivered software requirements at 97 percent at or below cost and 97 percent on-time. Because of process improvements, in fiscal year 2012, three depots will produce as much as five depots produced in the late 1990s.

FACILITY SUSTAINMENT, RESTORATION, AND MODERNIZATION

The sustainment portion of facilities sustainment, restoration, and modernization was funded just over 80 percent of the Office of the Secretary of Defense facility sustainment model. Due to current fiscal realities and the revised strategic guidance, the Air Force is taking a deliberate pause in its military construction program, resulting in a nearly \$900 million reduction from fiscal year 2012 enacted levels. To manage the risk associated with these actions we continue civil engineering transformation to employ an enterprise-wide, centralized, asset management approach to installation resourcing which maximizes each facility dollar.

FLYING HOUR PROGRAM

The emphasis on readiness in the new strategic guidance reinforced Air Force focus on the importance of maintaining our flying hour program (FHP). The fiscal year 2013 budget request removes flying hours where associated with the retirement of some of our oldest aircraft and divestiture of single-role mission weapons systems. In the remainder of the FHP, however, levels are consistent with fiscal year 2012 levels to prevent further erosion of readiness. The fiscal year 2013 baseline FHP remains optimized as we continue to fly a significant portion of our hours in the CENTCOM AOR. As these combat sorties decrease over the next few years, these overseas contingency operation hours will migrate back to our baseline program to ensure peacetime FHP requirements are met. We are also committed to a long-term effort to increase our live, virtual, and constructive operational training (LVC-OT) capability and capacity by funding improvements in our LVC-OT devices (e.g., simulators and virtual trainers) and networks.

Although the Air Force has no single rollup metric to measure FHP requirements, we are working toward a set of metrics that clearly articulate the training requirements needed to support desired readiness levels. The Air Force operates a wide variety of aircraft—including multi-role aircraft—that require differing training requirements in amount and type for each aircrew member. In addition, we have critical space and cyber units that involve no aircraft at all. As we develop FHP metrics, we will dovetail our efforts with the work being done at the Cost Assessment and Program Evaluation (CAPE) office at the Office of the Secretary of Defense to study the relationship between defense funding and military readiness and mature necessary metrics and assessment tools.

PERSONNEL SHIFT

History has shown that when we withdraw ground forces from an area of conflict, there is an increased requirement for residual Air Force presence to provide robust overwatch capabilities. In the past two months we have seen a measurable increase in tasking, and expect the same as we plan to responsibly transition the security of Afghanistan over to the Afghan security forces. This anticipated requirement, coupled with an ever smaller force, requires a close look at the composition of our forces that are capable of both high and low deploy-to-dwell ratios.

Across our two components, the Active and the Reserve, we find both advantages and challenges. The Active component has a higher deploy-to-dwell capacity, and is immediately available. However, it is already stressed, with a deploy-to-dwell ratio in many areas approaching redline (more than 1:2). The Reserve component is characterized by great volunteerism and great aircrew availability. It is also committed to helping the country meet crisis and surge commitments at home and abroad. If our Active component is too small to meet its demands, we risk putting our Guard and Reserve Forces in the position of breaking other commitments to employers, communities, and families. As a result, in some of the high demand mission sets, we had to make a modest shift in force structure toward the more deployable force. This reduces our risk of overstressing all three components of the force.

Analysis indicates that in balancing this equation, you cannot continue to reduce the highly rotating force (i.e., the Active component) without exceeding the rotational redlines of both groups. No solution was perfect, but when looking at the options, we decided that the most palatable choice was to execute a small shift from the Reserve component to the Active component. We also took this rebalancing opportunity to increase the Reserve component's exposure to emerging mission sets. This ensures that as our force gets smaller, it stays agile, lethal, and still ready to deploy at a high enough rate to combat current and emerging threat and contingencies.

TRAINING READINESS

While this generation of airmen is one of the most combat experienced forces in our history and has proven our capabilities and relevance in today's fight, our high OPTEMPO has not been without cost to the readiness of tomorrow's force. Since Operations Desert Shield and Storm, the Air Force has not come home, evolving from a garrison force to a forward deployed force. Since 2001, our fighter forces have supported contingencies in Iraq, Afghanistan, Libya, and other locations around the world. In addition, our special operators, security forces, ISR, and other forces have provided theater security presence and helped build partnership capacity in Asia, Europe, the Middle East, and elsewhere.

As a result, the training readiness of our people has suffered. While our airmen have quickly adapted their training to incorporate counterinsurgency tactics, which

has proven invaluable to today's mission, this focus has inevitably degraded our opportunity to train across the full spectrum of operations, including specialized training to prepare for high-end, future conflicts and to meet the requirements outlined in the new strategic guidance. As our force gets smaller, we must train our airmen to be the most lethal and effective force for the future across the full spectrum of conflict.

STRATEGIC RISK

While no plan is free of risk, the Air Force has gone to great lengths to responsibly reduce excess force structure in order to preserve readiness. Last year, the Air Force was at maximum capacity when our airmen provided humanitarian support to our friends in Japan, executed a large airlift movement in support of national leadership, supported the NATO no-fly zone to protect civilian lives in Libya, all while remaining fully employed with counterinsurgency operations in Iraq and Afghanistan. These operations spanned the globe and the entire operational spectrum, from humanitarian relief to combat airpower. Our Nation and our allies have come to rely on the full depth of support the Air Force team brings. As we reduce our force, we will retain the capability to execute each of these missions, but will no longer have the capacity to execute them all in parallel. As a result, the days of engaging in two large scale wars, while simultaneously responding to a myriad of humanitarian crisis and engaging in short-notice campaigns will not be possible.

The Air Force will be smaller but still very lethal, providing the Nation with the unique and enduring capabilities required to promote our National interests. We are committed and ready to support the new strategic guidance that anticipates one large scale, combined arms campaign and the ability to respond quickly to deny the objectives on an opportunistic aggressor or impose unacceptable costs.

CONCLUSION

To both fulfill current commitments and curb emerging threats, the Air Force has made tough decisions to trade size for quality to maintain a superb and ready force. While we are a smaller uniformed force, in fact smaller than at our inception in 1947, we have mitigated risk through careful consideration of the proper rotating force mix, the appropriate level of investment in modernizations, research and development, and utilizing strategic partnerships to leverage resources and reduce redundancies to be a ready force during a time of diminishing resources.

In support of this guidance, alongside our joint partners, the Air Force stands ready to defend and advance the interests of the United States by providing unique, agile, and flexible capabilities across the full spectrum of operations that are required to succeed in today's fight and future conflicts. The advancements our innovative airmen have pioneered and have continually sharpened have been essential in ensuring our Nation's security while reducing the overall casualty counts inflicted by war.

Despite fiscal challenges and an evolving security environment, America's airmen, along with their fellow soldiers, sailors, marines, and coastguardsmen, remain committed to the security of our Nation.

Senator MCCASKILL. Thank you very much, gentlemen.

Since the turn of the century, we have been heavily involved in combat operations which have required our personnel to deploy frequently and has caused incredible wear and tear on both people and the vital equipment that we need for readiness. Frankly, we have had little time to train for anything other than counterinsurgency.

Notwithstanding the steps taken by Congress to increase investments, reported readiness rates have significantly declined over the past 10 years, record funding and still a significant decline.

In past Readiness and Management Support Subcommittees, we have been told by your predecessors that an increase in readiness will not occur until we see a decrease in operational tempo. Now we have the drawdown in Iraq and surge recovery in Afghanistan this year and phased drawdown thereafter.

Can you give us today what your best projections are, as to when we will see a more positive readiness trend in light of the draw-down that is currently underway?

General AUSTIN. Thank you, Madam Chairman. I think from the Army's perspective, we are already beginning to see that as we have come out of Iraq, certainly we have more opportunities to train at home station. We are taking advantage of those opportunities. Again, as we retrograde our equipment and put that equipment through reset, more equipment is being made available. So we are already beginning to reap some of the benefits of that slow-down.

I was the guy at the very end there in Iraq who was charged with overseeing that reposturing effort, and I can tell you that that was very well done, a magnificent job by our Joint Force to do that.

But as General Dunford and I have both pointed out, it will take about 2 to 3 years beyond the complete retrograde of our equipment out of Afghanistan to reset that equipment, and we certainly need to be funded to do so and would appreciate any help that you could provide us in doing that.

General DUNFORD. Madam Chair, as you pointed out, there are really three components of readiness: the training piece, the people piece, and the equipment piece. As we have started to recover forces from Afghanistan, our deployment-to-dwell has expanded. At one point, our squadrons and battalions were deploying for 7 months, home for 7 months, and redeploying for 7 months. That time now has expanded to somewhere between 11 and 13 or 14 months between deployments, and so that has helped us on the training side. As we recover the force, we will start to fill in some of the personnel gaps that we have had over the last couple of years.

But I would emphasize again what General Austin said; the long pole in the tent before we start to actually see increased readiness reporting from our units at home station is going to be the equipment piece, and that is 2 to 3 years from the time the equipment actually gets home, not from the time the units actually redeploy. So our best estimate right now, based on a 2014 drawdown from Afghanistan, would be sometime around 2017, is when we would start to see significantly increased reporting.

I mentioned that 67 percent of our units at home station were in degraded readiness, and really what I was referring to was C-3 or C-4 on a scale of 1 to 4 in terms of readiness. Units report the lowest level of their readiness in manning, training, and equipping. So 61 percent of those units that report degraded readiness, report that degraded readiness as a result of equipment shortfalls.

So not only do we have to get the equipment home, but we have to reset that equipment going through our depots and/or replace that equipment that has been destroyed. So a combination of the procurement process and the depot maintenance process. Our best estimate is again that 2 to 3 years not from the time the marines come home, but from the time their equipment comes home from Afghanistan.

Senator MCCASKILL. Do the Navy and Air Force disagree with the 2 to 3 year assessment, or does that sound about right from your perspectives also?

Admiral FERGUSON. Madam Chair, from our perspective, the force demand is a little different on the Navy as we withdraw out of the land campaigns. We have sustained training all our forces at a major combat operation level through this 10-year period, and what you saw in this budget is we invested in training, we invested in depot maintenance, brought it up to 100 percent, but we remain reliant on that OCO funding and we see that it will take at least 2 to 3 years for a transition, perhaps longer for us, to sustain readiness levels.

General BREEDLOVE. Madam Chair, the difference for us is much as you saw after we came out of Operations Desert Storm I and II. Immediately following a change in mission like we are seeing in Iraq now, the actual requirement for air forces goes up in order to facilitate that retrograde, to cover with kinetic fires and intelligence, surveillance, and reconnaissance (ISR), to reduce the risk for those ground combat soldiers and marines as they do that mission. We are seeing that now. Even as we are coming out of Iraq, about 3 months ago our deployed squadron, fighter squadron, requirement was about eight and a half. It is up to about 11 and a quarter now, and that is much what we expect.

Also, on the lift side of the house, especially if we do not get movement in the Pakistan Ground Lines of Communication (PAK GLOC)—much of the job of bringing home all of the equipment that the Marine Corps and the Army need will fall to the backs of the Air Force to haul out. So there will be a considerable amount of time as we effect this retrograde, especially if it is increased before the Air Force will even begin to begin its retrofit and refit. So our start time could be significantly different than what you heard from my compatriots, and it will take us some period of time between a year and a year and a half after that to get through the training cycles and things we need.

Senator MCCASKILL. Since you touched on the closure—the problems we are having on the border of Pakistan, General Breedlove, let me go to that question. It is relevant, obviously, to the draw-down as we pull equipment and men and women out of Afghanistan. It is obviously very important in terms of fuel costs. It is a huge bill that I think people forget, that nobody buys more fuel in the world than we do. When it is expensive, it really is a gut punch to the budgets of our military. I know that we have to pay almost three times the normal rate to go through the NDN than we would have to typically expend going through Pakistan.

What effect is this closure going to have on getting everything out that we need to get out, and more importantly, on getting the fuel we need to continue to support the mission that we have ongoing in Afghanistan?

General BREEDLOVE. Ma'am, I will take the first shot at that. There are two effects on the Air Force and its ability to support the joint team that fuel brings.

First of all, in this current year, as you are aware, the reprice on fuel is going to cost us approximately \$1.3 billion that was not in our original plan, and that will be money that we will have to go in and find in other sources, assuming you approve them, inside of our budgets. So fuel reprice is a big deal for us.

Second of all, as you mentioned, if the PAK GLOCs do not open, and we cannot count on the flow that was planned for when we originally budgeted for our fuel for this next year and now we have to increase the amount of fuel we use to begin to fly out much of this retrograde by air, that will again be an unplanned OCO bump in fuel requirements to the Air Force.

General DUNFORD. Madam Chair, I would add one quick point to the point you made and the one General Breedlove made, and that is, it goes back to the previous question you asked about when would we be reset to a high level of readiness. Obviously, the longer it takes to get our equipment out of Afghanistan—and the NDN would take longer to get our gear out—the longer it will take us to restore the high level of readiness. So in addition to the implications of cost, the factor of time is an issue.

Senator MCCASKILL. I think a lot of Americans do not understand that the stresses with Pakistan have many implications, and it is not just the direct implication of, are they our friend, are they our enemy, what exactly are they, and who can we trust within Pakistan, but it has a dramatic impact on the budgets of our military as it relates to operational requirements in Afghanistan and drawdown in Afghanistan.

Thank you.

Senator Ayotte.

Senator AYOTTE. Thank you, Madam Chair.

I wanted to ask each of you in the conclusion of the Chairman of the Joint Chiefs of Staff's risk assessment that he submitted to us—he says that the Services will need to “conceive of a new risk paradigm.” Can you help me with what that means, conceiving of a new risk paradigm?

General AUSTIN. I think as you create a new strategy, certainly you look for ways to balance the risks that you are going to accept. Of course, you focus on the most dangerous things, and then also you consider the most likely things that are going to occur. So I think what the Chairman is getting to with that—at least my read of this—is that each time that you revamp your strategy, you are going to have to look at things through the lens of the context of today and what the threat offers in the future.

Senator AYOTTE. General, just as a follow-up on that, just listening to it from my perspective, I assume that is what we did whenever we issue a risk assessment. So when I hear the words “new risk paradigm,” it makes me wonder if our overall view of how we are going to meet risk or assess them has changed. Has it or has it not?

General AUSTIN. Certainly our methodology for conducting risk assessments has not changed but the context has changed a bit in terms of the state of the world. What we are seeing today is absolutely different from what we saw 2 years ago, actions in the Middle East, those types of things.

Senator AYOTTE. I appreciate your answer, and I am asking you to assess what somebody else means. But just to make it more helpful, let me direct my question more specifically, which I think will be relevant.

So with the proposed \$487 billion in reductions, obviously we are talking about the first year here for 2013 of those reductions over

the 2010. You have proposed significant end strength reductions, combat unit eliminations, weapons systems, other cost-cutting measures that we are talking about today. There is no question that these reductions are going to impact the ability of each Service to respond to the request of their combatant commanders. What I think is important to understand is when you look at what the Secretary said and I quoted in my opening statement, “you cannot take a half a trillion dollars out of the defense budget and not incur additional risk,” and he said “there is no margin for error.”

What, in each of your opinions, in each of the Services are the risks that we are incurring to the extent you can talk about them? If you could, what are the risks that we are incurring here that keep each of you up at night? If we were to add money back in this budget to meet where we have just cut it right to the edge on no margin for error and you had that choice—I am not asking you to make the request of us, but if you could and you think about what keeps you up at night, what would you tell us?

General BREEDLOVE. Ma’am, I will take a shot at it first. I think I understand where you are trying to go.

There are a few things that I think, as you mentioned, we are taking cuts right in 2013. In fact, in the Air Force budget, it is almost 200 aircraft in the first year and a number of people, that speaks to capacity. Our overall capacity is coming down, and in our new DSG, the ability to swing capacity from the first to the second conflict is a key to how well we will support the joint force.

What keeps me up at night are two things. The first is the time to respond. If we are fully engaged in the first, will we have time to get to the objectives we need in the first engagement in order to properly support the second engagement with our reduced capacity, which is evident from the cuts in number of people and aircraft.

Then the second thing that worries me has not changed much in relation to this strategy, and it is the same thing I spoke to in the readiness hearings last year. That is, that we do have pretty intense pressure on what we call our low-density/high-demand assets, the Joint Surveillance Target Attack Radar System, the Rivet Joints, the ISR fleet in its total, all of those things which are sized for about one conflict and not two. Now some of those ISR assets are deployed at less than 1-to-1 deploy-to-dwell ratio. The ability to respond from one conflict to the next with those low density/high demand assets keeps me up at night.

Senator AYOTTE. General?

General DUNFORD. Senator, I would like to go back to the original question and just talk about the framework for risk a little bit because there are really two kinds of risks. There is a strategic risk that the Chairman largely talks about, but then he alludes to what I will describe as institutional risk, and that is the Services’ ability to create balance between maintaining high quality people, meeting the combatant commanders’ requirements, maintaining that home station readiness that I spoke about in my earlier comments, maintaining a proper modernization profile so that years from now we will have the capabilities that we need, and also properly maintaining our infrastructure, something that Madam Chair mentioned.

We have done things differently in the sense that we project the next 8 to 10 years will be a period of austerity. So that has caused us to go back and take a look at all of our requirements and make sure we understand what we really have to have, and what is nice to have. We made some hard choices inside to extend some of our equipment out past what might have been its normal service life by service life extension programs and those kinds of things.

For example, in our ground tactical vehicles right now, we only plan to modernize 20 percent of the fleet between now and about 2027 to 2028. We decided to go back, and we think it is manageable risk, we have decided to go back and look at the rest of the fleet and do some things that will extend that service life out for perhaps 5 or 7 years beyond what it might otherwise have been in terms of being in service.

So managing institutional risk is frankly what keeps me awake at night. A piece of that—and we call it five pillars—is certainly meeting the combatant commanders' demands. The demands, as Admiral Ferguson mentioned, certainly exceed our supply at this particular time.

But the other thing that keeps me awake at night, as I look out over the next 8 to 10 or 12 years, is actually maintaining balance on what I described as the institutional pillars of risk, and making sure that we do not inadvertently hollow out one of those pillars, only to fail to recognize the second and third order effects that folks will have to deal with 8 to 10 years from now.

Then the last thing that keeps me awake at night, is all of us came into the military in the late 1970s, and I was a platoon commander in the post-Vietnam days. I know what a hollow force is because I was a platoon commander in a hollow force. I will tell you that the number one thing that keeps me awake at night is being a part of anything that would cause the U.S. Marine Corps to look like it did in the 1970s as opposed to what it looks like in 2012. That is really what keeps me awake at night.

Senator AYOTTE. Thank you, General.

Admiral FERGUSON. Senator, what I focus a lot of my attention on is balancing the present versus the future. Those future capabilities that the U.S. Navy and Marine Corps will need going forward as we face increasing competition and anti-access/area denial technologies, and nations that develop technologies and capabilities trying to thwart our ability to operate from the sea. So that future balance investment has to be weighed against maintaining the current readiness of the force as we operate. What you saw us in our budget do, was we reduced force structure. We took out some older assets to make available those assets. We looked at our other investment accounts and made critical investments in the capabilities we needed, preserving research and development and the new technologies. We reduced procurement in some areas or delayed them to outside the FYDP for affordability, really focusing on preserving the force. These investments we made today were focused on more ordnance, more training for the fleet, and better depot maintenance to sustain the current readiness.

So the risk really boils down to capabilities. Can we pace rising peer competitors' capacity? Do we have the forces available to flow the combatant commanders with an acceptable level of risk? Then

how it affects certainly response times and what our presence levels are in the fleet. But we think that in this budget we tried to achieve that balance with an acceptable level of risk.

General AUSTIN. I will just add, Senator, that these remain challenging times, and we are faced with a variety of issues. For me, foremost among those issues is supporting the effort in Afghanistan, and then, while doing that, striking a balance in all of the other requirements that we are faced with. So I routinely work along with the Army Chief of Staff to make sure that we have a healthy balance between our efforts in modernization, end strength, and readiness, and just keeping that balance routinely is really what we are focused on.

But also I worry a lot about the health of our force. Now, having said that, I also said earlier that I believe that we have the most resilient force that we could have ever imagined. If you told me 15 years ago that we were going to be in combat for a decade and be able to keep our soldiers and our family members with us, I would not have believed that. But as you look back and see how we have been able to adapt across the military, but specifically in the Army, to meet the demands and keep our force with us and take care of our troops, I think that is quite impressive. I am really concerned about our ability to continue to do that, and I will remain focused on that for the foreseeable future, because, as you well know, people is what the Army is all about. So our ability to do that and keep faith with our soldiers and families is something I remain concerned about.

Senator AYOTTE. Thank you.

Senator MCCASKILL. Thank you, Senator Ayotte.

Senator Begich.

Senator BEGICH. Thank you very much, Madam Chair.

I have a couple of broad questions and then, General Breedlove, as you can probably guess, I also have the Air Force on my mind, so I will come to you in a second. The first one is just a yes or no.

Do you support the United Nations Convention on the Law of the Sea?

Admiral FERGUSON. I will go first and I do. Navy leadership supports it on the uniform side. It provides several positive benefits. First, a legal framework for interactions and resolution of disputes at sea. Second, it allows us to shape the resolution of those disputes as a member and a party of the treaty. Third, we feel comfortable that intelligence operations and military operations will not be subject to the jurisdiction of any international court or evolution. So we are comfortable and we support accession to the treaty.

Senator BEGICH. Is there anyone else who would like to respond to that? The Navy knows it all on this issue. So I will hold there.

Second, just in a nutshell, any comment in regards to the future of the Arctic and military need or positioning?

Admiral FERGUSON. I think we are looking at the Arctic very carefully. We have an ongoing effort in conjunction with our allies, the Canadians, Norwegians, and others, in discussing it. I think there are three aspects. There is a security aspect, there is a safety aspect, and certainly an environmental aspect that we are concerned about in the Arctic. The initial actions for us, as the area

becomes free of ice during the summer months and we start to see shipping and oil exploration and other activities up there, will be a necessity for us to begin to think about having a maritime domain awareness of what is occurring in the Arctic. But I do not see at the present time or within several years a requirement for military operations up there.

Senator BEGICH. Does anyone want to respond on that one?

Admiral FERGUSON. We routinely operate up there now with our submariners and have gained a lot in those operations.

Senator BEGICH. Very good. Thank you very much.

General Breedlove, let me go to you. You know where I am going. I want to talk to you a little about Eielson Air Force Base. There is an effort to relocate the F-16s. My big concern is based on the volume of movement of the civilian force. I see this as a back door base realignment and closure without all the public process and the need.

But here is the real question, this is what I ask everyone in every meeting I have, if you are the Air Force and you are wearing everything that indicates such, you get these questions, and I look for the answers. Did the Air Force conduct a comprehensive analysis and assessment to validate the cost savings? In the first year it is \$3.5 million. I think over the 5 years, it is \$169 million.

When I say "comprehensive," not just for the fiscal year 2013, but for the spread, and then other Services that may be affected. For example, the joint training facility that is there, the mobility center that the Army uses to move people, the Stryker force, they all use it. It is on the Air Force base and Air Force personnel participate in that effort. When you reduce that force, then the Army is going to have to pick up the tab on this. I do not want to put you two in the middle of this. But I look at it from a DOD perspective not a Service perspective of these savings.

So is there a comprehensive cost analysis, and then if the answer is yes, is it gross in the sense of what it saves, or is it net in what it saves? Because I believe it is not the latter. It is not net. It is a gross number.

General BREEDLOVE. Senator, we have talked a little bit about this with your staff, I think the turn of the discussion or the question is what you would call how detailed is that analysis. We did do a detailed analysis to make this decision, but I assure you it was not to the level that you are discussing now. That is why we have a team up there that has made a much more deep study of this, and we will soon see that next level of analysis which you asked for. As our Chief of Staff has said, if after this next level of analysis, the savings do not pan out as we thought they would, then we will relook at the decision to move that force.

Senator BEGICH. I appreciate that. Here is the feedback, just so we have it on the record, from many people who met with the team that was up there. You've probably seen some of the reports. They felt the team came up and already had a program of dismantling versus what are the costs, what are the savings, are they real, are they not. So as you see that report come to you, I would hope that you would ask those hard questions because it was not just one or two folks that mentioned this to me, but it was everybody. They felt like it was not about, okay, does this make an economic sense,

does it really have the savings. At the end of the day, this is an economic issue. It is not a strategic issue. It is about how much are we saving. I recognize that, and the response we received was somewhat surprising.

So I would hope you or your folks would take that hard look of are these real savings and then making sure it is not just through the eyes of the Air Force, but stepping one more step out into DOD savings because they may be gross savings, but then you may have these other expenses. For example, the Army may have to pick up more costs which, okay, if that is part of that, that should be worked in because at the end of the day it is about how much money we need to save for DOD. Each Service has a requirement. So I want to make sure we look at that perspective.

Then there is the construction budget. There may be needs in the Joint Base Elmendorf-Richardson and I want to see how that fits in and not just for the 2013 but for a longer span.

I think we are on the same page. I do appreciate some of your folks coming in the last week and working with us. That is greatly appreciated.

General BREEDLOVE. Senator, I will assure you I will look at that report. I wrote down that you have a feeling that they arrived with a preconceived notion.

Senator BEGICH. Yes.

General BREEDLOVE. So we will attack the report in that way. I clearly understand what you are talking about, about real savings over the long run and other unintended consequences. The team should be focused on those, and we will ask those questions.

Senator BEGICH. Great. Again, I recognize the need. Through our markup we did last year, I offered some needs and some savings. Actually we tried to save the Army a lot of money on the Medium Extended Air Defense System, but it somehow got jacked back in, not by you guys. But now the House has taken it out. So we are trying to save you a few hundred million there. I think we are game to find those savings. But let us make sure they are sustainable savings, and that is how we look at this.

So again, I have a series of other pieces, but I think you get the sense.

General BREEDLOVE. Fully.

Senator BEGICH. Everything from the National Environmental Policy Act analysis when you have to build housing and all these other things, that is all a cost that has to be figured into this. So I appreciate that.

Let me just end on one last question, and that is on the Red Flag Alaska operation. Whatever happens to Eielson, where does that end up, at the end of the day? Is it third wing? Is it the 354th? Who will own that exercise at the end of the day? Because we know the commitment by the Air Force and the military is to continue that operation. It is very successful. So I just need to know where it lands.

General BREEDLOVE. As you said, Senator, the Red Flag Alaska is absolutely critical to the training we are about to do. As our new strategy talks of the shift to the Pacific, clearly this is a Pacific focused area. So we anticipate no changes now.

Senator BEGICH. Thank you all very much and thank you for your service and for the Alaskans that are now starting to come back from Afghanistan. We had about 9,000 Alaska-based folks in the field in Afghanistan, and they are all starting to come back. Thank you for the service. It was a pleasure to see them in Afghanistan when I was there that last trip. Thank you all very much.

Senator MCCASKILL. Thank you, Senator Begich.

Senator Inhofe.

Senator INHOFE. Thank you, Madam Chairman.

We have these hearings and we all hear about the dedication, the fact of what our troops are doing over there in all the Services. General Austin, I am kind of like you. When I was in the Army, I never believed that we could reach the stage where we are today with an All-Volunteer Army. It was not an All-Volunteer Army. In fact, I was a product of the draft, and I still think it is a good idea.

I look at this and I see what—to me it is just less of a concentration on defending America. When Senator Ayotte was talking about the new risk paradigm, I used to chair this subcommittee. When the Republicans were in the majority, I was the chairman of the Readiness and Management Support Subcommittee. I have always thought that risk equals lives. Does it not? If you are willing to increase your risk, you are willing to accept more loss of lives. Am I wrong?

General DUNFORD. Senator, I think you are right. It is in part lives. It is also in part the accomplishment of the mission and loss of equipment. So, I think what you want to do is you want to have a force with the capabilities and capacities that allows you to accomplish the mission with minimal loss of life or equipment. That really is what we need to have.

Senator INHOFE. Sure, I understand that. I love all you guys and I agree that is a problem.

But we are changing right now. General Breedlove, I am reading now from your statement. You said as we reduce our force, we will retain the capability to execute each of these missions, but will no longer have capacity to execute them all in parallel. As a result, the days of engaging in two large-scale wars, while simultaneously responding to a myriad of humanitarian crises, and engaging in short-notice campaigns will not be possible. I agree with you. I appreciate that, you had some pretty strong statements in there.

When you were talking about the age of your aircraft, I know that. I know how old the KC-35s are and the B-52s. I know that the American people really would expect more, but they do not really know. They do not know how bad this is.

Let me mention one area that will make everyone uncomfortable, I served in the House with Secretary Panetta, and I know that what he said did not really come from his heart. Obviously, no one is going to be able to say that. But he said last week that DOD would wage war on global warming by promising to spend billions of taxpayers' dollars on more green stuff and all that. Right now, we are trying to survive this thing. When the Democrats and Republicans, all of them talked about this half trillion dollars and about sequestration coming along, it is a disarming of America.

Now, I happen to be the ranking member, and when we were the majority, I was the chairman of the Environment and Public Works

Committee. I know this obsession on all this global warming stuff. I also know that the trends have totally changed. It just came out the other day, only 19 percent of the TV meteorologists believe, number one, that global warming is taking place, and number two, that manmade gases are causing it.

Yet, I read right here—and I appreciate very much, Admiral, when you were talking about—every \$1 increase in the price per barrel of fuel is approximately \$31 million of additional costs annually above the budgeted level. We are talking about huge amounts of money here. If the President—and he does—wants to use the military as a test tube for his green agenda, he can do it, but people need to know he does it. You guys are in the awkward position of having to say things that fortify the committee.

Let me just ask you this; this is a direct quote from last week. “In the 21st century, reality is that there are environmental threats that constitute threats to our national security.” Do any one of the four of you want to volunteer to explain to me, because I do not understand, what are these environmental threats that are comparable to the terrorists who are out there? Anybody? [No response.]

Yes, I do not know either.

But anyway, I want to get into one thing here on the F-35s. By moving this program to the right, the President is able to say, we are not reducing the number of F-35s. However, during the cuts, it moves them over to the right so that the President’s budget request cuts the F-35 budget by \$1.6 billion in fiscal year 2013 and \$15.1 billion over the FYDP. The fiscal year 2013 cut results in 179 fewer planes being produced during this FYDP period. Granted, later on down the road, they may be produced, but we are talking about right now is when the problem is.

I gave a talk, it was on the Senate floor, and I researched it pretty well. I said it matches the figures we are getting from you all. In total since 2008, DOD has spent at least \$4 billion on climate change and energy efficiency activities that had nothing to do with the actual meeting of real defense needs. The same \$4 billion could have been used to purchase 30 new F-35s. It could have been used to purchase 28 new F-22s, if we had kept on the F-22s before the budget 4 years ago, and that program was axed. Or the C-135 aviation modernization program. I think we all agree—certainly you agree, do you not, General Breedlove, the significance of that program?

General BREEDLOVE. Yes, sir.

Senator INHOFE. I think everybody does. So let me ask you, do you really believe that it is more important to be experimenting with this green stuff than it is to go ahead with that program, the aviation modernization program? That is axed. That is done in this budget.

Admiral FERGUSON. Senator, I cannot speak to the broader DOD programs including that amount. But on the Navy side, we are putting a significant amount of our investment in efficiency and making our forces more efficient.

Senator INHOFE. I am all for efficiency. That is not the point. I am getting at how important this program is, which I think is very significant. I have a lot of quotes here from all of you talking about

how significant this program is and the fact that that is knocked out in this budget for the benefit of a green test tube experiment that the military is being forced to do.

Let me say this. I know my time has expired and I have to leave anyway. But I can remember back when Secretary Rumsfeld was before our committee, and it was a confirmation hearing. I said to him, "the American people believe that we have the very best of everything, and we do not." Certainly, General Austin, you would agree. Our non-line-of-sight cannon, there are five countries that make a better one than what we have.

So I said, if you are going to take over this position—and I could say the same thing to Secretary Panetta, but I did not during that confirmation hearing—you are going to be advised by a lot of smart generals. There are a lot of smart generals out there. All four of you are as smart as you can be. But you are going to be wrong. I recall that the last year I was in the House, on the House Armed Services Committee, with, I would say, our current Secretary who was seated next to me, we had someone testifying that in 10 years we would no longer need ground troops.

So what is the answer? How can we meet the expectations of the American people that our number one concern should be defending America, not all this other stuff, and that we have the best of everything? Our kids go out in battle. They have the best equipment. His answer was this. He said we probably should go back to what we did over the last century. He said the average—in fact, it was right on this number—in times of war, in times of peace for 100 years in this country, that we spent 5.7 percent of our Gross Domestic Product on defending America. At that time, it was dropping down precipitously. This is after the Clinton administration. Now we are looking at about half of that.

So I guess what I am saying—I am not asking any questions here. I am saying that you are doing a great job. We are doing a lousy job because we are not dealing you a hand. With the hand that you have, you are playing it right. You need to have a better hand.

Thank you, Madam Chairman.

Senator MCCASKILL. Thank you.

I am going to resist the temptation to do any rebuttal of Senator Inhofe here because I want to stay focused on—

Senator INHOFE. No. This might be a good time to do it.

Senator MCCASKILL. I will wait until you leave. [Laughter.]

I am not dumb. [Laughter.]

I think what is really awkward is when people like you are pulled into some of the politics that swirl around this place. We all do this politics stuff all the time up here, and one of the things I admire so much about our military is the loyalty and support that you give one another and that you stay focused on your mission. You try, as much as you possibly can, to stay away from politics, and you understand that the Commander in Chief is the Commander in Chief. I have deep respect for you in that regard.

I want to talk a little bit about non-standard equipment (NSE). The Services have invested billions of dollars in NSE since the beginning of combat operations, which have ranged from mine-resistant ambush protected (MRAP) vehicles to flat-screen TVs. I know

there are various efforts to look at the NSE and to figure out future usefulness in that regard. This is one of those things that can get left in the corner of the cupboard as we focus on standard equipment and with all the protocols we have in place for standard equipment.

What is your best estimate on the overall size of the NSE, and what are we going to do with all this stuff?

What I am really worried about is—with my background as an auditor, I am really about the accountability piece on this. I am worried about whether or not we are doing anything in a way that could even resemble joint and whether or not we are having duplicative efforts to try to track down the NSE load that we have and figure out how we are going to transition it out of an OPTEMPO to a different kind of tempo. Could you all address the NSE issue for me?

General AUSTIN. Thank you, Senator. Certainly I share your concern about how much NSE we are able to maintain over time. As you well know, 60 percent of our life cycle costs is sustainment. So we have to be able to afford to keep what we have on hand or we have to choose to transition it to some other place. We are very concerned about that in the Army.

So we are taking a hard look at the numbers of vehicles and the numbers of weapons that we are going to keep on hand. We are going through that assessment right now. I have even gone down to visit a company arms room here recently to take a look at what our soldiers are actually required to maintain. Of course, when the Vice Chief of Staff shows up in a company arms room, it is typically an emotional event for that unit. But my focus was to—

Senator MCCASKILL. I think calling it an “emotional” event is one of those diplomatic words. [Laughter.]

I do not think they would call it “emotional,” General. Probably something other than that.

General AUSTIN. But I have a real concern about how much equipment we are asking our troops to maintain that may not be useful to us anymore and we may not be able to afford to sustain. So we are going through a very deliberate process of making sure that we keep what we need and we transition things that we do not need and cannot afford. It will take us some time to work through that. But clearly we share your concern.

Senator MCCASKILL. What about the MRAPs? Do we have repair parts in the supply? Are we going to have to continue to rely on contractor logistics? That is, I think, a big question mark right now. What is the answer on the MRAP issue?

General AUSTIN. Certainly we will not be able to afford to rely on contractor logistics for the foreseeable future because that is very expensive. So we are going through doing an assessment on how many MRAPs we are going to keep and what the disposition of those is going to be, and then again, we will outline what the maintenance and supply chain will be as a result of that.

Senator MCCASKILL. Thank you, General, for that.

I want to get to Guam before we leave.

Did anybody else have anything on NSE that you wanted to weigh in on? General Breedlove?

General BREEDLOVE. Ma'am, it is really less about NSE, but a worry I have is, we have had a period of time where some really good ideas have been brought forward to the battlefield and quickly adopted to help our soldiers and marines on the ground. The MC-12 Liberty aircraft is a shining example of getting it right. But also, we have some examples where we have multiple starts to try to get to capabilities in dirigibles and others where we have several that are competing and many in the same mission space. I am concerned that we are able to get to the right number and type, and then transition them into long-term use. We have been able to do some of this work because of OCO money, and now as the OCO money goes away, we have to start making prudent decisions about some of these multiple starts in similar mission sets.

Senator McCASKILL. I think that is really a good point, General, because when you have OCO money, it is almost embedded in that that you keep looking around and trying different things, and it almost breeds a certain inefficiency that is required by the nature of the mission. But now, it is really imperative that we decide which of those starts are worth continuing.

As I have said before, one of the biggest problems our military has, if you want to call it a problem, is there is nothing that you guys do not think you can do. So when you are going down a road and you are hitting bumps, sometimes you just keep deciding you are going to go over the bumps and keep going down the road instead of saying, maybe we need to pull the plug on this journey, maybe this is a road we cannot afford to go down.

I am hopeful that what you are talking about there, General Breedlove, is exactly that. We cannot afford to go down multiple paths, especially if there is overlay and duplication, which I do not need to tell you has happened just a few times.

General DUNFORD. Senator, I would just like to quickly follow up and give you some degree of confidence that we recognize the challenge that you have raised and we actually have a process in place to look at it.

In our case, just on order of magnitude, we have about 600 pieces of NSE as a result of the last 10 years. We have gone through, and we are in the process of continuing to go through, each and every item to determine which ones would be transitioned to programs of record. To give you some idea, we probably will have transitioned about one-third of those 600 to programs of record to date.

The other question you asked, which I think is an important question, is where are we with regard to integration in the joint world. I think we all sit on the Joint Requirements Oversight Council. We also have subordinate organizations, the Army-Marine Corps board, for example, that take a look at things that are unique to ground forces. I am pretty confident, particularly in the case of NSE, that we have the right processes in place to look at that equipment, and make the proper decisions about transition as General Breedlove alluded to.

We are now, as a result of our pretty significant experience, identifying those programs that had some promise some years ago, but absolutely do not have a future, and in those cases, recognizing again the period of austerity that we are in, and recognizing the tail associated with some of those programs, we are making sure

those programs are ended and we properly dispose of the equipment that has been useful in Afghanistan but perhaps will not be useful and not be a part of our future.

Senator MCCASKILL. Good luck if that equipment is built in more than 25 States. [Laughter.]

Which seems to be a habit that some of our contractors have. They figure if they can have pieces of it in more than 25 States, they immediately have 50 Senators that are protective and parochial. But I know you guys have never witnessed that in all of your time that you have been here.

My time is up. I know that both my colleagues have more questions.

I do want, General Dunford, to make sure that if I do not have an opportunity to question again, that we address the Marine Corps as it relates to Guam. As we look at our budget, I really am anxious that everyone stays in the corral, so to speak, until we are certain what the future is in Guam. I do not want to waste one dime doing anything in Guam until we get the reconsideration of the agreement to a place that we think it makes sense for the United States, for our military, and for the people of Guam and Japan. So thank you for that.

Senator Ayotte.

Senator AYOTTE. Thank you, Madam Chair. I appreciate your raising the issue of Guam. I think it is an important one with what we need to do in markup.

I wanted to ask each of you—and I raised it in my opening statement, we know that defense sequestration is coming in January if Congress fails to act to come up with other responsible budget savings. I am a strong advocate for us doing that. We have heard from each of the Services, as well as from our Secretary of Defense, the devastating impact of defense sequestration, including hollowing out our forces, along with all the other consequences.

But what I would like each of you to address for me is timing because I am worried that there is a general feeling around here that we can kick this can until December to make the decision on how to avoid defense sequestration and undermining our national security. I met with a group of our defense industrial base the other day, and they pointed out to me that there are things that they are going to be required to do, for example, issue layoff notices under the Warren Act and other legal requirements, that they will have to undertake.

Can you help me, each of you? If we wait until December, what are the disadvantages and consequences of doing that as opposed to resolving this issue much sooner, particularly for each of our Service branches? Because I think this timing issue is very important for people around here to understand.

General AUSTIN. I agree with your assessment, Senator, that if this does come to pass that it would be devastating. Because of that, I think it would drive us to go back and redo some of our planning, certainly make new assessments. That takes time, and it certainly consumes a lot of organizational energy. So we are a bit concerned about that.

I think from an Army perspective, again, we have not done any planning on this, as you indicated. But the back-of-the-envelope

calculations are such that this would probably mean a loss of probably another 100,000 troops, 50 percent of those in the Guard and Reserve. With those kinds of impacts, that probably would drive us to go back and relook at our planning efforts here.

Senator AYOTTE. So, General, that would be in addition to the 72,000 that we are looking at in terms of end strength reductions?

General AUSTIN. Right.

Senator AYOTTE. Another 100,000.

General AUSTIN. Right.

Senator AYOTTE. Thank you.

Would that not take time? Obviously, thinking about this concept, first of all, if we are going to reduce our forces another 100,000, how do we not break the faith there? I do not know how you could possibly not break faith. But even the implementation of something so devastating, would it not be more productive if we could tell you sooner that we have resolved this for you? Is there not an urgency? I think that is what we need to appreciate around here. Would you agree with me that there is some urgency that you are not having this hanging over your head?

General AUSTIN. Absolutely. If we did not have that sword of Damocles hanging over our head, we would be in much better shape.

Senator AYOTTE. Thank you.

Admiral?

Admiral FERGUSON. Senator, I think there are two significant impacts. If you look at sequestration, the impact on the Navy from the \$600 billion defense reduction would be about \$15 billion per year. That is the amount of the entire ship construction account that we would have to figure out how to spread in our budget and reduce. Waiting until December and then not having a resolution at that point would allow a very short cycle for planning. It would not allow us to make efficient or effective choices. It would also cause us to go back and relook at the strategy because the force that comes out of sequestration is not the force that can support the current strategy that we are operating under.

The second concern would be the industrial base impacts that you alluded to. Our industrial shipyards and our providers and corporations have to start making some investment decisions with respect to notification of employees if there are furloughs, if we are forced to break contracts and not be able to execute them under a sequestration scenario. So I would indicate that the uncertainty in our industrial base would affect our suppliers and then, if it were to occur, would greatly affect our industrial base sustainment over the long-term.

Senator AYOTTE. Admiral, if we lose some of those small employers, isn't the risk that they do not come back?

Admiral FERGUSON. That risk certainly exists. In many of our more complex procurement programs, we are down to single vendors or single suppliers and we are their predominant customer. So, it would be very difficult for some to recover.

General DUNFORD. Senator, I would like to start this by going back to your opening comments when you quoted President Reagan. We have a tendency to view sequestration as a budget issue, but it really is not a budget issue. It is a reordering of our

national priorities. It is what we will not be able to do, and certainly at the strategic level, I think what the Secretary said is, we will not be able to implement the strategy as currently written if sequestration goes into effect.

I can tell you from a Marine Corps perspective, we are at 182,000 right now. We are at the margin of being able to meet the strategy. In other words, we have balanced the risk. I have talked to you in private that we believe that with 182,000 marines, we can meet the strategy that Secretary Panetta has articulated. But just as General Austin mentioned, there is an automatic 10 percent personnel cut unless personnel is exempted. There is an automatic 10 percent personnel cut on the Marine Corps. That is another 18,000 right away if we were to be reduced. If we were to be cut another 18,000, we would not have adequate capabilities and capacities to meet a single major contingency operation. So that is fairly significant.

I think the other point that you raise that is absolutely true is we would absolutely not be able to keep faith with our people. If sequestration were to go into effect, not only would we have to cut that additional 18,000 people if a flat 10 percent was executed, but we right now are only budgeted in fiscal year 2013 for 182,000 marines. We are relying on overseas contingency funds to have a ramp to take us from the 202,000 marines we were authorized in 2012 down to the 182,000 marines that we are going to be at in fiscal year 2016.

If sequestration went into effect and we were not given the opportunity to have that ramp, that would be an immediate reduction from 202,000 to something on the order of 168,000. At that number, there is absolutely no way we would keep faith with people. We would be breaking contracts and sending people on their way who believed they had a commitment from us to remain on Active Duty. These are the very people we talked about earlier who are in Afghanistan today, forward deployed, forward engaged, in harm's way, and their reward when they come home will simply be to dismiss them and shake their hand. I think that would be a mistake.

Senator AYOTTE. Thank you, General.

General BREEDLOVE. Senator, just to reiterate a couple of things my compatriots have said, we think that we would definitely not be able to execute the existing strategy if we have to go through sequestration. We echo your remark that it would be devastating. We simply cannot afford this one.

As we have talked about several times, the Air Force is the oldest it has ever been in terms of its iron. We desperately need to recapitalize our flying fleet, and if we see sequestration, we will not be able to maintain capacity and do recapitalization of those fleets. So we will have to make very tough decisions to either come way down in the number of units or to give up the modernization of those units.

I want to echo something also said regarding the industrial base. There are some very key capabilities out there that are already very much at risk. In the aviation business, the number of facilities that can do stealth have reduced, and another cut to the capability and the effort that we are putting into those stealth capabilities could cause us severe problems in that industrial base.

Senator AYOTTE. I thank all of you. I know that my time is up. Can you just give me a quick yes or no? Yes, is there an urgency that we do this before December? General Austin?

General AUSTIN. Yes.

Senator AYOTTE. Admiral Ferguson?

Admiral FERGUSON. I affirm, yes.

Senator AYOTTE. General Dunford?

General DUNFORD. Yes.

Senator AYOTTE. General Breedlove?

General BREEDLOVE. Absolutely.

Senator AYOTTE. Thank you.

Senator MCCASKILL. Senator Begich?

Senator BEGICH. Madam Chair, thank you very much.

I hold my other questions, but first, I am sorry that Senator Inhofe is not here. We actually do a lot of stuff together, especially around general aviation. But on the issue of, as he called it, “the green test tube,” let me ask a few questions.

I was in Afghanistan. I was visiting a forward operating base where I saw marines utilizing new technology around solar energy so they do not have to hump in a lot of equipment, which I know the marines do not like to do. They have only a certain type of equipment that actually saves their lives. What I saw there was incredible technology development from these huge trucks of energy that they would have to bring in, maybe fuel and otherwise, now down to small compact packs.

Is that not of value to the marines to have that new technology when they are out on forward operating bases, such as in Afghanistan, where they do not have to have all this fuel being brought in, but they can now spend 3 days out in the field? Is that a good thing?

General DUNFORD. Senator, the focus of our energy initiatives are exactly along the lines of what you just talked about. They are designed to make us more operationally effective and reduce the load on our individual marines. We have fielded to all of our battalions in Afghanistan the solar panels that you saw. That replaces hundreds of pounds of batteries that marines would otherwise have to carry. We have conducted 7-day patrols without the extra weight of batteries because we have had those solar panels. So all of our interaction with industry is designed—we are spending money in places where we can have an immediate impact.

In fact, I was just down at Camp Lejeune, NC, last week. We have what we call an experimental forward operating base. It is an annual event where we bring in partners from industry and we articulate what we need. This year, we happened to focus on things like potable water and how we could create potable water without the big reverse osmosis purification units that typically are associated with our units that weigh a great deal. That is absolutely the focus of our energy efforts, enhancing our operational effectiveness and increasing our ability to operate in expeditionary and austere environments.

Senator BEGICH. In an efficient and ready way too. You move quicker with less of those batteries, for example. I was amazed how much the old battery technology weighs.

General DUNFORD. Senator, we are fielding that equipment because when we fielded it to the first battalion, all the other marines saw it and there was a demand signal that immediately was raised as the other units wanted to have that equipment as well. In fact, the only critical piece to this is making sure that we get it to our marines early enough in the predeployment cycle where they are proficient at using it before they deploy. The thing that we have sometimes relearned is that when you field equipment when marines are already deployed, it is not going to be very effective. So we have really worked very hard to make sure that we get that equipment to our marines before they deploy. But when we do, they absolutely have found that to be extraordinarily useful.

It goes beyond just the batteries. It goes to energy efficient tent liners, lights, things you have seen.

Senator BEGICH. Also from the Air Force end, the alternative fuel development, all your technologies now making sure that you are not just on a certain type of aviation fuel, but new technologies so you can become more self-sufficient and less dependent from a national perspective on foreign oil from countries that hate us. Is that a fair statement?

General BREEDLOVE. Sir, our focus there, as you know and you have alluded to, is to make sure that our fleet is ready to accept those fuels such that when they become economically viable, then our fleet will be ready to go and we are proceeding with that.

Senator BEGICH. Also from the Navy perspective, if I remember reading a report, one of your big concerns, and why you have the Task Force Climate Change, is because if you have a change in sea levels, it has a direct impact on all of your ports.

Admiral FERGUSON. That is certainly true.

Senator BEGICH. Am I mistaken there?

Admiral FERGUSON. No. That is certainly true.

Senator BEGICH. We have invested billions in these ports around the country and around the world, and it is in our interest to make sure if there is—we can argue over the science and all that. No disrespect to my folks who do the weather on TV, but I would prefer to put all that aside. The fact is, we are having some changes and you are looking at those as infrastructure costs potentially. Is that a fair statement?

Admiral FERGUSON. I think that is fair that some are looking at that. We are also looking in relation to the Arctic about what are the future challenges up there as that opens up. Similar to the Air Force, we are operating and certifying alternative fuels for our ships and aircraft in order that when they do become economically viable—

Senator BEGICH. You are ready.

Admiral FERGUSON.—we are certified and ready to use them. Again, the focus on efficiency in our OPTEMPO—our fuel bills alone are consuming our readiness accounts, so we need to look at alternatives.

Senator BEGICH. From the Army, one of the highest incidence of fatalities and injuries is protecting those fuel sources coming into Afghanistan, for example. So the more efficient they become, the less of that fuel you will have to haul, you probably will save lives. Am I wrong about that?

General AUSTIN. Clearly, Senator, becoming more efficient is all about saving lives from the Army's perspective. Three tours in Iraq, one in Afghanistan, and I can tell you that every time that I can do something to not put a soldier on the road, whatever it is, I want to do it because it saves lives.

It is also about, as General Dunford mentioned earlier, maintaining our soldiers. It is about soldier load and decreasing the burden on them, increasing their endurance. If they can go out with batteries with longer life and if it is easier to recharge them, if they can harvest energy that is left over in batteries and put that energy in other places, I think that is all good. That all contributes to saving lives and becoming more effective on the battlefield.

Senator BEGICH. The last comment, then I will just do one more last thing on a separate issue.

The energy costs, because of our dependency on diesel and other types of fuels, are draining your accounts and over-expending because the cost of fuel has gone up. So you then make choices because you have to have the fuel, and those choices are not necessarily fun choices to make. So the less we spend in that area, the less stress you will have on other budget elements within your own divisions. Is that a fair statement?

Admiral FERGUSON. Yes.

Senator BEGICH. Let me also just end on this, and I appreciate Senator Ayotte's comments in her questioning to you, but I want to, for the record—the automatic cuts, if I were sitting in front of another group here—maybe it is my Veterans' Affairs Committee—the Department of Veterans Affairs would say some similar things. If I were sitting in front of the infrastructure groups, roads, water, sewer guys would say, everyone is having a pinch here. The thing that Congress is missing—this is more through you to the larger audience. You do not have to respond to this. We always talk about in order to replace these cuts, we have to have more cuts. The reality is you cannot cut your way out of this problem, there is no possible way. After 2 decades of poor management around this place, Republican and Democratic Presidents who are here and past, we have a deficit and a debt that is staggering. Everyone is to blame.

The question is, are we going to do the right thing here? When I was mayor and we had the same problem, it is a three-pronged attack: you are going to cut budgets; you are going to deal with revenues; and you are going to invest in the right infrastructure, whatever that might be. In my case, I think it is education; I think it is energy; and I think it is basic core infrastructure we have to invest in. We have to deal with revenues. No one wants to talk about it. It scares everyone to death here. But the fact is, it's the only way—and I am happy to say the city that I was mayor of survived this economic crash without a hiccup. As a matter of fact, we had a rise in prices in our housing. We have a strong economy. It is moving. It actually was rated by Business Week as one of the economies that would move and recover very quickly in the bad recession because we did a three-pronged attack on this issue: revenues, expenses, and investment.

What this place has a habit of doing, because it makes good political sound bites, is it is always about we got to cut or we got to

revenue or we got to infrastructure. Never the three. All three are going to make this problem get resolved. But until this Congress gets real about it—and no disrespect to Senator Ayotte here—you cannot cut more to then save the cuts that are over here. It is going to be a combination of things. If you think we can cut our way out of this budget, you are dreaming. There is no way to do that. We will have significant cuts. We will have to do that. We have things that we have to get rid of that we can no longer do. That is clear. But the gap is so large because of 2 decades of poor management around this place and getting your go-lucky days. Well, those days are over.

But we have to be honest with the public. It is a three-pronged attack. That is how we are going to solve this and we should be realistic about it. Because what is going to happen, just so you know the politics, I hear it already. No disrespect, Senator Ayotte. We have to do it now to save the military. That is what is going to happen. We are going to be in this political battle on the Senate floor, yelling at each other. Who is going to be more pro-defense, who is not? I love the military. Let me tell you that. Based on everything we did when I was mayor, what my wife does every day to support the military, none of us are going to see the military degrade its capacity. But we are going to protect this country economically and do it the right way so all of us are successful in the long-term.

So there is my rant. I get frustrated when I hear this because it is a three-pronged attack. We have to be serious about this and honest with the public.

Senator MCCASKILL. Okay. We will end with a rant.

Senator AYOTTE. I want you to know I would have a strong rebuttal, and I would say this, that what I am really worried about is our defense industrial base too because they have to make decisions upfront. So we can wait until December, but those decisions are being made as we speak here.

Senator BEGICH. I agree, and we should have made the decision last year and honestly talked about all three pieces, but we did not and you know that because it is politics as usual around this place.

Senator MCCASKILL. First of all, let me step in here and say that maybe now is the time I should do my rebuttal of Senator Inhofe. [Laughter.]

I think this would be a perfect time for that.

I think it is a perfect time to thank you all for your service to your country and to all the people in the room. I am going to resist the temptation to ask why there are so many of you in the room, because as some of you who have been to these hearings before know, it is one of my pet peeves that we have to be careful about how many people we have tasked to how many tasks and whether we need as many people sometimes in attendance at these hearings since they are televised. But I know everybody in the room cares very deeply about their country and is committed, and I appreciate that.

We are struggling with trying to correct mistakes that have been made over the last 20 years as to the way we fund what we must fund as a Federal Government. But there is no disagreement between Democrats and Republicans that the most important priority

of the Federal Government is our national defense. There is absolutely no disagreement, regardless of Democrat or Republican, that we have the best military in the world, and that we must keep the best military in the world.

How we get there—we are going to need help and input from you, but we are also going to have to realize that we cannot give you everything you ask for in the future because we have tried that, and taking OCO out, the base budget of DOD, taking out health care—so you cannot even use the health care increase—has gone from \$270 billion to north of \$600 billion in 10 years. We have doubled the amount of money going to DOD in 10 years. That is not counting OCO. You add OCO on top of that and that is a huge piece.

So can we keep the best military and do it smarter with a little less money? I am confident we can. I am especially confident we can because of the leadership we have in the military which is represented here today very well.

Thank you very much. There will be, obviously, more questions for the record that some of us did not get to, and we look forward to a continuing dialogue as we keep our military as ready as we possibly can and also figure out a way that we do not drown in debt about 15 or 20 years from now. Thank you all very much. This hearing is adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CLAIRE MCCASKILL

READINESS TRENDS

1. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, since the turn of the century, the Services have been heavily engaged in combat operations which, among other things, have required personnel to deploy frequently and have little time to train for anything other than counterinsurgency missions, and caused heavy wear and tear on both people and equipment. In addition, units that are not deployed have had to transfer equipment and personnel to deploying units, causing serious equipment readiness shortfalls. Notwithstanding steps taken by Congress to increase investments, reported readiness rates have significantly declined over the past 10 years. What are the public indicators of an increase in readiness we can expect to see?

General AUSTIN. The readiness of Army units is tied to our force generation model which allows Army units to build readiness in order to meet mission requirements at predictable periods in time. Army units receive specific training and execute mission rehearsal exercises tailored to the operational requirements the unit will execute on deployment. Readiness, in fact, has improved over the past several years. We are just now witnessing improvements on critical investments made over the years. Growth in unmanned aerial systems, new helicopters, expanded training bases for new and critical skills and many others have contributed to improvements in Army readiness. Currently, the readiness of those units executing operations in support of combatant command requirements (i.e., deployed units) remains at the highest levels. As demand for forces continues to decline, we expect the readiness to improve earlier in the force generation cycle. In the second quarter of fiscal year 2012, the Army met its dwell goal of 1:2 for individual soldiers. In the future, we anticipate the potential to reach 1:3 boots-on-the-ground (BOG)/dwell around the end of fiscal year 2016 as forces continue to redeploy from Afghanistan. As the Army adjusts to a peacetime footing, soldiers will deploy less often, lowering the stress on the individual and the strain on equipment. We will better measure our ability to recruit and assess the number of quality soldiers needed each year. Likewise, the retention rate for quality soldiers who become the leaders of tomorrow is an important measure of sustaining high readiness. It is through this continued investment in personnel, training, and equipment across all three components that the Army of 2020 will be able to satisfy the requirements of the National Military Strategy (NMS).

Admiral FERGUSON. Since the Navy is inherently a rotational force and we reset in stride, the primary stresses on our force in terms of readiness have been longer deployments, compressed maintenance and training between deployments, and greater deferred maintenance. Public indications of increased readiness would include consistent adherence to our Fleet Response Plan (FRP) with a sustainable cycle of deployment, sustainment, maintenance, and training for individual units and task groups. For Carrier Strike Groups, this entire cycle would be 32 months with approximately 7-month long deployments. Other indicators would be a reduction in deferred maintenance, sustained high recruiting and retention of quality sailors, improved manning levels, and higher unit readiness ratings.

General DUNFORD. The principal readiness detractor for Marine Corps non-deployed units is the reduced availability of equipment with which to outfit and train. Because the reset of Marine Corps equipment will continue 2 to 3 years after it returns from Afghanistan, the Corps' best estimate, based upon a 2014 drawdown from Afghanistan, is that unit readiness levels will increase around 2017. Incremental increases in the core training readiness of Marine Corps units are expected over the next 24 to 36 months as some equipment and personnel flow back from Afghanistan. These changes in unit readiness resource and training levels will be reported in the Defense Readiness Reporting System (DRRS).

General BREEDLOVE. The specific status and trends of Air Force readiness are only reported through classified channels. However, there are general public indicators of actions taken to focus on readiness; actions taken to modernize aging weapons systems, focus on full-spectrum training, and reduced operations tempo (OPTEMPO). The modernization of aging weapons systems is critical to the Air Force's ability to support the National Defense Strategy (NDS). Investments in high priority programs such as the F-35 Joint Strike Fighter (JSF), Long-Range Strike Bomber, KC-46 refueling tanker, service-life extension of the F-16, preferred munitions, capability modernization programs, Space-Based Infrared and Advanced Extremely High Frequency satellites, and space launch capability are among the most important public indicators of an increase in readiness.

2. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, how did these priorities and readiness data influence your budget submissions? More specifically, how do you use readiness information to determine where to make investments?

General AUSTIN. Readiness is measured based on the status of the Army's manning, training, equipping, and sustaining resources reflecting the ability of units to accomplish core functions as designed. Assessments are based upon requirements established by doctrine in support of the NMS and the NDS. We know from our experience what it will take to maintain the readiness of our organizations and equipment. By forecasting readiness concerns across the Future Years Defense Program (FYDP), we ensure our investments strike a balance. During the year of execution we adjust resources, if necessary, to make sure the next deployers and units in the available phase of the Army Force Generation (ARFORGEN) process are ready.

Admiral FERGUSON. The Navy uses historical and current year readiness data to inform our readiness models for developing our requirements. We continuously measure modeled requirements against actual results to inform future investments. In the fiscal year 2013 budget request, we increased our investments in our readiness accounts, maintenance, and training as well as a sustainable deployment cycle to maximize readiness.

General DUNFORD. In order to sustain operational readiness and be prepared for crisis and contingency response, the Marine Corps balances readiness across five pillars: high quality people, unit readiness, capability and capacity to meet combatant commander requirements, infrastructure sustainment, and equipment modernization.

The first pillar that the Marine Corps sustains is high quality people. Recruiting and retaining high quality people plays a key role in maintaining our high state of readiness. Further, the Marine Corps must always be faithful to the obligations we have made to those who serve honorably, and guard against breaking the chain of trust that exists with them. The Marine Corps has a plan for, and is conducting a measured drawdown to meet end strength of, 182,100 marines; if resources remain consistent, our current plan has the Marine Corps completing its drawdown by the end of fiscal year 2016. This drawdown will be undertaken while simultaneously supporting our forward presence mission, combat operations in support of Operation Enduring Freedom (OEF), combatant commander requirements, and ensuring we keep faith with marines and their families. In order to accomplish this, the Marine Corps has requested Overseas Contingency Operations (OCO) funding in fiscal year 2013 to support our overstrength and expects it will be necessary to

continue funding this overstrength in OCO until the drawdown is complete. It is also important to note the critical role our civilian marines play in ensuring the Marine Corps accomplishes its myriad of missions; the Marine Corps has budgeted to support its current civilian workforce and relies on the experience and knowledge of these individuals to ensure mission success. The Marine Corps has a ratio of 1 civilian to every 10 marines, and the contribution made by this lean workforce cannot be overstated.

Unit readiness is the second pillar, and it is measured in how we maintain readiness of the operating forces. Over the past several years, approximately two thirds of our units at home station have been in a degraded state of readiness in order to support forward deployed units. Accordingly, 10 years of constant combat operations has come at a cost, as we have seen a reduction in the overall readiness of our nondeployed forces. Our nondeployed unit readiness has been the billpayer for deployed unit readiness to ensure marines in combat had the very best equipment. It is now critical that the Marine Corps reset the force following the past decade of combat operations; as such, the Marine Corps has requested \$1.3 billion in our fiscal year 2013 OCO request for operational reset. While this funds our operational, or near-term, reset costs, the Marine Corps also has approximately 95,000 principal items in Afghanistan that will be reset following the end of combat operations; this is our long-term, or strategic reset cost. Using the lessons learned from Iraq, the Marine Corps anticipates a strategic reset cost of over \$3 billion over a 2- to 3-year period following the return of all our equipment from Afghanistan. As the Marine Corps resets the force, we are simultaneously committed to supporting our operational requirements and our mission as the Nation's expeditionary force in readiness.

Force-sizing to meet geographic combatant commander requirements with the right mix of capacity and capability is the essence of our third readiness pillar. The Marine Corps must maintain a force that meets our ongoing operational requirements in Afghanistan, while simultaneously maintaining our forward presence across the globe. Marine Air Ground Task Forces (MAGTF) are in high demand due to their flexibility, operational reach, and ability to be tailored to meet the mission requirements, and the Marine Corps is committed to properly training and equipping its forces in order to ensure they are prepared to meet combatant commander requirements. Currently, we are taking steps to rebalance in the Pacific, resuming the Unit Deployment Program and beginning rotational deployments to Australia. We are also engaged in numerous security cooperation and engagement activities such as Special Purpose MAGTF-12 in support of U.S. Africa Command (AFRICOM) and our Black Sea Rotational Force in support of U.S. European Command (EUCOM).

The Marine Corps' fourth pillar is infrastructure sustainment. Despite budget reductions in the fiscal year 2013 budget, the Marine Corps has requested to fund facility sustainment, restoration, and modernization at the 90 percent level—the Department of Defense's (DOD) stated goal. Our infrastructure must be maintained, as it plays a direct and complementary role in our ability to train and deploy ready forces in support of mission requirements.

Finally, in order to equip our marines to match the needs of the emerging security environment, the Marine Corps must invest in equipment modernization. However, in this austere fiscal environment, the Marine Corps is only conducting essential modernization to support our core competencies, and we are mitigating costs by prioritizing and sequencing our modernization and sustainment programs. To maintain operational capabilities and readiness, modernization is critical in the areas of ground combat vehicles, aviation, and amphibious and pre-positioning ships.

Through it all, we will make the hard decisions and redouble our commitment to our traditional culture of frugality. We will continue to ask only for what we need, not what we want. Ultimately, we will build the most capable Marine Corps the Nation can afford.

General BREEDLOVE. The Air Force made hard choices to closely align its fiscal year 2013 budget submission with the new Defense Strategic Guidance (DSG). We will be a smaller but superb force that maintains the agility, flexibility, and readiness to engage a full range of contingencies and threats. We remain committed to our ongoing responsibilities, ranging from nuclear deterrence to operations in Afghanistan, counterterrorism, and global intelligence, surveillance, and reconnaissance (ISR). Although smaller, we will sustain global operations through our continuing presence in the Asia Pacific and Middle East theaters, while tailoring our presence in Europe. Air Force capabilities are fundamental to the major priorities of the new DSG, such as deterring and defeating aggression, power projection in anti-access and area denial (A2/AD) environments, preventing the spread of weap-

ons of mass destruction (WMD), space and cyber operations, and strategic deterrence.

It took innovative and adaptive thinking using regular readiness reports from more than 2,500 Air Force units in order to rebalance Air Force investments over the next several years in ways that will enable our essential contributions to the NDS. Confronted by a more complex and dynamic security environment, as well as a significant reduction in defense resources, the Air Force determined the best path forward was to become smaller in order to protect a high quality force that will improve in capability over time. To avoid a hollow force, we will protect readiness regardless of the size of our force and strengthen the integration of our Total Force Team of Active, Guard, and Reserve airmen.

EQUIPMENT CONCERNS AND FUNDING SHORTFALLS

3. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, I understand that you simply cannot fund every readiness requirement in your budget and that there will always be an inherent amount of accepted risk in military operations. However, in the past this committee has attempted to authorize your unfunded requirements, particularly as they relate to improving readiness. A recent example would be the backlog of the Navy's ship and aircraft depot maintenance. Please briefly quantify your current readiness funding backlogs and tell me what your highest priorities are, given your assessment of the current state of readiness in your Service.

General AUSTIN. As the Army's budget is reduced over the next several years, it is imperative that we balance force structure/end strength, modernization, infrastructure/installations needs, and readiness to avoid becoming a hollow force and to ensure that we meet the demands of our combatant commanders under the new national security strategy. We believe the fiscal year 2013 budget to include OCO request, as submitted, strikes just the right balance. Adjusting funding in one of these areas would impact funding in the others and upset the careful balance we think we've achieved. This budget provides adequate funding for resetting equipment coming out of theater, allows us to ramp down end strength in a deliberate and methodical way while taking care of soldiers and their families, and provides adequate funding to modernize. Of course, we will constantly be assessing and adjusting priorities throughout the year and will certainly inform you if our needs change.

Admiral FERGUSON. The Navy appreciates the continuing support of Congress and this committee for our readiness requirements. Considering both baseline and OCO funding in this budget submission, the Navy has fully funded ship maintenance and funded aviation depot maintenance to 94 percent which will result in a limited projected backlog of 14 airframes and 273 engine depot requirements. This funding is within acceptable risk and supports our ongoing efforts to improve surface ship readiness and the continuing introduction of new type/model/series aircraft to our inventory. Current Navy readiness remains dependent on OCO funding, and will require funding for reset following the end of OEF to support enduring baseline requirements.

General DUNFORD. The new DSG provides a framework by which the Marine Corps will balance the demands of the future security environment with the realities of the current fiscal constraints. Though the choices of the last year have been difficult, we are confident that we have carefully managed risk by balancing capacity and capability. To that end, the Marine Corps' 2013 budget request ensures that we maintain the high levels of readiness the Nation has come to expect of its marines.

General BREEDLOVE. Confronted by a more complex and dynamic security environment, as well as a significant reduction in defense resources, the Air Force determined the prudent path forward is to become a smaller more capable force over time. To avoid a hollow force, we will protect readiness regardless of the size of our force and strengthen the integration of our Total Force Team of Active, Guard, and Reserve airmen. We are slowing modernization and terminating or deferring numerous acquisition programs, while protecting key programs most critical to future Air Force capabilities. A top readiness concern for the Air Force in the fiscal year 2013 President's budget was to match peacetime flying hours to training requirements. Another priority is lowering fuel consumption; the rising cost of fuel prices has negatively impacted our operations and maintenance (O&M) budget. For example, in fiscal year 2012, the Air Force requested authority to reprogram approximately \$1.1 billion to shortfalls due to rising fuel costs. Additionally, the Air Force remains concerned about replenishing stocks of preferred munitions. The Air Force requires approximately \$1.3 billion to reconstitute various types of preferred munitions to

quickly meet combatant commander's needs. Weapons systems sustainment (WSS) also requires attention. Our depot maintenance requirements will continue despite a drawdown in OCO requirements. The Air Force will require approximately \$4.1 billion in the future years to transition from OCO funding and continue depot maintenance operations. Depot maintenance will become more critical to ensure a smaller force remains available and capable. Although Air Force contributions to the Joint Force have increased in relevance over time, there has been no corresponding increase in resources to fund this increasing demand. The Air Force has entered this era of fiscal austerity significantly smaller, with aging equipment, and the smallest budget share of any military department in half a century.

4. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, the Government Accountability Office (GAO) has previously reported that the Military Services tend to build their reset budget requirements on the basis of the equipment it anticipates will actually return from overseas in the next year, rather than prioritizing or targeting its reset requirements to address equipment shortages or other needs. What are your current estimates and timelines for the amounts of funding required for reset?

General AUSTIN. The Army estimates that the reset of equipment used in Iraq and Afghanistan will conclude 2 to 3 years following completion of operations in Afghanistan. If contingency operations ceased today, the Army would need \$10 billion to \$15 billion to complete reset over the next 2 to 3 years.

Admiral FERGUSON. The Navy reassesses reset requirements annually as part of its budget submission as our assets reset in stride between deployments. The President's budget includes a fiscal year 2013 reset requirement of approximately \$2 billion.

General DUNFORD. In January 2012, the Commandant of the Marine Corps signed the Marine Corps OEF Ground Equipment Reset Strategy which identifies what equipment we will reset and what we will divest. It prioritizes investment and modernization decisions in accordance with the capabilities of our middleweight force construct.

The reset of our equipment after more than a decade of combat requires an unprecedented level of effort, and our depots stand ready to meet the challenge. Reset is composed of strategic and operational reset; our fiscal year 2013 near-term operational reset cost is \$1.3 billion and is included in the OCO request.

Strategic reset costs will not be finalized until OEF operations have ceased. Our current strategic reset estimate is \$3.2 billion over a 2- to 3-year period following the return of our equipment from Afghanistan. This estimate is continually revised based on the 182,100 Marine Corps force structure, modified acquisition objectives, and condition of gear returning from Afghanistan, much of which was retransferred directly from Iraq to support the Afghanistan surge of 2009.

General BREEDLOVE. The total Air Force fiscal year 2013 requested reset level is \$2.183 billion. Air Force total equipment reset is calendar driven and/or event driven. Major weapons systems, such as aircraft and engines, are reset at depots. Support equipment and vehicles are primarily reset in theater. Air Force total equipment reset has been ongoing and will continue while the Air Force is engaged in combat operations and beyond. Combat operations drive reset costs.

5. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, to what extent are the Services planning to include funding for reset into their base budgets?

General AUSTIN. The Army participates in annual assessments of reset liability in coordination with the Office of the Secretary of Defense (OSD) for Cost Assessment and Program Evaluation (CAPE) in order to identify and estimate our future reset requirements stemming from operation in the U.S. Central Command's (CENTCOM) theater. Currently, both the Army and OSD CAPE intend to fund such requirements with contingency funds.

Admiral FERGUSON. The Navy will continue to fund reset requirements from the OCO budget, based on Office of Management and Budget (OMB) criteria. Our fiscal year 2013 reset request is \$2 billion.

General DUNFORD. The Marine Corps does not anticipate funding for reset in the base budget. Funding for our near-term operational reset has been requested in the fiscal year 2013 OCO request; our longer-term strategic reset will commence following the return of equipment from Afghanistan and is expected to cost \$3.2 billion over a 2- to 3-year period. During this time, the Marine Corps will be rebalancing in the Pacific, conducting training at home station, and providing for our marines and their families. In order to balance these myriad requirements while simultaneously conducting strategic reset, the Marine Corps anticipates a need for OCO

funding for 2 to 3 years after the end of operations in Afghanistan and the return of all equipment to home station.

General BREEDLOVE. As we transition from continuous OCOs, the Air Force is taking a deliberate approach as it plans for reset. The Air Force is actively estimating the one-time and enduring requirements to provide and sustain the necessary capabilities and capacity to support the defense strategy.

6. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, do opportunities exist to better focus the requirements for equipment reset, so that reset dollars go farther to meet equipment shortages and better address our home-stationed unit readiness rates?

General AUSTIN. The Army takes every opportunity to synchronize returning equipment from contingency operations through the reset process for redistribution based on priority. We do this utilizing a very deliberate Retrograde, Reset, and Redistribution (R3) process for equipment, focused on transitioning from the needs of the current conflict to full spectrum operations and training. The R3 process identifies retrograde priorities to assist Army Central (ARCENT) in their retrograde planning. This process synchronizes retrograde of equipment out of theater with its repair, and subsequent redistribution to support training and equipment readiness based on Army priority requirements.

While reset of equipment does not fill equipment shortages that existed prior to a unit's deployment, our efforts have been successful in both maintaining historically high equipment readiness rates and bringing the Army into materiel balance. The Army is projected to have 92 percent of its equipment on hand by the end of October 2012.

Admiral FERGUSON. The Navy resets in stride, relying upon regular, rotationally scheduled maintenance of our ships and aircraft between deployments to sustain the long-term material condition of our force. Reset requirements are assessed annually, and Navy maintains the planning assumption of approximately 2 years to complete reset maintenance for equipment used ashore in Iraq and Afghanistan. Ground equipment reset will be integrated within equipment modernization objectives, long-term support costs, and strategic investment plans. The rapid reset of the force will be balanced against the need for depot level overhauls, industrial capacity, and refresh actions or full replacement of end items in order to protect the long-term health of critical ground equipment. Ground equipment reset will occur in parallel with force reconstitution to ensure operating forces and strategic programs are outfitted with mission capable equipment as soon as possible; balancing the rate of return to the operating forces with optimal locations of repair.

As ground forces were removed from Operation New Dawn (OND) and are reduced in OEF, CENTCOM demand for Naval Forces has remained constant and even increased in some areas of the Persian Gulf. Until official drawdown decisions are made for U.S. Forces and Navy Forces in particular, reset requirements are assumed to be similar to previous years. This reset is intended to be funded each year with OCO funds as long as the Navy continues to provide support to these operations.

General DUNFORD. Yes. The Marine Corps continually assesses its force reconstitution plans to ensure the requirements for equipment reset remain relevant.

The Marine Corps has developed a comprehensive Ground Equipment Reset Strategy that maximizes Congress' investment in the reset of the post-Afghanistan reconstituted force. Our strategy calls for a detailed assessment of the specific equipment items requiring reset, those items it will divest from its inventories, the optimal facility to conduct reset actions on each item and how those determinations relate to the final positioning of a particular equipment item within the reconstituted force.

General BREEDLOVE. Yes, as the current contingency begins to wind down, Air Force equipment managers at the base level conduct equipment inventories and condition surveys prior to sending equipment back to home station or to fill vacancies in other areas. These base level equipment management actions provide the fidelity of information as to how the Air Force can ensure reset dollars address equipment shortages and home station unit readiness.

Additionally, for retrograde of support equipment, the Air Force is conducting a 100 percent inventory of all assets in Afghanistan, scheduled to be completed in Fall 2012. For all support equipment assets, to include war readiness material (WRM) (repositioned), the Air Force has developed a comprehensive process to identify if there are enduring area of responsibility (AOR) requirements (to include WRM), existing Air Force requirements worldwide (to include WRM in other AORs), or if excess to the Air Force. Once this determination is made, the Air Force will then carry out the proper disposition of the assets.

OPERATIONAL ENERGY

7. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, in fiscal year 2011, DOD spent \$19.4 billion on energy, of which 79 percent, or \$15.3 billion, was for operational energy related to flying, steaming, driving, and training, which comes to about 330,000 barrels of oil used per day. In Afghanistan, about 80 percent of ground convoys are dedicated to carrying fuel and water to our troops where they are exposed to deadly roadside bombs. While there are many concerns over DOD's heavy reliance on fuels to sustain operations on the battlefield in locations such as Afghanistan, GAO has recommended that the combatant commanders and the Military Services establish requirements and guidelines to maximize operational capabilities while reducing fuel demand. What are the Services doing to formally incorporate requirements related to fuel demand management at forward-deployed locations into policy and guidance?

General AUSTIN. The Army views operational energy solutions as a means to reduce fuel and resource use, but more importantly as an avenue to increase mission capability. We are currently deploying strategies, policy, and guidance to reduce fuel demand at forward operating locations on several levels. At the Army Division Headquarters level, operational energy and contingency basing have been incorporated as major objectives in the Army Campaign Plan (ACP). Through the ACP, the Army tracks progress on these objectives on a regular basis. Results are briefed to senior Army leaders.

We have published and are in the process of publishing several policies aimed at reducing fuel demand. These include our Contingency Basing Policy, published on June 1, 2011, which promotes resource efficiency through efficient planning, establishing, managing, sustaining, and transitioning of a contingency base throughout its life cycle. Additionally, we are currently finalizing our Operational Energy Policy which focuses on increasing tactical and operational endurance and effectiveness through effective energy conservation practices. We are focusing our efforts in three key areas: soldier, basing, and vehicle power.

In addition to these high level policies aimed at long-term progress, the Army has developed and deployed a range of energy-related solutions to include more efficient environmental control systems; energy-efficient shelters; water purification, recycling, and packaging capabilities; operational energy system analysis and measurement tools; an automated fuel management system; micro-grid solutions; and several renewable energy systems for individual soldiers to reduce fuel consumption at the tactical level. One example of such technologies is the minigrid, which improves the overall efficiency of Army base camps by optimizing generator usage. Minigrids that have been completed or have been funded will save the Army an estimated 50 million gallons of fuel annually. That is equivalent to removing 20,000 heavy expanded mobility tactical truckloads or 55 trucks from the road per day. The Army's Rapid Equipping Force (REF) is deploying such technologies to Forward Operating Bases (FOB) on the tactical edge, with their Energy to the Edge (E2E) program. Through E2E, the REF identifies bases in austere environments in which resupply is difficult and dangerous. They assess these bases and deploy technologies and other efficiencies to improve base safety and reduce the frequency of resupply. Recently, the REF worked with a FOB using balanced generator load, hybrid power, and renewables to reduce fuel use by 33 percent, therefore reducing the number of resupply airdrops from one in every 3 days to one in every 10 days.

Admiral FERGUSON. Fuel demand at forward-deployed locations depends on a host of factors, many of which are driven by the cognizant combatant command. While there is a well-established structure to capture and report fuel consumption for maritime and aviation assets (nearly 99 percent of the Navy's operational fuel consumption), it is more challenging to track and report fuel consumption for expeditionary forces for a variety of reasons. Some of these include use of temporary infrastructure outside the continental United States (OCONUS), the wide variety and numbers of equipment operated, and the complex fuel delivery network that exists for supplying forward deployed expeditionary units. Additionally, the line between the Military Services is frequently blurred during retail transactions at the tactical level in the theater of war. Navy Expeditionary Combat Command (NECC), Naval Facilities Command, and the Office of the Chief of Naval Operations (OPNAV) are developing a system that will provide more accurate fuel consumption that will not unduly burden forward deployed personnel.

As initial guidance, the Secretary of the Navy and Chief of Naval Operations (CNO) have issued goals reflecting this emphasis on energy conservation. Additionally, in June 2011 the Assistant Secretary of the Navy (Research, Development, and Acquisition) issued guidance concerning the use of energy-related factors in acquisition planning, trade-off analyses, technology development, and competitive source

selections for platforms and weapons systems. Included in this guidance are a mandatory calculation of fully burdened cost of energy, the establishment of an energy component of the affordability target, energy considerations in acquisition plans, energy considerations in the Gate Review process, and energy review of legacy systems.

General DUNFORD. The Marine Corps is aggressively moving to address the issues with policy and leadership guidance to increase our combat effectiveness by changing the way we use energy on the battlefield. We have:

- Issued the U.S. Marine Corps Expeditionary Energy Strategy and Implementation Planning Guidance, March 2011, providing a framework to institutionalize a more energy efficient, combat effective force;
- Issued foundational requirements to guide energy-related investments: the Marine Corps Expeditionary Energy Water and Waste Initial Capabilities Document/Capabilities Based Assessment, signed September 2011, providing a prioritized roadmap in materiel and non-materiel investments to increase effectiveness of the force through greater energy performance; and
- Published the 2012 Marine Corps Science and Technology Plan, for the first time establishing Science and Technology Objectives for expeditionary energy.

We are already integrating energy performance into our materiel requirements, for example:

- Ground-based Operational Surveillance System; energy key performance parameters (KPP) using gallons per hour (fuel) for each variant and across the fleet; sources of power key system attributes (KSA) that includes ability to use renewable and hybrid power sources.
- Joint Light Tactical Vehicle (JLTV); includes Fuel Efficiency KSA (static gallons per hour; dynamic payload ton-miles per gallon), attributes for Exportable, On-board, and Silent Watch power.
- Combat Operating Center (V) 1 Energy Performance KSA (gallons per day); additional attributes for thermally efficient shelters, energy efficient lighting, sources of power, energy monitoring and measuring.

General BREEDLOVE. The Assistant Secretary of Defense for Operational Energy Plans and Programs issued the DOD Operational Energy Strategy in May 2011 and the supporting implementation plan in March 2012. The Air Force is in the process of updating its policies, guidance, and strategic plans to reflect this approach. While only a portion of Air Force aviation fuel usage is to support forward operations, the Air Force has an overall goal to reduce its aviation fuel usage 10 percent by 2015.

8. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, how can the Services improve the way they track fuel consumption at forward-deployed locations?

General AUSTIN. The Army recognizes the need to improve fuel asset visibility, inventory management, and accountability at forward locations. The lack of an automated petroleum management capability is one of the high risk capability gaps in the approved Army Petroleum and Water Capability Based Assessment. The Army is working on a system-solution that will provide better visibility on fuel consumption and accountability to our commanders.

As an interim step, we fielded Tactical Fuels Manager Defense (TFMD) to 36 sites in Afghanistan. TFMD is currently used to track about 45 percent of Army fuel transactions in Afghanistan. The Army is also experimenting with Automated Information Technology data capture devices to input customer and transaction information at six of those locations, and automated collapsible fuel tank gauging at four locations.

The results from TFMD are being used to inform the longer-term solution, the Army Fuel Automated Management System (AFAMS). The AFAMS will be the Army standard software system for automated fuel management and accountability. AFAMS will include the ability to manage bulk storage and bulk distribution, and will also track platform consumption. The Army is currently developing the operational architecture for AFAMS, and it will include interfaces with our standard logistics management systems—Battle Command Sustainment and Support System and Global Combat Support System (GCSS)-Army.

Admiral FERGUSON. There is a well-established structure to capture and report fuel consumption for maritime and aviation assets which accounts for the nearly 99 percent of the Navy's operational fuel consumption. This reporting structure, by hull number for ships and type/model/series for aircraft, informs the Navy's decisions on how to focus efforts to reduce fuel consumption.

It is more challenging to track and report the remaining consumption by expeditionary forces for a variety of reasons. Some of these include use of temporary infrastructure OCONUS, the wide variety and numbers of equipment operated, and the complex fuel delivery network that exists for supplying forward deployed expeditionary units. Additionally, the line between the Military Services is frequently blurred during retail transactions at the tactical level in the theater of war. NECC, Naval Facilities Command, and OPNAV are developing a system that will provide more accurate fuel consumption that will not unduly burden forward deployed personnel.

General DUNFORD. The Marine Corps is focused on tracking fuel consumption to improve accountability, and critically, to provide the operational commander the ability to better manage and plan resource use for the purpose of increasing combat capability in operations.

Currently the Services are working with Defense Logistics Agency (DLA) Energy on several pilot programs to automate fuel consumption reporting. The emergence of disaggregated operations in OEF strains the current manual aggregation of data on the battlefield, particularly when hundreds of small outposts (Combat Outposts and Patrol Bases) compound the reporting process. Reporting moves from the consuming unit through the chain of command to the Marine Corps component commander and U.S. Forces-Afghanistan (USFOR-A).

This year, the Expeditionary Energy Office, in conjunction with Deputy Commandant for Installations and Logistics, created a Fuel Accountability Working Group with Naval Supply Energy and DLA Energy to address this challenge. This working group is putting together a proposal to conduct a pilot project to explore the automation of fuel keys in CONUS operations with the goal to transition the reporting method to the battlefield.

General BREEDLOVE. The Air Force uses the DLA fuel accounting system to track consumption at many forward deployed sites. Unfortunately, not all deployed sites have this system employed for all products stocked and sold. At locations where the Air Force does not have the DLA system, the Air Force tracks fuel consumption using a manual accounting process. The best way to improve fuel accounting/consumption tracking is for DLA to take ownership of all bulk fuel worldwide to include contingency locations, therefore allowing the use of the DLA fuel accounting system. Currently DLA Energy does not own (capitalize) fuel at all contingency locations.

NATIONAL GUARD AND RESERVE COMPONENTS

9. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, over the past 10 years, the Services have relied heavily on its National Guard and Reserve components to deploy in support of operations in Afghanistan and Iraq, as well as other operations worldwide. To supply ready forces, the Army, for example, implemented a rotational readiness model where Reserve units would be equipped to readiness levels that mirror the Active Force. The 2012 DSG also stressed the need for a robust Homeland defense. To what extent do you believe you are able to fully address all requirements for the domestic mission, including Homeland defense, civil support, and all of the general and specialized capability requirements associated with them, and provide the right balance of National Guard and Reserve capabilities and forces to meet those requirements?

General AUSTIN. Strategic guidance directs the Army to retain the capability to respond to a host of possible threats from general war to civil support and Homeland defense. The Army addresses these different threat scenarios within established component end strengths. The Army supports the DSG by maintaining capabilities that meet current requirements and emerging threats. The Army provides the right balance of National Guard and Reserve capabilities to meet U.S. projected requirements. The force generation process ensures these capabilities maintain the right readiness level to provide a consistent supply of ready forces to combatant commanders and civil authorities. We believe that the Army has the right balance of Reserve component forces to fully address all of the domestic mission requirements.

Admiral FERGUSON. The Navy is well-postured to support our requirements for Homeland defense and civil support. Navy Emergency Preparedness Liaison Officers are all Reserve officers that work with their regional civilian counterparts on a regular basis. Within both the Active and Reserve Forces, we have specialized capabilities such as the SEABEES as well as first responders to include helicopter squadrons and medical personnel, all of which can contribute to civil support operations. While our Maritime Homeland Defense forces are primarily ships from the Active

component, we also have Active and Reserve aviation squadrons and maritime security forces that routinely support Homeland defense operations.

General DUNFORD. The Marine Corps is a total force organization that is manned, trained, and equipped to be capable across the full range of military operations. The Marine Corps Reserve is structured to mirror the capabilities of the Active Force in order to augment and reinforce the Active component MAGTF across the range of military operations when required. The Marine Corps Reserve is resourced appropriately to meet that mission. The sourcing of Reserve Forces is managed within established Global Force Management (GFM) processes in order to provide appropriate Total Force sourcing solutions that are both relevant and timely. The readiness of the Marine Corps Reserve is currently, and will continue to be, a managed priority for the Service, and the Marine Corps will continue to diligently apply the standards that are derived from the Chairman of the Joint Chiefs of Staff (CJCS) Instruction for Force Readiness Reporting.

General BREEDLOVE. The Air Force recognizes that the first responsibility of U.S. Forces is to defend U.S. territory from direct attack by state and non-state actors. Additionally, when directed by the President or requested by the Department of Homeland Security, the Air Force is fully prepared to participate in defense support of civil authorities—to assist at all levels in preventing, protecting against, mitigating the effects of, and responding to manmade or natural disasters. In support of these critical missions, the proposed fiscal year 2013 Active and Reserve component mix is poised to maintain the Air Force's combat and defense support capabilities.

To fully analyze the effects of impending reductions, the Air Force conducted analyses of wartime scenarios, with consideration for Homeland defense and support to civilian authorities, consistent with the new January 2012 DSG. In support of the Homeland defense mission, the Air Force continues to meet mission requirements and taskings through the GFM process that prioritizes all combatant commanders' (U.S. Northern Command, CENTCOM, U.S. Pacific Command (PACOM), et cetera) requirements.

10. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, how can the missions of the Reserve Forces be expected to change to meet new priorities?

General AUSTIN. Reserve Forces will continue to provide select operational capabilities and strategic depth in support of national defense. As mission requirements change, we will examine the Total Force and make adjustments, if necessary, to meet the needs of the Nation. As priorities and missions shift, combatant commanders, in support of the DSG, will request capabilities and forces to meet their specific demands. The Reserve component contains many of the wide range of capabilities required by combatant commanders to meet their requirements, and the Army must leverage all capabilities in the Total Force in order to be the agile, responsive, tailorable force capable of responding to any mission, anywhere, anytime.

Admiral FERGUSON. The Navy Reserve is ready, innovative, and agile and is fully aligned with Navy mission requirements. As new missions emerge and current missions evolve, Active component/Reserve component mix solutions within a given mission area are carefully and continually examined. As we reduce the demand for mobilized reservists in theater, we will look to missions that integrate with the Active Force, provide surge capacity, and can be adequately sustained in the Reserves. We anticipate some potential reductions in Reserve end strength as we realign missions and reduce capacity in land-support missions. Reserve component sailors provide full and part-time operational capabilities and strategic depth to ensure the Navy is always ready to respond globally to crisis situations while maintaining fiscal efficiency across the spectrum of operations. For example, Reserves could fill new requirements in cyber warfare, ISR detachments, and Littoral Combat Ship (LCS) mission modules in the future.

General DUNFORD. We believe the mission of the Marine Corps Reserve—to augment and reinforce the Active component—will remain unchanged regardless of the recent strategic shift in Service and DOD priorities. Marine Forces Reserve will continue to prepare and provide units, detachments, and individuals to support requirements that are tasked to the Total Force Marine Corps. We are well-positioned to continue to contribute forces to OEF, albeit not in the numbers we have provided in the past, but commensurate with the overall downsizing of the overall military presence in Afghanistan. We are already planning participation in joint and partner-nation exercises in each of the geographical combatant commanders' AORs during fiscal year 2013 and will be looking forward to the same in fiscal year 2014. This does not depart from the 3,000 to 4,000 Reserve marines per year who participate in regional security cooperation and crisis prevention activities in support of

the various geographical combatant commanders. Additionally, fiscal year 2013 will see continued employment of Reserve Special Purpose MAGTFs in the AFRICOM AOR. The Marine Corps Reserve will continue to serve as an integral part of the Total Force as we continue to employ them as an operational force.

General BREEDLOVE. Shaping the optimum Active component/Reserve component balance within a fiscally challenging environment will continue to be a major focus. The Air Force seeks to ensure its capabilities and readiness meets the operational needs of the combatant commanders while at the same time providing the support and flexibility our State Governors have come to depend on in times of domestic crisis. The Active component/Reserve component mix is not a static number; it does and should change as circumstances and demands are placed upon the force change. As missions are reexamined, we will properly balance those changing mission requirements to best support the combatant commands and the strategic guidance with sustainable capabilities.

NAVY SHIP READINESS

11. Senator MCCASKILL. Admiral Ferguson, in recent years, the Navy has stood up a number of different organizations to monitor, maintain, or improve the readiness of its surface fleet. Most recently, the Navy Regional Maintenance Center (RMC) was established to oversee the operations and management of the RMCs and lead the regional centers in developing and executing standardized maintenance and modernization processes, instituting common policies, and standardizing training to provide cost-effective readiness to the Navy's surface ship fleets. To what extent, if any, has the Navy seen improvements in the readiness and inspection reports of its non-nuclear ships since these organizations were established in light of the fact that the Navy fully funded its ship depot maintenance requirement in fiscal year 2013?

Admiral FERGUSON. To improve surface ship maintenance performance, Surface Maintenance Engineering Planning Program (SURFMEPP) and Commander, Navy Regional Maintenance Centers (CNRMC) established standardized procedures for work package development, maintenance execution and certification, formalized work deferral processes, and training improvements. These initiatives are being used for the first time for availabilities starting in fiscal year 2012, so the trends in readiness and inspection reports have not yet appreciably changed.

Ultimately, recovering surface ship material condition will require both the improved training and standardized procedures developed by SURFMEPP and CNRMC, and a reduction of OPTEMPO to sustainable levels, to allow reset of the surface fleet's material condition.

12. Senator MCCASKILL. Admiral Ferguson, how, if at all, will the stand-up of these organizations affect the projected or actual service lives of non-nuclear surface ships?

Admiral FERGUSON. CNRMC and SURFMEPP are providing the surface fleet with the maintenance oversight and technical rigor necessary to accurately identify and oversee the execution of the required maintenance needed to achieve expected service life.

Since being established in 2010, CNRMC initiatives include improved training for RMC personnel and the Total Ship Readiness Assessment program. These programs are focused on preparing ships for depot availability maintenance periods.

Already, SURFMEPP has: (1) revised surface ship class maintenance plans to better define the engineered maintenance and inspection requirements (tasks and periodicities); (2) standardized procedures for work package development, maintenance execution, and certification; and (3) formalized the work deferral process.

This focus, along with fully funding surface ship maintenance requirements, will ensure the Navy is able to achieve non-nuclear surface ship expected service life.

13. Senator MCCASKILL. Admiral Ferguson, as the Navy is looking to achieve efficiencies by reducing the size of headquarters and support organizations, how will these new organizations contribute to Navy readiness, cost savings, and efficiencies?

Admiral FERGUSON. CNRMC will ensure all subordinate RMCs follow the same processes for contractor management and oversight, availability execution, and testing and certification. The end result is in an improvement in maintenance quality (reduced rework) while ensuring post availability documentation of ships' material condition.

The SURFMEPP will provide the single technical focus for surface ship maintenance requirements, documenting material condition, and adjudicating deferral requests. Each organization, working in conjunction with the type commander, will

ensure the right maintenance is performed at the right time in the ship's life cycle, to minimize cost, provide the highest material readiness possible, and ensure achievement of expected service life.

14. Senator MCCASKILL. Admiral Ferguson, what specific metrics are you using to measure the effectiveness of these new organizations?

Admiral FERGUSON. Effective execution of surface ship maintenance requires accurate work package definition and compliance with the maintenance planning timeline. These new organizations are intended to drive a disciplined surface ship maintenance planning and execution process. They provide dedicated oversight with metrics to measure compliance with the planning timeline and work package accuracy. Maintenance planning metrics are key indicators of how our new organizations are performing. During maintenance execution, metrics track production completion and testing, monitoring both the new maintenance organizations and contractor performance. Finally, work package accuracy metrics compare the cost of work actually performed to scheduled work items and projected costs. Key metrics will therefore be the accuracy of the organization to capture depot maintenance and the ability of the industrial base to complete the scheduled availability within budget and schedule.

NAVY MANNING ISSUES

15. Senator MCCASKILL. Admiral Ferguson, a number of Navy and external studies have found that the optimal manning initiatives of the past decade lacked a firm analytical basis, and contributed to deteriorating maintenance of the Navy's surface fleet. The Navy is now planning to add additional crew members to its cruisers, destroyers, and several of its amphibious ships. It is also planning to add 285 shore billets to reestablish the sea-shore flow between ships and intermediate maintenance activities. Do the current increases in ship crew sizes and the size of the intermediate maintenance activities have a firm analytical basis or are they also being driven by budgets or other factors?

Admiral FERGUSON. Current manpower increases to ship's crews and intermediate maintenance activities were in response to the findings of the 2010 Fleet Review Panel assessment of surface force readiness. The assessment panel determined that readiness of optimally-manned ships was suffering and decreased organic shore intermediate repair capability and capacity further exacerbated shipboard material readiness concerns. The Navy is gradually increasing manning in these areas as resources allow.

16. Senator MCCASKILL. Admiral Ferguson, according to DOD's fiscal year 2012 budget estimates, the Navy is projecting that it can save \$470 million in fiscal year 2012 and \$4.7 billion across the FYDP by reducing ashore manpower, reassigning personnel to operational ships and air units, adjusting special pays and advancements, and eliminating duplicative functions. To what extent are the increases in cruiser, destroyer, and amphibious ship crew sizes tied to these efficiency initiatives?

Admiral FERGUSON. Within the President's fiscal year 2012 budget, Navy realigned manpower from shore units to afloat units, specifically addressing critical fleet requirements. These actions were aligned with a DOD-wide effort to shift resources from tail-to-tooth. Most manpower shifted from shore activities was utilized to support increased billets across the Navy's surface force to improve damage control/firefighting, safety of navigation, preservation, material condition, and underway watch standing.

Specifically, the President's fiscal year 2012 budget will increase manning as follows:

- LPD 17 class ~ 12 sailors per hull;
- LSD 41 class ~ 14 sailors per hull;
- LHD 1 class ~ 33 sailors per hull;
- DDG 51 class ~ 21 sailors per hull; and
- CG 47 class ~ 17 sailors per hull.

17. Senator MCCASKILL. Admiral Ferguson, to what extent are the increases in the size of the intermediate maintenance activities tied to these efficiency initiatives?

Admiral FERGUSON. The increase in military manning of the intermediate level maintenance component of the RMCs is not directly tied to the fiscal year 2012 efficiency initiatives. Rather, it was based on the recognition that having shore mainte-

nance billets will produce sailors with enhanced maintenance skills that will improve shipboard maintenance when those sailors return to sea. The result will be better trained crews that are able to identify and accomplish emergent corrective maintenance before it becomes beyond the ship's capability to correct. These recommendations were developed in the 2010 Fleet Review Panel.

18. Senator MCCASKILL. Admiral Ferguson, what billets are being cut to support these increases?

Admiral FERGUSON. The President's fiscal year 2012 budget submission supported DOD and CNO priorities to enhance Navy warfighting capabilities by reducing overhead ashore billets to fund critical fleet manpower requirements. Specifically, the Navy consolidated warfare centers, eliminated overlapping functions between organizations, and reduced the size of operational and shore staffs reducing end strength by 568 (384 in the Active component and 184 in the Reserve component). This included combining 2nd Fleet with U.S. Fleet Forces Command; disestablishing Surface Warfare Development Group; merging the Center for Naval Engineering into Surface Warfare Officer School and the Center for Naval Intelligence into Center for Information Dominance; and disestablishing the staffs associated with one Carrier Strike Group, three Submarine Squadrons, and one Destroyer Squadron.

NAVY SHIP SERVICE LIFE

19. Senator MCCASKILL. Admiral Ferguson, the Navy has set a goal of a 313-ship fleet. Despite the fact that it is short of the goal, it is decommissioning a number of ships while they still had serviceable life remaining and plans to decommission additional ships in the next few years. Recently, it has also deferred a number of maintenance availabilities, due to funding constraints. What steps is the Navy taking to ensure it makes steady progress toward its 313-ship fleet while facing an uncertain budget situation and ongoing maintenance requirements?

Admiral FERGUSON. The Navy's proposal to retire a number of ships before the end of their expected service life was a fiscal decision to balance risk and available resources across the Navy to maintain a ready force today and in the future. This is consistent with the Secretary of Defense's statement that "a smaller, ready, and well-equipped military is preferable to a larger, ill-prepared force." The Navy is working to reverse the negative trend in surface ship readiness by investing in mid-life availabilities to work off the identified surface ship maintenance backlog to enable ships and submarines to reach their expected service lives. The total President's fiscal year 2013 budget request (baseline plus OCO) fully funds the fiscal year 2013 ship maintenance requirement for the Navy's remaining ships and submarines, and sustains the force structure required to support the Maritime Strategy.

To mitigate structure shortfalls, the Navy will use spiral upgrades to existing ships to the maximum extent possible, extend the service lives of specific classes of ships, and maintains ships to enable them to reach their expected service life. These measures will help maintain the size of the battle force inventory during the heavy ship retirement period expected in the 2020–2030 timeframe.

The ultimate size of the fleet will be informed by the completion of a formal Force Structure Assessment (FSA) and the ongoing DOD review of its operational plans for potential regional contingencies.

20. Senator MCCASKILL. Admiral Ferguson, how does the Navy intend to redistribute the personnel billets on the ships that are the most recent to be decommissioned, i.e., the seven cruisers and the two amphibious ships identified as part of the fiscal year 2013 budget request?

Admiral FERGUSON. The billets associated with the proposed reduction of seven cruisers and two amphibious ships were cut, rather than redistributed, in the President's fiscal year 2013 budget request as part of the DOD-wide budget reduction effort. The individual sailors will be distributed to other ships as these platforms are decommissioned.

21. Senator MCCASKILL. Admiral Ferguson, given the adjustments in the strategic guidance, which appears to emphasize the importance of building partnerships and maintaining presence, what impact will this have on the demand for naval presence and the Navy's ability to maintain readiness of its fleet given a potential increased demand?

Admiral FERGUSON. The Navy is committed to meeting combatant commander demand as adjudicated in the DOD GFM process, while also balancing the required maintenance on each ship and aircraft in order to avoid reducing their service lives.

To achieve that goal, we are adjusting our Fleet Readiness and Training Plan to establish a sustainable OPTEMPO and complete required maintenance and training between deployments. This will constrain the number of ships and aircraft available to combatant commanders at times, but ensures ships and aircraft reach their expected service lives and avoids a further decrease in fleet capacity.

The cumulative impact of ship deliveries, projected operating patterns, and forward stationing ships yields an increase in day-to-day naval presence in the Asia-Pacific region from about 50 ships today to about 58 ships by 2020. Specifically, this increased presence results from forward stationing LCSs in Singapore, integrating forward operating Joint High Speed Vessels (JHSV) into the Pacific Fleet, and increasing amphibious ship and destroyer (DDG) presence in the Asia-Pacific region. More amphibious ships and DDGs will become available for other missions because the theater cooperation and maritime security missions they fulfill today will be taken on by JHSV, LCS, and Afloat Forward Staging Bases (AFSB). Collectively, these changes will help us meet the demands for partnership and presence that are so essential to the DSG while we simultaneously address our maintenance and readiness concerns.

OVERALL READINESS

22. Senator MCCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, DOD's new DSG released in January 2012, as well as the Secretary of Defense's accompanying document, "Defense Budget Priorities and Choices", make a number of statements which have implications for the readiness of the force. In the past, this committee, GAO, and others have called for DOD to develop a plan for rebuilding readiness that clearly identifies requirements, prioritizes these requirements, and ties them to resources. DOD has typically pointed to its budget request to reflect such a plan. Given the current readiness levels of each of the Services and plans to reduce the force structure and end strength, to what extent have the Services developed plans and established priorities for rebuilding readiness?

General AUSTIN. The Army has established priorities to resource units as they build readiness. Additionally, the Army is revising the force generation process which will better enable the Army to provide ready forces necessary to meet the Army's requirements from the NMS.

Admiral FERGUSON. Sustaining our readiness remains a top Navy priority in our fiscal year 2013 budget request. In building our budget, we focused on funding critical elements of readiness and balanced our investments in future capability, O&M, personnel, training, and spares. Another element of our fiscal year 2013 budget is the adjustment of the FRP cycle to provide dedicated time for training and maintenance while providing greater deployment availability. Our shipbuilding and aviation maintenance investments are focused on promoting readiness and support proven sustainment models by fully funding ship maintenance requirements. The fiscal year 2013 budget, including OCO funding, will sustain the Navy's readiness levels to support the anticipated needs of the combatant commanders, as adjudicated through the GFM process, with some capacity to provide surge forces in support of major contingencies or other emergent needs.

General DUNFORD. The Marine Corps has a strategic trajectory to reconstitute and reset to a ready force by fiscal year 2017. The Marine Corps' Total Force Structure Review, begun in 2010, aligns the Marine Corps to meet the DSG, constrained budgets, and lessons learned from 10 years of war—particularly lessons with respect to distributed operations. The Marine Corps' Operation Enduring Freedom Ground Equipment Reset Strategy, published in 2012, identifies the equipment that will be reset or divested and prioritizes investment and modernization decisions. The Marine Corps' budget requests achieve a necessary balance across its five readiness pillars (unit readiness, capacity versus requirements, high quality people, infrastructure sustainment, and modernization) to support institutional readiness, sustain operational requirements, and prepare Marine Corps Forces for crisis and contingency response. An ongoing comprehensive review of Marine Corps equipment inventories will validate reset strategies, future acquisition plans, depot maintenance programming, and modernization initiatives.

General BREEDLOVE. The Air Force has made hard choices to better align with the new DSG by trading size for quality. We will be a smaller, but superb, force that maintains the agility, flexibility, and readiness to engage a full range of contingencies and threats. Air Force readiness is comprised of complementary components such as flying hours, WSS, and facilities and installations; an acceptable readiness posture depends on good health in all of these key areas.

The emphasis on readiness in the new DSG reinforced Air Force focus on the importance of maintaining the flying hour program (FHP) as the foundation of our flying training. The fiscal year 2013 budget removes flying hours where associated with the retirement of some of our oldest aircraft and divestiture of single-role mission weapons systems. In the remainder of the FHP, however, levels are consistent with fiscal year 2012 levels to prevent further erosion of readiness. The fiscal year 2013 baseline FHP remains optimized as we continue to fly a significant portion of our hours in the CENTCOM AOR, but still poses a measured risk to our full spectrum training and readiness levels. We are also committed to a long-term effort to increase our live, virtual, and constructive operational training (LVC-OT) capability and capacity by funding improvements in our LVC-OT devices (e.g., simulators and virtual trainers) and networks.

During previous budget cycles the overall Air Force weapons system sustainment requirement increased each year due to sustainment strategy, the complexity of new aircraft, OPTEMPO, force structure changes, and growth in depot work packages for legacy aircraft. In fiscal year 2013, although the Air Force is retiring some combat, mobility, and ISR force structure, our overall WSS requirements and costs continue to increase. WSS is funded at 79 percent of requirement in the fiscal year 2013 budget. We maintained our readiness capability in the portfolio areas most directly affecting readiness such as aircraft, engines, and missiles, while taking some risk in areas that are less readiness-related in the short-term such as technical orders, sustaining engineering, and software. Additionally, the Air Force continues to conduct requirements reviews and streamline organizations and processes to reduce maintenance and material costs, develop depot efficiencies, and manage weapons systems requirements growth. The goal of these efforts is to sustain fiscal year 2012 WSS performance levels for fiscal year 2013.

The sustainment portion of facilities sustainment, restoration, and modernization was funded at just over 80 percent of the OSD facility sustainment model. Due to current fiscal realities, the DSG, the Air Force is also taking a deliberate pause in its military construction (MILCON) program, resulting in a nearly \$900 million reduction from fiscal year 2012 enacted levels. To manage the risk associated with these actions we continue civil engineering transformation to employ an enterprise-wide, centralized, asset management approach to installation resourcing which maximizes each facility dollar.

23. Senator McCASKILL. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, specifically, have the Services assessed the manning, equipping, and training priorities for a smaller force, and are these priorities reflected in the fiscal year 2013 funding request?

General AUSTIN. Yes. The Army's fiscal years 2013 to 2017 program resources a force decreasing in size yet maintaining the capabilities critical to providing flexibility for the National Command Authority in an uncertain future. The fiscal years 2013 to 2017 program reflects a ramp reducing our Active component end-strength to 490,000 soldiers by fiscal year 2017. The fiscal year 2013 budget request reflects a portion of that ramp. The costs for Active component soldiers exceeding 490,000 are carried in the OCO request. This additional end-strength represents our need to man forces to meet the demands of continuing operations in Afghanistan. In addition to the Active component reductions, the Army is also reducing its National Guard end strength to 353,200 soldiers in fiscal year 2017 and its Army Reserve end strength to 205,000 soldiers in fiscal year 2013. The Army has also adjusted its training and equipping strategies and resourcing to reflect these end strength reductions.

Admiral FERGUSON. Yes. The Navy's fiscal year 2013 budget submission reflects the priority we placed on readiness—manning, equipping, and training—over force structure in support of the new DSG. We managed the size and composition of the force, while investing in required manpower, selected ordnance, and training for the Fleet to ensure our force does not become hollow. The Navy will continue to prioritize readiness and ensure we do have more force structure than we can afford to man, equip, train, and maintain.

General DUNFORD. Yes, the Marine Corps accounted for its personnel drawdown when assessing its manning, training, and equipping priorities in the fiscal year 2013 budget submission. Marine Corps end strength reductions are a result of right-sizing the Marine Corps to meet the anticipated security environment after the drawdown in Afghanistan and to address the impacts of the Budget Control Act on DOD budgets. The force funded in the 2013 budget is fully capable of executing all assigned mission in the new DSG and is optimized for forward presence, engagement, and rapid crisis response. Fiscal year 2013 is only the beginning of the drawdown, and this will be a multi-year, phased approach that is expected to be complete

at the end of fiscal year 2016. Through a measured drawdown in end strength, we will keep faith with our marines and return to more sustainable deployment to dwell ratios. The drawdown plan ensures the Marine Corps remains the Nation's expeditionary force in readiness while simultaneously keeping faith with our marines and their families who have excelled during the last 10 years of combat operations.

When budgeting for training, the Marine Corps carefully constructs our O&M budget to complement all activities associated with preparing marines for deployment. It is important to note that O&M costs are not linearly related to changes in end strength and, as such, both a quantitative and qualitative approach is necessary in the development of the O&M budget. While some O&M costs will fluctuate as a function of end strength, the majority of O&M costs are tied to unit equipment and training readiness and will change based on force structure (i.e., number and type of units) and operational requirements/tempo vice end strength. In other cases, some O&M functions may be independent of both end strength and force structure (i.e., base security) and will remain constant regardless of the drawdown.

In the case of our investment accounts, the Marine Corps reviewed our tables of equipment as part of our force structure development to ensure our marines have the required equipment to execute all assigned missions. In some cases, the deactivation of units will be directly tied to reduced approved acquisition objectives (AAO), which results in purchasing less equipment. An example is in our Light Armored Vehicle (LAV) fleet; a force structure reduction of three LAV companies has yielded a reduction in the LAV AAO and an estimated cost avoidance of \$140 million in fiscal year 2013 that we have asked Congress to realign to other critical shortfalls. However, it is important to point out that costs associated with modernization and reconstitution efforts are not directly linked to the drawdown and are independent of end strength.

The Marine Corps maintains a longstanding reputation in DOD as being a frugal, lean Service that delivers the best value for the defense dollar. As such, the Marine Corps has adapted to budgetary reductions by continuing our tradition of streamlining operations and reinvesting savings in order to get the most out of every dollar. Our fiscal year 2013 budget submission reflects this mentality, and it is this commitment that has allowed us to continue to provide the best trained and equipped Marine Corps units to Afghanistan, even in this era of constrained resources.

General BREEDLOVE. The Air Force's fiscal year 2013 budget request reflects aggressive prioritization of limited resources, heavily informed by the new DSG, with regard to both capability and capacity for a smaller, ready force. To retain critical core Air Force capabilities and the ability to rapidly respond to mission demands, the Air Force balanced risk along with manning, equipping, and training priorities across all mission areas.

Fiscal realities and strategic direction means the Air Force will continue the long-term trend of accepting a smaller force to ensure high quality. In planning for a smaller force, Air Force decisions favored retention of multi-role platforms over those with more narrowly focused capabilities—for example, F-16s over A-10s and F-15Cs, and C-130s over C-27Js. Where feasible, we sought to divest smaller fleets of highly specialized aircraft and stressed common configurations for key platforms in order to maximize operational flexibility and minimize sustainment costs. In correlation to the reductions in our aircraft force structure, we are also adjusting our end strength numbers. Maintaining the appropriate mix of forces between the Active and Reserve components is critical to sustaining Air Force capabilities for forward presence, rapid response, and high-rate rotational demands within a smaller overall force. Over the years, we have adjusted the mix between Active and Reserve components to ensure we maintain a ready and sustainable force and can meet surge and rotational requirements. In spite of aircraft divestments and reduction in personnel, we are committed to executing the defense strategy and will ensure America's Air Force remains ready to perform its mission. By properly funding areas such as flying hours, weapon system sustainment, and facilities and installation, we can ensure training requirements are met to support desired readiness levels.

MARINE CORPS MOVE TO GUAM

24. Senator MCCASKILL. General Dunford, the United States and Japan are reconsidering some of the terms of the agreement to move about 8,000 marines from Okinawa to other parts of the Asia-Pacific region, including to Guam, Hawaii, and possibly other locations. Earlier plans, and specifically the plans articulated in the 2006 Roadmap for Realignment agreement, contemplated a distribution of marines which

was not preferred by the Marine Corps. Has the Marine Corps been involved in this latest reconsideration of the terms of the agreement and are you satisfied that this renegotiation will result in a distribution of marines on Guam and elsewhere that will be consistent with the Marine Corps' preferred laydown and will be one that the Marine Corps can support?

General DUNFORD. The Marine Corps was involved with the renegotiation of the U.S. Government/Government of Japan 2006 Realignment Roadmap and assisted in the development of the April 27, 2012 Bilateral Security Consultative Committee statement.

The new Pacific laydown plan, termed Distributed Laydown, has been designed to achieve a more geographically-distributed, operationally-resilient, and politically-sustainable force structure in the region while still adhering to the basic tenants of the 2006 agreement. Assuming the availability of additional amphibious, strategic, and intra-theater lift to support the corresponding PACOM concept of operations, the Marine Corps is fully supportive of the Distributed Laydown.

25. Senator MCCASKILL. General Dunford, the plans that are shaping up for marines in the Asia-Pacific will result in marines spread throughout the region in places like Okinawa, Guam, Hawaii, Australia, and possibly the Philippines. At a recent Marine Corps Association event, in reference to these plans for the laydown of marines in the Pacific, you were quoted as saying that "the Marine Corps logisticians will have to figure out how to sustain a force that's distributed in a way that's much greater than anything we've done before." Could you expound on this challenge and talk about what the Marine Corps is doing now, and will have to do in the near future, to address these new challenges?

General DUNFORD. The Marine Corps initiated logistics support for this significant challenge in 2005 through the development of Distributed Operations (DO) and now the Enhanced MAGTF Operations (EMO) concepts. From the start, our logisticians have been involved in developing the requisite logistics concept of operations to support these new operating environments. Additionally, these challenges are seen today in Afghanistan and the lessons learned are influencing the development of new techniques, tactics, and procedures.

Current Marine Corps Expeditionary Unit (MEU) operational experience further emphasizes the importance to plan for potential distributed and disaggregated operations. MEUs have been tasked and have responded simultaneously to geographic combatant command requirements across multiple AORs in support of missions ranging from non-combatant evacuation, theater security cooperation, disaster relief, and air combat operations.

In the very near future, the Marine Corps will complete initial fielding of our modernized logistics information system, GCSS-MC. It will be deployed with our forces across the globe and enables the ability to source, track, expedite, and receipt for sustainment supplies at any location—afloat and ashore.

One system of note that is proving very capable in this environment is the Immediate Cargo Unmanned Aircraft System (UAS) initiative. A Military Utility Assessment (MUA) is underway now in Afghanistan. The Cargo UAS has the potential to be a transformational platform that provides a flying truck capability to deliver equipment and support to remote/austere locations when threat or weather precludes the use of ground convoys or manned aircraft. Cargo UAS is reducing sustainment requirements and vulnerability of logistics lines of communication.

The Marine Corps is also expanding the capability to provide initial expeditionary logistics from a sea-base outside the range of potential adversarial A2/AD capabilities. Our forward deployed amphibious ships and Maritime Prepositioning Squads (MPSRON) provide our MAGTFs with initial expeditionary logistic capacities needed and play key roles in our Concept of Operations (CONOP) for expeditionary sustainment in the littorals.

QUESTIONS SUBMITTED BY SENATOR MARK BEGICH

REDUCTION-IN-FORCE AUTHORITY

26. Senator BEGICH. General Austin, as you may know, Army Installation Management Command has recently requested reduction-in-force (RIF) authority to reduce civilian personnel numbers back down to 2010 levels. I appreciate the Army's initial attempt to utilize voluntary measures to implement the reductions. However, I am concerned about the utilization of a RIF to implement reductions, especially when certain actions would alleviate the need for the layoffs and preserve a qualified workforce at some locations, specifically, earlier implementation of the Army's

materiel enterprise—which transfers operational control of some functions to Army Materiel Command (AMC) from the Directorate of Logistics (DOL). For example, at Fort Wainwright and Fort Richardson the transfer of the functions and personnel to AMC is not scheduled to occur until fiscal year 2013. Yet, the personnel must come off DOL books by the end of fiscal year 2012. Essentially, people in these functions will be laid off, when they will be needed by AMC. Has the Army considered transferring the DOL functions to AMC earlier—even by a few days—to avoid a RIF and maintain a qualified workforce? Why or why not?

General AUSTIN. The Installation Management Command (IMCOM) is working closely with AMC to develop strategy to avoid or minimize the loss of DOL employees at all locations. In the case of Fort Wainwright and Fort Richardson, specifically, there will be no RIF to affect the mission transfer. IMCOM is using all available voluntary tools to reduce our strength to the civilian personnel reduction target directed by the Secretary of Army.

ASIA-PACIFIC PIVOT

27. Senator BEGICH. General Austin, as the Services implement the new DSG with a renewed focus on the Asia-Pacific region, our posture in the region will become increasingly important. Would you agree Alaska and Hawaii—two States strategically located to enable the basing, staging, and training of forces to promote U.S. interests in the Asia-Pacific region—are critical and significant to the new guidance?

General AUSTIN. Basing in Alaska and Hawaii will continue to provide vital staging and training areas for forces assigned to the Pacific, and is critical to the execution of our Asia-Pacific Strategy. In light of this, the Army has made major investments in the training infrastructure in Alaska and Hawaii. Since 2000, these investments have included the acquisition of 24,000 acres for training in Hawaii, the construction of four training and simulation facilities totaling \$59 million (MILCON), and 31 ranges including small arms, crew, collective live fire, and urban training ranges totaling \$549 million (MILCON). Three additional small arms ranges totaling \$47 million were included in the fiscal year 2013 budget. Both Alaska and Hawaii will receive the Army's integrated training environment by fiscal year 2016 and U.S. Army, PACOM is assessing what is required beyond those investments to address the new DSG. There are also four installation projects in the fiscal years 2013 to 2017 Program Objective Memorandum (POM) to help develop infrastructure and quality of life. Our forces based in Alaska and Hawaii will be crucial in deterring conflict and, when necessary, winning our Nation's wars in the region. They will also play an important role in expanding our presence in the region through exercises and training with our regional partners and the execution of other operations that will build relations throughout the region and reinforce our commitment to our Asia-Pacific partners.

QUESTIONS SUBMITTED BY SENATOR KELLY AYOTTE

PATRIOT MODERNIZATION

28. Senator AYOTTE. General Austin, what is the status of the PAC-3 Patriot modernization program?

General AUSTIN. The Army's Patriot modernization has been a continuous effort that has increased in scope in the last 2 years. The Army's broad Patriot modernization effort encompasses synchronized research, development, testing and evaluation and procurement investments that will enhance Patriot communications, interoperability, electronic protection, and supportability; provide training equipment updates at the school; and meet threat evolution to keep Patriot operationally relevant in the field. Modernization is also synchronized with ongoing Patriot sustainment activities to keep fielded systems viable.

The Army is initiating multiple modernization efforts to the Patriot program. This includes interoperability with Terminal High Altitude Area Defense, Upper Tier Debris Mitigation, and multiple software upgrades to defeat emerging threats and leverage new hardware capabilities. Internet protocol communications will continue to be modernized with significant investments in 2014 and 2015. The radar modernization currently underway procures the bulk of hardware in 2013 and 2014 with continued support and spares purchased through 2017. The Modern Man Station procurement in 2013 and 2014 will bring in greatly needed upgrades to the command shelters that also address obsolescence. Software upgrades are planned for release to the field every 3 years that increase radar and other system capabilities devel-

oped to defeat threat evolution and interoperate with other air and missile defense systems.

Development continues to evolve Patriot software and the ground system in the face of the changing threat. Modernization of Patriot will enable integration of the system into the Integrated Air and Missile Defense (IAMD) Architecture. The President's budget 2013 request supports the Army efforts to keep Patriot reliable and tactically relevant against current and near-term future threats, until at least 2040.

29. Senator AYOTTE. General Austin, what is the Army's current plan for the development and procurement of upgrade packages for the Patriot communications, command and control, radar surveillance, and missile guidance systems, particularly the missile segment enhancement program?

General AUSTIN. The Army has an integrated long-term plan to develop and procure Patriot upgrades based on evolving threats and requirements established by the warfighter. Patriot modernization efforts, in coordination with reliability and maintainability modifications, depot recapitalization, and software upgrades enable the use of new hardware to meet evolving threats and protect critical assets.

Communications

The Army is investing in communications, command, and control upgrades from fiscal year 2012 to fiscal year 2017 and beyond. Communication enhancements will improve beyond line-of-sight communications within the Patriot battalions and transition to more modern interface protocols, providing additional capability to the warfighter and enabling migration to the IAMD architecture.

Command and Control

The Modern Man Station will replace the original monochrome displays (long out of production) in the crew stations with modern flat panel displays and enable future improvements in the man-machine interfaces.

Battery Command Post Tactical Command System improves software upgrade efforts by increasing capabilities to the warfighter, and reduces logistics support to maintain these command shelter systems well into the future. This effort includes re-hosting software on the new workstations, providing spares, provisioning fielding packages, logistics support, software validation and verification, engineering input to technical manuals, and field service engineering support.

In fiscal year 2016, the Army will begin to incorporate the Integrated Battle Command System (IBCS) into the Patriot command and control architecture. The IBCS is the gateway to integrate Patriot into the IAMD, which will allow Patriot to leverage non-organic sensors and will unite Army Air and Missile Defense under a common command and control architecture.

Radar Surveillance

The Army radar upgrade investment is significant from fiscal year 2012 to fiscal year 2017 and beyond. The Radar Digital Processor replaces obsolete analog components no longer produced with current supportable technology, enabling critical capability enhancements such as the Identification Friend or Foe Mode 5, Levels 1 & 2 (further reducing the potential for fratricide) and allows further improvements in Combat Identification techniques. The digitization of the radar enables several electronic protection techniques previously unavailable to Patriot. The digitization of the radar is a key requirement to put the Patriot radar on the network as part of the migration to the IAMD architecture. Increased radar sensitivity and threat sensing capability takes advantage of Missile Segment Enhancement (MSE) interceptor's increased range and altitude.

Missile Guidance Systems

The PAC-3 MSE missile is the next generation Patriot missile. Fiscal year 2013 funds complete Initial Production Facilitization. The MSE missile is now a medium to low risk effort with a production decision scheduled for the end of fiscal year 2013 and first deliveries scheduled to begin in the 4th quarter of fiscal year 2015. This interceptor has a similar guidance system to the current PAC-3 missile, but has upgraded software, increased range and maneuverability that allow for more optimal trajectories. The radar digital processor ground system improvements, in combination with the missile capabilities, give MSE longer range target engagement capabilities, enabling it to defeat more advanced threats at a greater distance.

Launcher upgrades are required for the PAC-3 and MSE missiles. Enhanced Launcher Electronics Systems (ELES) upgrade kit procurement is underway. ELES upgrades enable the launcher to fire the PAC-3 missile. A modified ELES kit will enable MSE launch capability as well. The Army goal is to upgrade all U.S. Patriot launchers to PAC-3 capable as soon as feasible, prior to the retirement of the PAC-

2 and GPS Embedded Module family of missiles. Approximately 23 percent of launchers fielded to operational units today are PAC-3 capable. The President's budget 2013 request includes funding for 38 ELES upgrade kits, with additional kits to follow in fiscal year 2014 and beyond.

MILITARY RISK FROM THE DEFENSE BUDGET CUTS

30. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, the budget request for fiscal year 2013 represents the first year of \$487 billion in defense budget cuts over the next 9 years. The Services have responded with significant proposed end strength reductions, combat unit eliminations, weapons systems terminations, and other cost-cutting measures. These reductions will impact the ability of each Service to respond to the requirements of combatant commanders. In your opinion, in which areas is each Service incurring the most military risk that you would recommend mitigating through the restoration of funding?

General AUSTIN. DOD and the President released a new set of defense priorities in January 2012. Those priorities contain an acknowledgement that there will be some missions that DOD will no longer be sized to accomplish. In our fiscal year 2013 budget, the Army responded to those new priorities. We have developed a ramp for the drawdown in Army end strength that is very methodical and deliberate, and which will allow us to transition soldiers in a reasonable manner. With our scheduled rate of reduction we are confident that we can continue to meet our commitments in Afghanistan and our other requirements will ready rotational forces, and the fiscal year 2013 budget request will meet our needs in that regard.

If there is a significant and sustained demand for deployable forces above what is envisioned in the new defense priorities, it is likely that we would incur additional risk. However, we believe that we can mitigate that risk through what we call regeneration and investment. Regeneration will give us the ability to change course to surge, regenerate, and mobilize forces quickly, if needed. Investment means managing the force in a way that protects the Army's ability to regenerate capabilities that might be needed to meet future, unforeseen demands. These involve reexamining the mix of elements in the Active and Reserve components, maintaining a strong National Guard and Army Reserve, retaining a healthy cadre of experience noncommissioned and mid-grade officers, and preserving the health and viability of the Nation's industrial base.

Admiral FERGUSON. The projected Navy battle force is fully capable of meeting the strategic guidance found in Sustaining U.S. Global Leadership: Priorities for 21st Century Defense. The Navy prioritized readiness and capability against emerging threats over force structure in our budget request to ensure our Navy is ready and relevant not only today but also in the future.

General DUNFORD. We are currently performing impact assessments of sequestration that consider some of these factors. However, we are heavily focused on turning off sequestration rather than assessing its impacts.

The Marine Corps recognizes the fiscal realities that currently confront the United States, and we have already made hard choices inside the Service to ensure that we ask only for what we need as opposed to what we may want. The Marine Corps is currently taking steps to rebalance the force while simultaneously posturing it for the future; additionally, we are continuing to maintain our forward presence and provide Marine Corps combat forces to Afghanistan.

The Marine Corps have accepted risk in the budget. Reduced end strength creates risk in warfighting capacity as the operating force manning levels will go from 99 percent for both officer and enlisted ranks to 95 percent for officers and 97 percent for enlisted. However, this risk is manageable and provides an affordable solution that maintains a ready, capable, and more senior force in support of the new DSG. This enduring strength level and force structure ensures that the Marine Corps retains the necessary level of noncommissioned officer and field grade officer experience and warfighting enablers to support the future security environment and needs of the Nation after the drawdown in Afghanistan.

General BREEDLOVE. The Air Force continually looks for ways to minimize risk, given the current fiscal environment. We've balanced risks in light of new DSG trading size for quality and putting a premium on readiness to prevent a hollow force. Our partnership with the Navy to pursue Air-Sea Battle is one way we will sustain our Nation's military advantage as a smaller joint force faces emerging A2/AD threats. Discussion on levels of risk, specific to our enduring capabilities and core functions, are classified and I can provide those details to you in a separate forum.

31. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, to the best of your knowledge, have the combatant commanders had an opportunity to review their operational plans to make adjustments based on the decreased availability and timeliness of resources?

General AUSTIN. As part of the Joint Planning and Execution process, the Services and Joint Staff have the opportunity, along with the combatant commanders, to routinely review and assess the feasibility of operational plans and our readiness to support them. Based on these assessments, the combatant commanders have the opportunity to adjust plans while the Services make decisions on the allocation of resources to ensure that we can realistically provide combatant commanders the resources needed to execute, if required. Additionally, the CJCS has conducted a series of strategic seminars that have explored how we might adjust our plans based on the new DSG and with resources programmed in the most recent President's budget.

Admiral FERGUSON. The Navy annually updates the forces available for planning purposes in the GFM Implementation Guidance Apportionment tables. These tables document the number of forces that can be deployed to support the combatant commanders during a major contingency and reflect the current constraints. In turn, the combatant commanders review current forces availability from the Services through the Joint Staff-led Joint Combat Capability Assessment (JCCA) process and update their plans biannually. As an initial step in the implementation of the new DSG, DOD conducted three strategic seminars where the combatant commanders met personally with the Service Chiefs to discuss force structure adequacy for current plans. Detailed combatant commander review of their specific plans is ongoing.

General DUNFORD. The Marine Corps annually updates the forces available for planning purposes in the GFM Implementation Guidance Apportionment tables. These tables document the number of forces that can be deployed to support the combatant commanders during a major contingency and reflect the current constraints. In turn, the combatant commanders review current forces availability from the Services through the Joint Staff led JCCA process and update their plans biannually. As an initial step in the implementation of the new DSG, DOD conducted three Strategic Seminars where the combatant commanders met personally with the Service Chiefs to discuss force structure adequacy for current plans. Detailed combatant commander review of their specific plans is ongoing.

General BREEDLOVE. Yes, the combatant commanders and their subordinate Service component commands review their plans annually as part of the JCCA process. In addition to the JCCA process, DOD conducts a quarterly Joint Forces Readiness Review of the level of current risk relative to our forces capability to carry out their wartime mission.

RISK IN OPERATIONAL PLANS

32. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, in the military drawdowns after World War II, Vietnam, and the Cold War, we went through a period of hollow forces, in which combat capability on paper was not supported by the manning and training of actual units. To avoid this same fate, the Services have taken steps with the drawdown proposed in this budget to actually reduce units along with end strength to ensure the remaining units can be manned at full strength. But now, we run the risk that major combat units are dual or triple tasked by combatant commanders, which leaves us with the same capability gaps. In your opinion, have the Services worked with combatant commanders to ensure that the reduction of major combat units is reflected in updated operational plans?

General AUSTIN. Yes, and we continue to do so. Army commands continually update and refine operational plans to identify capability gaps, shortfalls, and training requirements. The Army is improving how it apportions forces to combatant commanders to provide trained and ready forces to meet any contingency. The Army is also regionally aligning forces to combatant commands to provide increased capabilities to execute theater shaping operations and contingencies. Simultaneously, the Army is also developing investment and regeneration strategies which posture the force to reconstitute capabilities and formations in response to crisis or war. Most recently, the Army has worked with the other Services and all the combatant commands through the CJCS Strategic Seminar Series to identify capability gaps and assess our ability to meet requirements to execute top priority plans.

Admiral FERGUSON. The Navy annually updates the forces available for planning purposes in the GFM Implementation Guidance Apportionment tables. These tables document the number of forces that can be deployed to the combatant commanders

during a major contingency and reflect the current constraints. Additionally, the combatant commanders review current forces availability for their plans through the Joint Staff-led JCCA process and update their plans biannually. Furthermore, DOD recently conducted three Strategic Seminars where the combatant commanders met personally with the Service Chiefs to discuss force structure adequacy for current plans. The Navy has an ongoing dialogue with the combatant commanders regarding projected force structure as they review details of their operational plans.

General DUNFORD. The Marine Corps, via its Service components and the Joint Staff, has and will continue to work closely with the combatant commanders as operational plans are updated, developed, and assessed. The new DSG provides the framework for DOD, and the Services as force providers for the Joint Force, to balance the demands of the future security environment with the realities of our current fiscal constraints. We expect ongoing and future updates of operational plans will reflect this guidance. Additionally, we expect insight gained through recent and ongoing senior level discussions, in which the Marine Corps has participated, regarding executing the new military strategy with the programmed force will inform updates of operational plans.

General BREEDLOVE. The Joint Forces Readiness Review requires a quarterly assessment of our capability to carry out operational plans. If the combatant commands assess that they do not have the required forces, they report this to Congress by means of the Quarterly Readiness Report to Congress and DOD via the Chairman's Risk Assessment.

33. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, what metrics do the Services have in place to ensure that the budget cuts over the next 10 years do not lead to a hollow force in terms of equipment and training? In other words, how will we know a hollow force when we have one?

General AUSTIN. A balanced force maintains a proportional distribution of available resources against three equally important components: manpower, modernization, and readiness. ARFORGEN establishes clear, quantifiable aim points for manning, equipping, and training units as they move through the progressive readiness model. These aim points along with monthly reporting, commander comments and trend analysis of manning, equipping, and training will help identify potential future shortfalls. The Army has coordinated efforts with the other Services, the Joint Staff, and OSD to identify medium- and long-term indicators to help identify future potential readiness issues as well as the strategic levers we can adjust to correct these issues. The Army will continue to use and refine these metrics and the analysis associated with manning, equipping, and training to measure readiness. By closely monitoring these metrics and ensuring the fidelity of the systems the Army uses the Army will maintain visibility on any hollowing of the Force. The Army will continue to invest its resources to ensure readiness aim points are met through increased training and modernized equipment.

Admiral FERGUSON. The Navy uses multiple sets of metrics to measure equipment and training readiness. FRP Operational Availability reflects ready forces available for presence and surge, while DRRS-Navy (DRRS-N) resource area metrics assess the overall readiness of the force. A decline in the operational availability of our forces, a decline in individual unit readiness metrics, or a significant increase in deferred maintenance may be seen as early indicators of declining readiness.

General DUNFORD. Hollow forces were typically the result of reductions in defense spending without concomitant reductions in forces—and thus there was not enough equipment to train those levels of manning. The Commandant established as a guiding principle for the Marine Corps, as it prepares for the future, the metrics to monitor manning, equipment, and training levels in the Marine Corps' manpower, supply, and maintenance systems and in the DRRS. Additionally, the Chairman's JCCA process provides near-term analyses of readiness, assesses DOD's ability to execute required priority plans, provides a framework for conducting commanders' readiness assessments, and renders visibility with respect to readiness issues across the combatant commands, Services, and combat support agencies.

General BREEDLOVE. Preserving readiness and avoiding a hollow force was a non-negotiable priority for the Air Force and DOD in developing the fiscal year 2013 budget. We accomplished this by prioritizing readiness over force structure. A smaller ready force is preferable to a larger force that is ill-prepared because it lacks adequate resources. We will avoid a hollow force by protecting readiness at any force level, and strengthen the integration between our Total Force team of Active Duty, Guard, and Reserve airmen. We are slowing modernization, terminating, or defer-

ring numerous acquisition programs, but at the same time, protecting the key programs most critical to future Air Force capabilities.

Currently the Air Force Directorate of Studies & Analyses, Assessments, and Lessons Learned (A9) is building a framework to codify our metrics and the RAND Corporation has started a study on this effort. The new DSG and fiscal realities necessitate setting new thresholds for failure and success in our force structure and mission accomplishment. The Air Force Chief of Staff's deadline is to develop metrics and leading indicators by October 1, 2012. The Air Force Readiness Management Group has taken on the task of validating the results of the A9-led effort. We will then determine the measurements for a hollow force. As the Air Force works to mitigate budget cuts over the next 10 years, our leaders will continue to closely watch readiness trends to ensure we remain responsive and effective.

34. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, what are the warning signs?

General AUSTIN. A hollow force is a military force that appears mission-ready but, upon examination, suffers from a shortage of personnel, equipment, and maintenance or from deficiencies in training. A hollow force occurs when decisions are made that take a disproportionate share of resources from one or more components of personnel, equipping, and training, or that take too many resources too quickly so that reductions are forced at a pace that precludes force readiness. In conjunction with DOD, the Army is conducting a review of the indicators that could signal trends for strategic readiness. The Army has coordinated efforts with the other Services, the Joint Staff, and OSD to identify medium- and long-term indicators covering manning, training, sustaining, and infrastructure needs to help identify future potential readiness issues as well as the strategic levers we can adjust to correct these issues. By being aware of these indicators and understanding how to quantitatively measure them the Army can begin to address shortfalls and warning signs to keep from becoming a hollow force.

Admiral FERGUSON. The Navy uses the FRP Operational Availability across the FYDP to provide a ready reference to measure Navy performance in achieving both presence and Major Combat Operations response in support of the combatant commanders. The exact FRP Operational Availability required for each type of combat power the Navy generates each year depends on the projected GFM plan for the year, plus surge requirements. It is stated in three terms (the number of units forward, plus the number of units ready to surge within 30 days, plus the number of units ready to surge within 90 days). This can also be applied as a hollow force indicator.

For individual units, The DRRS-N provides an indication of the readiness levels of individual units.

General DUNFORD. Throughout the sustained deployments of Operation Iraqi Freedom, Operation New Dawn (OND), and OEF-Afghanistan, the Marine Corps has participated in several Chairman of the Joint Chiefs JCCAs. These assessments provided a snapshot of service operational and strategic readiness and determination of the ability to support the NMS.

Although the uniqueness of individual JCCA plan assessments did not permit for cumulative trend analysis, there were reoccurring inputs to Service plans that when addressed holistically did offer warning signs that Marines Corps support to a combatant commander's operational plans offered risk. Specifically, the Marine Corps identified three signs of risk in its support to operational plans.

First, in every JCCA plan assessment the Marine Corps identified significant numbers of units as sourcing solutions that were in a reduced capacity (C3) due to a lack of personnel, training, or equipment. Additionally, in several JCCA plan assessments there were specific unit requirements that the Service was unable to source, as all available units (not deployed and not in dwell) were in a non-mission capable (C4) status due to personnel, training, or equipment.

When challenged by an unsourced operational plan requirement, the Service offered the Joint Staff and combatant commander a mitigating solution by way of "in lieu of" sourcing. This additional step to fulfill requirements increased Service risk to source, as the in lieu of force was not fully trained to the plan's mission requirement.

The second sign of risk to combatant commander operational plans, highlighted by a JCCA plans assessment, was no single Marine Expeditionary Force (MEF) capable of independently sourcing all requirements of a major contingency operation. As a result of reduced unit readiness and availability, contingency sourcing of a combatant commander's requirements mandated global sourcing. This reduced the cohesion of the overall organization; hindered command relationships based on

shared experiences and training, and required the Marine Corps to establish unity of effort and unity of command prior to initiating tactical or operational action.

Finally, with the global sourcing of units, a third sign of risk to operational plans was the Marine Corps' inability to train and equip to specific regional requirements. Units were unable to focus on their assigned mission, become familiar with a region, or deploy to the area for training.

A further risk to the operational plans, not addressed here, was combatant commanders adjusting their mission requirements, thereby sacrificing their plan, as a result of the global sourcing shortfalls and reduced readiness of the Marine Corps. This risk can only be addressed by the combatant commander.

Unit cohesion is a service risk incurred in supporting operational plans. Our forward deployed units have equipment and personnel above standard allowances. Ensuring our committed forces are properly supported we pull people and equipment from home station units.

General BREEDLOVE. In general, risk may be viewed in terms of capacity, capability, and readiness. Risk increases when: the force lacks the capacity to source all requirements and execute the assigned mission; the force does not have the technologically advanced platforms and weapons to dominate the fight; or the force is not ready because it is inadequately resourced and sustained in terms of personnel, training, and equipment (i.e., the force is hollow). Warning signs can generally be found in funding shortfalls in these key areas relative to capacity and capability requirements, as well as negative readiness trends identified in the DRRS or the Status of Resources and Training System. The Air Force closely monitors these and other leading indicators and applies predictive analytic tools to forecast future readiness and risk.

The specific Air Force risks to operational plans are reported through classified channels.

READINESS RISKS ASSOCIATED WITH THE SIZE OF THE NAVY FLEET

35. Senator AYOTTE. Admiral Ferguson, earlier this year, in his prepared statement for the Navy posture hearing, referring to the size of the Navy, Secretary Mabus wrote that quantity has a quality of its own. He also wrote that building up the number of ships in our fleet has been a priority for this administration from day one. In 2011, the CNO testified that the Navy requires a minimum of 313 ships to meet operational requirements globally. Does the Navy still have a valid requirement for 313 ships?

Admiral FERGUSON. The requirement for 313 ships is based on the 2005 Quadrennial Defense Review (QDR). We are preparing a FSA based on the new DSG to validate the minimum number of ships to meet operational requirements and capabilities globally. The FSA is currently being staffed within DOD.

36. Senator AYOTTE. Admiral Ferguson, currently the Navy has 285 ships. Is it correct that the Navy is not projected to increase the number of ships to 300 until 2019?

Admiral FERGUSON. Yes. The Annual Report to Congress on the Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2013 projects the battleforce inventory to reach 300 ships in fiscal year 2019.

37. Senator AYOTTE. Admiral Ferguson, what specific readiness risks are we incurring by maintaining a fleet well short of the requirement?

Admiral FERGUSON. Specific risks include response time, capacity to meet contingency plans, and capability to pace emerging threats. Our assessment is the projected Navy battle force is fully capable of meeting the strategic guidance found in Sustaining U.S. Global Leadership: Priorities for 21st Century Defense. In addition, our construction plan must sustain the national shipbuilding design and construction base.

38. Senator AYOTTE. Admiral Ferguson, what has changed in the world to convince the Navy that it needs fewer ships and submarines?

Admiral FERGUSON. Our assessment is our projected Navy battle force is fully capable of meeting the strategic guidance found in Sustaining U.S. Global Leadership: Priorities for 21st Century Defense. The Navy completed a FSA based on the new DSG to validate the minimum number of ships to meet operational requirements and capabilities globally. The FSA is currently being staffed within the Navy and once approved by the Secretary of the Navy, it will be reviewed by the Secretary of Defense for approval.

39. Senator AYOTTE. Admiral Ferguson, how will the Navy support a shift to the Asia-Pacific region as described in the administration's NMS while the budget request calls for a reduced requirement for ships and submarines?

Admiral FERGUSON. The Navy is resourced and aligned to sustain its ability to assure access to the entire Asia-Pacific region and implement the missions outlined in the DSG. In the Navy's fiscal year 2013 budget submission, we retained the carriers and large-deck amphibious ships and the end result in fiscal year 2017 will be the same number of combat ships as today (285 ships). The Navy is conducting a careful review of our strategic laydown and dispersal of ships and aircraft in support of the 2012 DSG emphasis on the Asia-Pacific region. This review balances ship decommissions and deliveries (outlined in the Shipbuilding Plan) with operational, infrastructure, and maintenance requirements and ensures dispersal of critical assets.

The Navy is renewing its emphasis in the Asia-Pacific region in four ways: the ship and air forces built and deployed to the region; the capabilities developed and fielded for the region; the intellectual capital applied to Asia-Pacific security challenges; and in the homeporting balance of U.S. ships toward the Pacific coast and the Asia-Pacific region.

First, the cumulative impact of ship deliveries, projected operating patterns, and forward stationing ships will yield an increase in day-to-day naval presence in the Asia-Pacific region from about 50 ships today to about 58 ships by 2020. The Navy's shipbuilding and aviation plans also sustain today's level of carrier and large-deck amphibious ship operations. Specifically, this increased presence results from forward stationing LCS in Singapore, integrating forward operating JHSV's into the Pacific Fleet, and increasing amphibious ship and DDG presence in the Asia-Pacific region. More amphibious ships and DDGs will become available because the theater cooperation and maritime security missions they fulfill today in other regions will be increasingly conducted by JHSV, LCS, and AFSBs. These new ships enter the fleet over the next several years.

Second, using relevant aspects of the Air-Sea Battle concept, the Navy will continue integrating capabilities essential in the Asia-Pacific region, particularly those needed to assure access. The Navy is also preferentially deploying platforms with the newest capabilities to the Asia-Pacific region.

Third, increasing the Navy's emphasis on the Asia-Pacific region also means rebalancing intellectual capital and leadership attention toward the region. There are three main initiatives to accomplish this. The Navy is sharpening its focus on the warfighting missions that are most important in the Asia-Pacific—ISR, ASW, strike, ballistic missile defense (BMD), air defense, and electronic warfare. The Navy is also developing its people to serve in the Asia-Pacific region, emphasizing the requirement to understand its unique geopolitical and operational environment. And, the Navy has increased efforts to reassure our allies and strengthen partnerships in the Asia-Pacific region.

Finally, the Navy continues to rebalance homeports toward the Pacific. In conjunction with the fiscal year 2013 procurement and force structure changes described above, the Navy completed an overall assessment of strategic homeporting. We will be adjusting the homeports of ships to support the Navy's goal of 60 percent of the fleet being homeported in the Pacific by 2020.

With new ships and aircraft, advanced capabilities to meet emerging threats, and new concepts to employ them, the Navy's effectiveness and presence in this region will increase over the next several years. Along with this trend, our network of maritime partnerships is expanding in recognition of shared security and economic interests, affording us additional places from which to operate on a sustainable basis.

LOGISTICAL CHALLENGES IN ASIA

40. Senator AYOTTE. General Dunford, the Marine Corps recently announced its future force posture in Asia. You are quoted as saying this force posture will consist of about 2,500 marines in Australia. Hundreds of them are training in and around Southeast Asia on a daily basis, hundreds of marines are training in the Philippines, about 5,000 marines are in Guam, about 11,000 on Okinawa, and another 4,000 on Iwakuni. You have also said that you have been lying awake at night worrying about the logistical challenges associated with the future Marine Corps posture in Asia. Under this planned force posture in the Pacific, what exactly are the logistical challenges the Marine Corps will confront to maintain readiness while meeting the requirements of the combatant commanders?

General DUNFORD. As the Marine Corps reorients forces throughout the PACOM AOR in support of combatant commander requirements, the logistical challenges

will be many and we do not have all the answers at this time; however, the tyranny of distance associated with the Pacific laydown will be the most challenging logistical issue the Marine Corps will confront.

Current proposals have Marine Forces in the Pacific operating from mainland Japan, Okinawa, Guam, Hawaii, Australia, and in CONUS. We are looking at this challenge from the tactical, operational, and strategic levels and planning is ongoing within HQMC, III MEF and Marine Forces Pacific (MARFORPAC) to further define requirements and develop Courses of Action/Concepts of Logistical Support. Force laydown will drive the concept of logistics support.

In addition to maximizing organic Marine Corps logistic support to units across the region, the Marine Corps looks to continuing our partnerships with U.S. Transportation Command and the U.S. Navy for movement of personnel/equipment/supplies. Additionally, leveraging a combination of Host Nation and other Contract Support, Acquisitions and Cross Servicing Agreements, Commercial Logistical Services (ie: FedEx), and dedicated Marine Corps government employees will be necessary to meet logistics support requirements.

41. Senator AYOTTE. General Dunford, what will you need from the Navy, including amphibious ships and maritime prepositioned assets, to meet training and contingency operational requirements in that region?

General DUNFORD. The planned Marine Corps redistribution in the Pacific provides new challenges for the movement and maneuver of forces. Rotational forces in Australia and Guam will require amphibious shipping in order to accommodate annual seasonal patrol requirements within the PACOM AOR. In addition to amphibious warships, other types of vessels such as JHSVs, high speed transports, and maritime prepositioning ships will all be required to augment and support the movement of Marine Forces.

Current and future Marine Expeditionary Brigade/Expeditionary Strike Group (MEB/ESG) aggregation capability and closure rates need to be in concert with Operational Plan requirements. Adequate lift assets, in all forms, will be a prerequisite in expanding the naval capability to provide contingency response and deterrence. The expansion and distribution of forces in this region will also provide an increased theater security cooperation capability, while retaining the ability to transition as a ready force to respond to contingencies and other operational requirements.

The increased demand for amphibious lift in the PACOM AOR must be balanced against enduring Amphibious Ready Group/Marine Expeditionary Unit (ARG/MEU) requirements in other AORs, particularly CENTCOM, as well as requirements for routine large-scale (MEB/ESG) amphibious exercises and independent single-ship deployments (outside of the ARG/MEU program) such as Africa Partnership Station and Southern Partnership Station. These increasing requirements place an added tax on the current inventory of amphibious ships and must be considered alongside global operational demands.

Maritime Prepositioning Force (MPF) shipping will play an increased role in supporting movement of equipment and forces for the combatant commander with regard to theater security cooperation events, annual MPF exercises, and support of contingency and operational plans in the AOR. Funding for the exercise of these assets is essential to meeting operational requirements and maintaining a high level of readiness to support the PACOM commander.

42. Senator AYOTTE. General Dunford, are you confident the defense budgets over the next 5 years will be able to support your logistical requirements in the Pacific theater?

General DUNFORD. The Marine Corps is confident that we will be able to support our logistical requirements in the Pacific theater as the Navy-Marine Corps team is ideally suited to support the new DSG's focus on the PACOM AOR. To do so, however, will require continued investments in amphibious shipbuilding, ship-to-shore connectors, maritime prepositioning capabilities, and O&M funds to support operational and strategic maneuver in the Pacific. The Marine Corps understands that future requirements in the Pacific will necessitate more distributed operations and decentralized command—both of which will result in higher training costs. Also, as the Marine Corps rebalances toward the Pacific, we must make the proper investments in facilities and ranges to maintain the training and readiness of deployed forces.

As our security strategy looks increasingly toward the Pacific, the Marine Corps, partnered with the Navy, remains the most economical, agile, and ready force immediately available to deter aggression and respond to crises. Amphibious ships are a foundational requirement for expeditionary force projection and crisis response. Fur-

ther, our prepositioning ships are a unique strategic capability allowing us the ability to quickly respond to a wide scale of contingencies. The Marine Corps is committed to sound stewardship of funding in order to meet the logistical requirements in the Pacific.

AMPHIBIOUS SHIPS

43. Senator AYOTTE. Admiral Ferguson, the Navy has acknowledged that low amphibious ship readiness can present a significant challenge to the training readiness of Marine Corps units and it is addressing this maintenance readiness shortfall. I understand that the optimal force structure for amphibious lift requirements is 38 amphibious ships to support the operations of 2 MEBs. But, because of fiscal constraints, the Navy will not buy 38 amphibious ships. I also understand that the minimum number of operationally available ships necessary to meet the assault echelon requirement is 30 and, to achieve this availability, the Navy needs 33 amphibious ships. How many amphibious ships do we have now?

Admiral FERGUSON. At the end of fiscal year 2012, we will have 30 amphibious ships in the inventory to include 1 LHA, 8 LHDs, 9 LPDs, and 12 LSDs. The Navy remains committed to providing sufficient amphibious lift for day-to-day presence as well as large-scale expeditionary operations; however, we are fiscally constrained to 32 amphibious ships in the mid- to long-term. The 32-ship amphibious force we are procuring will optimally be comprised of 11 LHA/Ds, 11 LPDs, and 10 LSDs. Our proposed delivery/decommissioning profile will meet historical sourcing for Amphibious Ready Groups.

44. Senator AYOTTE. Admiral Ferguson, what was the average operational availability of the current amphibious fleet for fiscal year 2011 and fiscal year 2010?

Admiral FERGUSON. The average operational availability for fiscal year 2010 was 81 percent, based on an average of 31-ship amphibious fleet, with an average of 25 ships available. For fiscal year 2011 it was 76 percent based on an average of 29-ship amphibious fleet with an average of 22 ships available.

45. Senator AYOTTE. Admiral Ferguson, what is the average operational availability assumed in the 33 amphibious ship mix?

Admiral FERGUSON. The average operational availability assumed in a force of 33 amphibious ships is 90 percent. This provides 30 ships in support of a 2 MEB assault echelon, with an acceptable level of risk in combat support vehicle and sustainment capacity, versus the full 38-ship requirement.

46. Senator AYOTTE. Admiral Ferguson, if the operational availability for the current fleet is different from the future amphibious fleet, how and by when will the Navy increase the operational availability of these ships?

Admiral FERGUSON. The operational availability of the amphibious fleet has recently averaged approximately 80 percent due to several factors. This includes the LSD Midlife program, taking ships out of service for extended periods (as long as a year) and the challenges of bringing the LPD 17 Class online (e.g. unscheduled maintenance availabilities). In the fiscal year 2016 to fiscal year 2022 timeframe, as the LHD Class ships enter their midlife availabilities, we expect a similar temporary decline in operational availability for this class. While this maintenance will adversely affect operational availability in the near-term, it will extend the service life of these ships to 40 years by upgrading combat systems to pace threats, propulsion plant improvements to ship's fuel efficiency, replace obsolete equipment, and integrate new Marine Corps airframes. Overall, amphibious fleet operational availability is expected to improve to approximately 90 percent upon completion of LSD and LHD midlife availabilities and as the LPD-17 construction process continues to mature.

The Navy remains committed to providing 30 operationally available amphibious ships to meet naval amphibious lift demand.

RISK IN THE NATIONAL MILITARY STRATEGY

47. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, the DSG released by the administration in January 2012 abandoned the concept we have supported since the end of the Cold War to maintain sufficient military forces and readiness to successfully conduct two separate major contingency operations. This strategy was intended to deter an adversary and reduce the risk of a threat to U.S. interests even if we were engaged in a major con-

tingency operation elsewhere. In its place, the administration proposes enough forces to deny an aggressor's objectives across all domains of operations in one region while inflicting an unacceptable cost on an opportunistic aggressor in a second region. In other words, we have announced to our adversaries that we have enough forces to win one major contingency operation, while being able to hold in a second major contingency. In your opinion, with the range of unstable areas we have around the world, does our reduction in forces actually increase the risk the likelihood of eventually having to engage in two major contingency operations?

General AUSTIN. We will maintain the ability to address two major contingencies, we will simply go about it differently. Consistent with the DSG, and the Defense Planning Guidance (DPG), the Army is taking steps to increase our engagement with important regions of interest. Through the CJCS's Strategic Seminar Series we are investigating ways to address risk, including increasing the regional alignment of the Army, which will provide us with more region-specific capabilities that enable us to shape the security environment and deter conflict. We will increase combined exercises of all types, build partner capacity, support military sales, and conduct key leader engagements and conferences with partner nations. We will increasingly rely on air and BMD to deter threats. We are also reinvigorating our rapid deployment ability in response to global crises to demonstrate our resolve to counter threats and deter aggression.

Admiral FERGUSON. We do not believe the DSG mandate to "deny objectives or impose unacceptable costs" on an opportunistic aggressor in a second region increases the likelihood of having to engage in two major contingency operations or reduce our ability to deter adversaries. Reductions in force size are mitigated by targeted improvements in capability and posture. This includes placing a premium on presence in the Asia Pacific and Middle East, as well as support to partner nations in and around those regions. We also prioritized investments in capabilities to counter adversary A2/AD strategies, including improvements in space and cyber, ensuring we maintain a force that is "agile, flexible, ready, and technologically advanced." Given the level of presence and surge forces we will sustain under the new strategy, we do not feel the risk of engaging in two major contingency operations has increased.

General DUNFORD. The new DSG, which provides the framework for DOD to balance the demands of the future security environment with the realities of our current fiscal constraints, calls for a future force that will "remain capable across the spectrum of missions, fully prepared to deter and defeat aggression and to defend the Homeland and our allies in a complex security environment."

To that end, the Marine Corps, as an element of the larger Joint Force, and in support of maintaining that Force's fully credible deterrent value, has and will maintain a quality force, fully ready and capable of executing our assigned missions. This will ensure we are capable of continuing to meet global challenges, and that potential adversaries continue to believe that attempting to achieve their objectives by militarily confronting America is not a viable option.

Additionally, the Marine Corps, as a forward deployed and forward engaged force, will continue to be postured to mitigate potential causes of conflict through our Theater Security Cooperation and Building Partner Capacity efforts, and to respond quickly to crises in order to prevent their escalating into major contingencies.

General BREEDLOVE. Perhaps. If the United States engages in one major combat operation, there is the potential another state will see an opportunity for offensive actions elsewhere. The risk imposed by operating with a smaller force places an increased need to manage the timing and phasing of an appropriate U.S. response. Given the unpredictable will of potential adversaries, this risk can be mitigated by shaping a force that is more agile, flexible, ready, and technologically advanced. When U.S. forces are committed to a large-scale operation in one region, they will be capable of denying objectives or imposing unacceptable costs on an opportunistic aggressor in a second region and maintain stable deterrence. By leveraging the reach and power inherent in our air, space, and cyberspace forces, we can hold a second adversary and give the National Command Authority an opportunity to decide how to apportion forces in the most advantageous manner. Additionally, fiscal realities require the United States to partner closely with like-minded states to help manage global stability in the 21st century. We must build partnership capacity in some of the most unstable regions while pooling, sharing, and specializing capabilities with our closest allies.

48. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, if we were engaged in a major combat operation in Asia, for example, what message would this reduction from a two to one and a half major contingency operations capability send to a country like Iran?

General AUSTIN. Consistent with the DSG and the DPG, the Army is taking steps to increase our engagement with important regions of interest. We will still maintain the ability to address multiple contingencies, we will simply go about it differently. We are investigating ways to increase the regional alignment of the Army, which will provide us with more region-specific capabilities that enable us to shape the security environment and deter conflict. We've been participating in the CJCS's Seminar Series to assist in identifying what the Total Force can do to mitigate any risk associated with change to our strategic guidance. We will increase combined exercises of all types, build partner capacity, support military sales, and conduct key leader engagements and conferences with partner nations. We will increasingly rely on air and BMD to deter threats. We are also reinvigorating our rapid deployment ability in response to global crises to demonstrate our resolve to counter threats and deter aggression.

Admiral FERGUSON. The DSG does not commit to a one and a half major contingency operations strategy, but rather directs the Joint Force to "deny objectives or impose unacceptable costs" on an opportunistic aggressor in a second region. We believe the DSG provides sufficient supporting direction to fulfill this objective, including emphasis on capability and posture improvements that directly convey U.S. resolve. For example, the DSG is very clear in its emphasis on the Middle East. The Navy has already responded to this guidance with plans to deploy additional staff, surface combatants, mine sweepers, mine clearance helicopters, patrol craft, and the USS *Ponce* as a deterrent force. We are also making targeted investments in new capabilities that apply to this unique geographical region. The Navy will continue to partner with the Joint Force to present an opportunistic adversary with a daunting array of capabilities to deny their objectives and impose costs. Together, we believe our posture adjustments and capability improvements send a clear message of resolve and determination.

General DUNFORD. Regardless of whether the United States is engaged in a major combat operation in Asia, Iran should not perceive the attempt to achieve its objectives by military means is a viable option.

The new DSG states that "even when U.S. forces are committed to a large-scale operation in one region, they will be capable of denying the objectives of—or imposing unacceptable costs on—an opportunistic aggressor in a second region."

Based on insight gained through recent and ongoing senior level discussions regarding executing the new military strategy with the programmed force, I am confident that the Joint Force, to include Marine Corps forces, if involved in a major combat operation in Asia, would retain sufficient capability and capacity to rapidly project sufficient combat power to deny Iran's objectives or impose unacceptable costs, without incurring unacceptable risk to operations in Asia.

General BREEDLOVE. The new DSG is clear that "U.S. policy will emphasize Gulf security ... to prevent Iran's development of a nuclear weapon and counter its destabilizing policies." As such, we have no intention of abandoning the Middle East and there is sufficient power projection capability in remaining Air Force and Navy assets to rapidly respond to aggression anywhere in the world and deny an adversary victory. Finally, the United States is not only confident in its own ability, but the ability of its allies and partners, to repel any aggression.

49. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, wouldn't this reduced readiness—this reduced capability—make Iran, for example, more likely to take risks and to engage in provocative or aggressive actions? In other words, doesn't this change in strategy—and the associated reduction in combat capability—make war more likely?

General AUSTIN. We are active in examining ways we can increase our capabilities in a variety of areas, though we may reduce our capacity in some areas such as major combat operations. This is based in part on our assessment of the likely scenarios the Army would have to support in the event of a contingency. We are mitigating this risk by maintaining sufficient readiness to respond to a major combat operation, as well as maintaining the capacity for a robust combat surge. We are also engaging partners and allies in each region in order to meet the challenges of a new century, or essentially being preemptive in peace. To meet the complex challenges of the early 21st century, the Army will frame its efforts into three interdependent roles: prevent, shape, and win. First, we must prevent conflict with a credible force with sufficient capacity, readiness, and modernization. Second, our Army must help shape the international environment so that our friends are enabled and our enemies contained. The Army shapes the global security environment by building and maintaining relationships with allies and partners, increasing allied and partner capacity for self-defense and coalition operations, and ensuring access for U.S. Forces. Finally, the Army's mandate is to "overcome any nations responsible

for aggressive acts that imperil the peace and security of the United States.” This is non-negotiable; the Army will be able to win, and to win decisively.

Admiral FERGUSON. The Navy does not believe the DSG will make war more likely. The new strategy directs specific improvements in both capability and posture that signal U.S. determination and resolve against an opportunistic aggressor. For example, the DSG places a premium on presence in the Middle East and support to partner nations in and around the region. In alignment with this strategy, the Navy will maintain a persistent presence in the Middle East, including the forward stationing of additional patrol craft in Bahrain. The Navy will also make the investments necessary to operate effectively in anti-access/area-denial environments, such as increasing our near-term mine warfare capability and improving near-term capability to counter fast attack craft. We prioritized readiness and capability against emerging threats over force structure to deliver a ready and relevant Navy now and in the future.

General DUNFORD. The new DSG states that “even when U.S. forces are committed to a large-scale operation in one region, they will be capable of denying the objectives of—or imposing unacceptable costs on—an opportunistic aggressor in a second region.” Therefore, Iran should not perceive the attempt to achieve its objectives by military means is a viable option, and thus should be no more likely to take risks or engage in provocative or aggressive actions.

Based on insight gained through recent and ongoing senior level discussions regarding executing the new military strategy with the programmed force, the Joint Force, to include Marine Corps forces, if involved in a major combat operation in Asia, would retain sufficient capability and capacity to rapidly project sufficient combat power to deny Iran’s objectives or impose unacceptable costs, without incurring unacceptable risk to operations in Asia.

Additionally, the Marine Corps, as a forward deployed and forward engaged force in the CENTCOM AOR, will continue to mitigate potential causes of conflict through our Theater Security Cooperation and Building Partner Capacity efforts, and to respond quickly to crises in order to prevent their escalating into major contingencies.

General BREEDLOVE. Hostile states will consider risk versus reward prior to taking action. Our ability to rapidly mass the capabilities of our force and the size of the force were all balanced to minimize risk and preserve our ability to dominate an adversary. The force structure in our strategy leverages the U.S. Air Force’s asymmetric advantages in air, space, and cyberspace to rapidly respond to aggression globally and, in turn, deter that aggression in the first place.

50. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, doesn’t the new DSG reduce America’s deterrence of potential aggressors, and if so, what is each Service doing to address this increased risk?

General AUSTIN. Consistent with the DSG and the DPG, the Army is taking steps to increase our engagement with important regions of interest. We are investigating ways to increase the regional alignment of the Army, which will provide us with more region-specific capabilities that enable us to shape the security environment and deter conflict. We’ve been participating in the Chairman’s Strategic Seminar Series to assist in identifying what we can do to mitigate any risk associated with change to our strategic guidance. We are examining ways to increase our capabilities in a variety of areas. We are mitigating this risk by maintaining sufficient readiness to respond to a major combat operation, as well as maintaining the capacity for a robust combat surge. We are engaging partners and allies in order to meet the challenges of a new century. The Army remains a globally responsive force, capable of operations in multiple theaters. Our readiness remains the cornerstone of our conventional deterrent to prevent conflict. Our intent through actions such as regional alignment and building partner capacity is to enhance our ability to influence outcomes before overt deterrence becomes necessary. If events reach such a point, the integration of all of the Services in the Joint Force continues to provide a wide range of options for policymakers.

Admiral FERGUSON. The Navy does not believe the DSG reduces our ability to deter adversaries. The Navy remains committed to deterring aggression, and if deterrence fails, winning our Nation’s wars. Consistent with the new DSG, we are implementing targeted initiatives in both posture and force structure to be capable of denying objectives or imposing unacceptable costs on an opportunistic aggressor in a second region even while forces are engaged in a large-scale operation in a primary theater. This includes forward-deploying BMD destroyers in Rota, Spain, forward-stationing LCSs to Singapore, and increasing the number of patrol coastal ships stationed in Bahrain. We believe these initiatives will have a powerful deter-

rent effect, bolster our forward presence, and clearly demonstrate our commitment to allies and partners.

This budget proposal invests in our aircraft carriers, ships, aircraft, attack, and ballistic missile submarines. We believe the Navy retains the appropriate capabilities to deter potential aggressors.

General DUNFORD. The new DSG calls for a future force that will “remain capable across the spectrum of missions, fully prepared to deter and defeat aggression and to defend the Homeland and our allies in a complex security environment.”

Based on insight gained through recent and ongoing senior level discussions regarding executing the new military strategy with the programmed force, I am confident that the Joint Force, to include Marine Corps forces, if involved in a major combat operation, would retain sufficient capability and capacity to rapidly project sufficient combat power to deny an adversary’s objectives or impose unacceptable costs without incurring unacceptable risk. This will ensure that potential adversaries are deterred by the continued belief that attempting to achieve their objectives by militarily confronting America is not a viable option.

The Marine Corps, as a forward deployed and forward engaged force, will continue to be postured to mitigate potential causes of conflict through our Theater Security Cooperation and Building Partner Capacity efforts, and to respond quickly to crises in order to prevent their escalating into major contingencies.

General BREEDLOVE. Even with declining budgets, the Air Force continues to provide the essential force structure and capabilities with armed forces that are agile, flexible, and ready to face a full range of contingencies and threats. The fundamentals of deterrence are demonstrating the capability to impose a cost or to deny a benefit, and the Air Force remains committed to these fundamentals. The Air Force’s strategy is an integrated, balanced, and comprehensive one that is a solid, cost-effective implementation of high-priority programs that will ensure our ability to rapidly respond to global crises well into the future. The Air Force continues to seek innovative concepts to counter adversary investments in denying our forces access. Fiscal constraints require the Air Force to slow the pace and scope of modernization while protecting programs critical to future warfighter needs, such as the F-35, KC-46, Long Range Strike-Bomber, and Air-Sea Battle concept. The strategy maintains our Nation’s readiness and deterrent capability.

51. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, how are we compensating for this reduction in deterrence?

General AUSTIN. We are examining ways we can increase our capabilities in a variety of areas. We are mitigating risk by maintaining sufficient readiness to respond to a major combat operation, as well as maintaining the capacity for a robust combat surge. We are engaging partners and allies in each region in order to meet the challenges of a new century. By building partner capacity, we are expanding the abilities of our allies and partners which will help to shape the international environment to our advantage. We are achieving this through regional alignment of forces. This allows us to maintain presence and a posture that provides a credible deterrence while enhancing our allies’ and partners’ abilities. It also sets the conditions for us to gain access, if needed, to rapidly provide forces to respond to crises.

Admiral FERGUSON. The Navy does not believe the DSG reduces our ability to deter adversaries. Consistent with the new DSG, we are implementing targeted initiatives in both posture and force structure to be capable of denying objectives or imposing unacceptable costs on an opportunistic aggressor in a second region even while forces are engaged in a large-scale operation in a primary theater. In addition, we are sustaining our nuclear deterrent capabilities at an acceptable level. We believe these initiatives will continue to present an effective deterrent.

General DUNFORD. Although the Marine Corps does not believe a reduction in deterrence has, or will, occur, as a forward deployed and forward engaged force it will:

- Be postured to mitigate potential causes of conflict through our Theater Security Cooperation and Building Partner Capacity efforts; and
- Respond quickly to crises in order to prevent their escalating into major contingencies, while maintaining the capability and capacity to support major contingency operations.

Additionally, in order to better posture itself for the current and future security environments as an element of the Joint Force, the Marine Corps is executing the following initiatives:

- Distributed laydown in the Pacific Area of Operations provides for operationally resilient, geographically disbursed, and politically sustainable forces;

- Increasing the number of marines to U.S. Marine Corps Special Operations Command (SOCOM) as the Service component of SOCOM;
- Increasing the number of cyber marines to U.S. Marine Corps Forces Cyber Command as the Service component of U.S. Cyber Command;
- Providing SPMAGTFs such as the Black Sea Rotational Force and the SPMAGTF—fiscal year 2012 to EUCOM and AFRICOM;
- Increasing the number of Foreign Area Officers and Regional Area Officers; and
- Resetting the force in stride to ensure we are ready to meet contingency and crisis response requirements.

General BREEDLOVE. The Air Force is maintaining our Nation's conventional and nuclear deterrent capability by investing in the next generation of strike aircraft, tankers, bombers, and intercontinental ballistic missiles (ICBM). In the context of current fiscal constraints, force reductions are necessary to avoid becoming a hollow force. Guided by its core functions, the Air Force must recapitalize our fleet with an emphasis on maximizing operational flexibility and minimizing sustainment costs. Development of our next generation of strike aircraft, tankers, and preferred munitions ensure we remain capable of operating in emerging A2/AD environments. Additionally, we will continue to build partnership capacity to increase the collective capability of our friends and allies to support operations.

NAVY FLEET OPERATIONS TEMPO

52. Senator AYOTTE. Admiral Ferguson, it has been recently reported that the Navy's pace of fleet operations is surging and unsustainable as high demand for ships and submarines continues to take its toll. CNO Admiral Greenert was quoted as stating that, "we can't run at that rate," explaining that the Service doesn't believe it can sustain this through the next 5 years. You stated in your written statement that, "supporting this higher demand above programmed levels will require additional funding or reprogramming actions in the current year, and could impact the service life of our platforms should we compress maintenance timelines." Are fleet readiness rates dropping in the Navy? If so, what can be done to reverse this trend?

Admiral FERGUSON. The Navy is taking measures to ensure we sustain an appropriate level of readiness. This includes prioritizing readiness over capacity and shifting to a more sustainable deployment model in our fiscal year 2013 budget submission:

- Fully funding ship maintenance and midlife modernization periods, and continuing a series of actions to address surface ship material condition;
- Increasing investment in training and adjusting the Fleet Readiness Training Plan (FRTTP) to be more sustainable and provide units adequate time to train, maintain, and achieve the needed fit and fill in their manning between deployments;
- Forward basing and forward deploying ships to reduce transit time, so that the Navy-Marine Corps team can continue delivering the rapid response our Nation requires of us; and
- Employing rotating crews on Mine Countermeasures, Patrol Coastal class ships, and soon LCSs as the force grows, and further studying the benefits and costs of expanding and using rotational crewing.

The Navy is also in the process of conducting a FSA based on the new DSG. The FSA will evaluate the capabilities needed to execute the DSG, the ships and aircraft needed to deliver these capabilities, and the resulting inventory requirements. Overall, the proper mix of critical capabilities necessary to support the DSG will prove more significant than the exact number of ships in the fleet.

53. Senator AYOTTE. Admiral Ferguson, how does the budget request for fiscal year 2013 address this issue?

Admiral FERGUSON. The Navy prioritized readiness and capability over capacity to ensure our Navy is ready and relevant not only today but also in the future. We also invested in maintaining a sustainable deployment model to allow for the reset-in-stride of our forces between rotational deployments.

Specific efforts in our fiscal year 2013 budget submission to address the stress on the force resulting from operating at a war-time tempo for over 10 years include:

- Fully funding ship maintenance and midlife modernization periods, and continuing a series of actions to address surface ship material condition;

- Increasing investment in training and adjusting the FRTP to be more sustainable and provide units adequate time to train, maintain, and achieve the needed fit and fill in their manning between deployments;
- Forward basing and forward deploying ships to reduce transit time and mitigate reduced force structure, ensuring the Navy-Marine Corps team can continue delivering a rapid response capability; and
- Employing rotating crews on Mine Countermeasures, Patrol Coastal class ships, and soon LCSs as the force grows, and further studying the benefits and costs of expanding and using rotational crewing.

54. Senator AYOTTE. Admiral Ferguson, where do you need additional funding?

Admiral FERGUSON. The President's budget submission for fiscal year 2013 adequately supports expected fiscal year 2013 operations and reflects the best balance of risk and available resources across the Navy portfolio. Additional funding could be required for repairs to the USS *Miami* due to the 23 May fire in Portsmouth Naval Shipyard.

55. Senator AYOTTE. Admiral Ferguson, how many ships would be required to fully satisfy combatant requirements under the current NMS?

Admiral FERGUSON. The Navy continues to meet 100 percent of the adjudicated requirements tasked through annual Joint Staff-led GFM process which balances competing combatant commander demand with the available resources and priority requirements. The requests for forces from combatant commanders are not constrained by force provider inventory, NDS, or other demands from other combatant commands. It is estimated that to source 100 percent of combatant commander demand it would require an excess of 500 ships. Although the current force structure does not meet all peacetime demands, our presence meets most important requirements for war plans and security cooperation.

F-22 READINESS

56. Senator AYOTTE. General Breedlove, currently, the F-22 fleet's operational availability remains disappointingly low, at 60 percent. And, for the first few months of fiscal year 2012, its mission capability rate was similarly only about 61 percent. Why are the F-22 readiness rates still disappointingly low?

General BREEDLOVE. Low observable (LO) panel restoration caused by subsystem failures is the number one F-22 readiness issue. The F-22 aircraft availability (AA) rate is 60 percent and measured against an AA standard of 66.7 percent. Currently, 30 percent of the reportable non-mission capable issues are attributed to the LO system.

F-22 readiness rates were also negatively affected by planned improvements to the Air-to-Air Interrogation system cables which are designed to increase cable reliability between system components. Another factor affecting the F-22 readiness rates is the ongoing modification to the F-22 oxygen system as a result of last year's safety investigation. The Air Force is designing new sensors to ensure pilots are able to monitor and react to any changes in the oxygen supply system. This modification is scheduled to be completed in late 2012.

Despite these negative trends, the F-22 mission capable rate trended upward during the past 6 months and achieved a 70 percent average against the 74 percent standard. With aggressive corrective actions in place, the Air Force is confident these are temporary negative readiness conditions well on their way to resolution.

57. Senator AYOTTE. General Breedlove, what plan does the Air Force have to improve the F-22's readiness?

General BREEDLOVE. The Air Force is executing the F-22 Aircraft Availability Improvement Program (AAIP) with the goal of improving F-22 readiness across the fleet. AAIP achieves its objectives by focusing on a broad range of factors impacting F-22 readiness. These factors include technical data, maintenance procedures, diagnostics capability, and hardware reliability and maintainability. As an example, the Reliability and Maintainability Maturation Program (RAMMP) is conducted under the AAIP umbrella and is focused on increasing aircraft availability by designing, developing, and retrofitting more reliable and maintainable parts on the F-22. By addressing readiness factors with programs such as RAMMP, the Air Force is actively engaged in improving F-22 readiness.

CONTRACTOR LOGISTICS SUPPORT

58. Senator AYOTTE. General Breedlove, how will the Air Force more effectively drive affordability into its contractor logistics support (CLS) contracts—specifically in the areas of greater contractor cost visibility, increased contract flexibility and scalability, and enhanced opportunities for competition?

General BREEDLOVE. The Air Force continues to make improvements in all these areas. The Active Air Force's fiscal year 2013 President's budget justification documents contain increased visibility into CLS costs, based on the program offices' estimates of requirements in CLS expense categories. The Air Force expects to achieve the same level of visibility in the fiscal year 2014 President's budget submission for the Reserve Forces. In the fiscal year 2013 budget execution, the Air Force is developing new cost element details in our financial system to track CLS obligations for over 30 different cost elements instead of the current single CLS cost element. This additional detail will allow greater visibility of actual costs attributable to individual contract line items.

For increased contract flexibility, the Air Force is continuing to establish pricing matrices to support variable throughput in CLS contracts. We are also increasing contract flexibility by using a fixed price per event methodology for recurring requirements that do not have set quantities. Scalability increases are being achieved by breaking out tasks from larger contracts and dividing them into smaller contracts to enhance competition.

The Air Force has also expanded the use of business case analyses (BCA) and is utilizing the Navy Price Fighter program to ensure a best value approach for CLS contracts. The BCAs have led to reduced contract costs as well as the decisions to move some contract work to organic sources. The Navy Price Fighter program leverages a should-cost approach and has generated an average of 16 percent savings/cost avoidance in contract negotiations. In addition, several CLS programs have separated sole source engineering support from maintenance repair and overhaul efforts to allow enhanced competition in areas of depot repair and contractor operated maintenance and supply. Finally, the Air Force is placing increased emphasis on acquiring rights in technical data and software in the initial procurement to allow more work to be done organically or be put out for full and free competition down the road. The measures we are taking to enhance competition will result in more opportunities for small business participation as well.

CONTRACTOR SUPPORT FOR CONTINGENCY OPERATIONS

59. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, the Military Services have since World War I relied to varying degrees on the use of contractor support to act as a force multiplier on the battlefield. Can you provide an assessment on what extent the readiness of your forces are impacted by having access to contractors who provide support services during contingency operations?

General AUSTIN. The Army's use of contractors for the provision of contingency support services reduces military footprint and increases the availability and overall readiness of the force. The Army's role is to provide ready ground forces to the combatant commanders in support of their assigned missions and objectives. Contractors have provided logistics services such as dining and transportation, support services such as linguists and analysts, and maintenance services through Field Service Representatives (FSR) and other contracted support. Unquestionably, contract support is critical to the sustained availability of select equipment on the battlefield and to maintain operational capabilities for high-demand, low-density skills for which maintaining an adequate force structure is neither feasible nor fiscally viable.

Admiral FERGUSON. Contractor support has been critical to the success of deployed Navy Expeditionary Forces engaged in Iraq and Afghanistan. The direct support of contractors fills gaps that exist within the expeditionary logistics support area to include FSR for maintenance, engineering, and configuration management support for the Navy's expeditionary equipment. This includes tactical vehicles, construction equipment, combatant craft, and large-scale tactical communications. In addition to overhaul and depot level support, contracted services provide urgent equipment modifications and assessment as well as retrograde/redeployment support in theater for units. It has greatly enhanced Navy Expeditionary units' ability to refurbish and overhaul tactical and construction equipment within the CENTCOM area of operations. The Marine Corps and Army contracts leveraged by the Navy's reduced turn-around time, shortened maintenance availability time, and put valuable equipment back into the hands of forward expeditionary units sooner without having to ship additional equipment from CONUS.

General DUNFORD. Contract support is a force multiplier. Our recent combat experiences in Iraq and Afghanistan have demonstrated the utility of contract support and have ensured marines were focused on their combat mission, maintaining the highest level of combat effectiveness in the most austere combat conditions. Contracted services such as facilities support (laundry, electrical, messing, et cetera); internal physical security, FSR and other contracted services are manpower intensive.

Forward deployed marines will always be given top priority where readiness is concerned; however, without contracted support, combat effectiveness would be diminished as the result of having to use marines to provide these essential services. Contracting these vital services remains critical to the success of combat operations.

General BREEDLOVE. Access to contractor support during contingency operations has had a significant impact on force readiness. Contractors provide spares, ground support equipment, and materials for essential technology like the F-15C Active Electronically Scanned Array Radar. Contractor FSR embedded with SOCOM units provide nearly all fielded system support, including flight-line maintenance, spare and repair parts, and depot maintenance.

60. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, how would the readiness and effectiveness of your forces be affected if the use of contractors in contingency operations were limited or curtailed?

General AUSTIN. Without the ability to leverage operational contract support, the Army's effectiveness would be severely compromised. Without contract support, the Army would have far fewer combat troops available. Commanders would be forced to use military personnel to perform many functions currently performed by contractors. In addition, the Army would be required to maintain a large cadre of military personnel trained in niche capabilities, such as linguists, for every region in which the Army might conceivably be called to operate, further reducing the number of combat troops available. Finally, prolonged military engagements in austere environments without the capabilities provided by contracted support would increase strain on military personnel in low-density skill-sets while also decreasing quality-of-life for combat troops. This would unquestionably have a detrimental effect on the ability to sustain America's All-Volunteer Army.

Admiral FERGUSON. The loss or reduction of support provided by contractors in support of contingency operations will adversely affect operational readiness and add additional stress to military operators, logisticians, and maintainers. Navy expeditionary units are not staffed with dedicated logisticians and support personnel or trained to provide all the intermediate and depot level maintenance actions required in extended contingencies, so we remain reliant on contract support. Without this logistics support, the Navy would experience increased maintenance turn-around time and decreased availability time for equipment. This would result in increased maintenance, transportation, procurement, and other logistics costs for the Navy.

General DUNFORD. The Marine Corps expeditionary ethos demands that we maintain the highest level of combat effectiveness in the most austere combat conditions. As the Nation's Expeditionary Force in Readiness, the marines are well-prepared to be first to the fight as a self contained MAGTF to win the Nation's battles.

Contracted support over the past 10 years has been a force multiplier. Forward Operating Base construction, rapid fielding of new capabilities (e.g. Mine Resistant Armored Protected (MRAP) vehicles), and other demands unique to the current fight could not have been sustained without the support of contracted services.

Although the Marine Corps stands ready today to meet the Nation's demands, contracted support has proved invaluable to ensuring combat forces are relieved of the manpower-intensive support and administrative functions in order to remain focused on combat operations. Contracted support also allows USFOR-A to remain below the mandated number of forces permitted on the ground.

General BREEDLOVE. Limiting or curtailing contractor support in contingency operations would negatively affect force readiness and effectiveness due to supply and maintenance issues. Supply and maintenance effectiveness would be degraded without the technical expertise provided by CLS on a majority of weapon systems. Aircraft relying on total CLS for sustainment and maintenance for the aircraft itself or critical components would have reduced effectiveness and availability in direct support of combat operations. Forces utilizing embedded field service representatives performing duties such as on-site operational ground checks and inspection and repair of prime equipment and systems would also be affected.

MARITIME PREPOSITIONING FORCE

61. Senator AYOTTE. General Dunford and Admiral Ferguson, last year, the Navy announced plans to place 6 of 16 ships from the 3-squadron MPFs for the Marine Corps into reduced operating status beginning in fiscal year 2013. General Panter of the U.S. Marine Corps has stated in testimony that that decision needed additional analysis. When I asked General Panter last year about this decision to place six ships on reduced operating status, he said that placing portions of Squadron 1 in the Mediterranean on a reduced operating status would translate to a potentially slower response time in support of the combatant commands. Based on these readiness concerns, I introduced an amendment last year that was included in the final National Defense Authorization Act (NDAA) that asked DOD to look at the risk this move would incur. Yet, this year, the Navy wants to go a step further and actually wants to eliminate 1 of the 3 MPSRONS and to reduce the number of maritime prepositioning ships to 12 in fiscal year 2013. The MPSRON that would be eliminated is the MPSRON in the Mediterranean. Last month, General Mills testified in response to my questions that the elimination of a MPSRON increases risk. How specifically does the elimination of the prepositioning squadron in the Mediterranean increase risk?

General DUNFORD. The MPF is a core (essential) element of the Navy's readiness, strategic mobility, and global responsiveness posture. MPF is comprised of military sealift command ships, naval equipment and sustainment, and sailors and marines that provide our Nation with a responsive, relevant, and scalable capability.

Historically, MPF has focused on major combat operations in order to support the deployment of a MEB in response to combatant commander operational plans. However, within the FYDP, MPF will transition to a seabasing-enabled capability with the completed fielding of large, medium-speed roll on/roll off vessels, and the introduction of mobile landing platforms and the dry cargo/ammunition (T-AKE) ship. MPF (seabasing-enabled) will provide a limited employment option in low-spectrum operations while retaining high-end deployment capability, thereby allowing MPF (seabasing-enabled) to be scalable across the full range of military operations. Based upon the President's budget for fiscal year 2013, the MPF program will divest one MPSRON and will increase the capacity of the two remaining MPSRONS, each of which currently holds 58 percent of a MEB equipment set. Though short of the Marine Corps' goal of 80 percent, each enhanced MPSRON will be capable of prepositioning 69 percent of MEB equipment set.

The risk associated with this strategy is that there will be no maritime prepositioning coverage in EUCOM, AFRICOM, and Southern Command, thereby limiting global coverage and forward presence, and increasing crisis response timelines to these AORs. The new DPG focuses on PACOM and CENTCOM, while assuming risk to the EUCOM and AFRICOM AORs. The remaining two MPSRONS fully support PACOM and CENTCOM Operational Plans.

Balancing operational risk with programmatic necessity, both the Navy and OSD believe the risk associated with loss of MPSRON-1 is acceptable. However, the acceptance of that risk is predicated on increasing the capacity in the remaining two MPSRONS, the continued fielding of T-AKE and mobile landing platforms, and funding annual MPF exercises.

Admiral FERGUSON. Risk is increased in terms of the number of days that it will take to respond to a major combat operation in EUCOM or the west coast of Africa. However, this risk is acceptable and mitigated by the following:

- There will be no loss of aggregate sealift capacity since five roll-on/roll-off ships will remain part of total force via transfer to CONUS-based Strategic Sealift Fleet and maintained in the same 5-day readiness status.
- The Commandant of the Marine Corps, PACOM, EUCOM, and AFRICOM have all testified before Congress the level of risk assumed is acceptable.
- The 2011 NMS focuses on PACOM and CENTCOM, while assuming risk to the EUCOM and AFRICOM AORs. The remaining two MPSRONS will be enhanced and capable of fully supporting requirements. Peacetime and contingency demands in EUCOM and AFRICOM can be supported by Surge Sealift or other Naval Forces, e.g. Amphibious Readiness Groups.
- CONUS-based Strategic Sealift ships can be loaded with a wider variety of equipment and/or humanitarian supplies tailored to a broader mission set than previously realized through the traditional Marine Corps ground combat focused MPSRON-1—thus adding flexibility and efficiency.

62. Senator AYOTTE. General Dunford and Admiral Ferguson, the Norway Marine Corps Prepositioning Program (MCP) has been cited as a major mitigation factor

for the risk we are incurring by eliminating a squadron. I asked General Mills last month about the equipment in Norway. He was able to answer some of my questions and said he would get back to me on others. From a readiness perspective, I would like to ask you a few questions as well. Since the equipment in Norway is in caves and not on ships, how long would it take to get that equipment on ships?

General DUNFORD. The Marine Corps response to section 1013 of House Resolution 1540, the NDAA for Fiscal Year 2012 stated, "Achieving the appropriate ship mix and embarked equipment sets and density is ongoing to optimize operational capability and mitigate risk. Additional mitigation is provided by MCPP-Norway (MCPP-N): a task-organized equipment set forward deployed in the EUCOM AOR." MCPP-N does not replace MPSRON-1 in depth or breadth of equipment. Stating that MCPP-N is a major mitigating factor for the risk incurred by eliminating MPSRON-1 would be incorrect.

Surge sealift ships can be activated and sail to Norway in about 2 weeks. An additional option is to call upon U.S.-flagged ships from the Maritime Security Program (MSP). Some of these MSP ships conduct trade in northern Europe, thus can likely respond in days.

It will take 7 to 10 days to load the equipment in Norway onto ships once they arrive. However, MCPP-N is versatile, and ground, rail, and air are all possible modes of transportation. Strategic air was used for MCPP-N support of the Russian wildfires in 2011 and humanitarian assistance to Turkey following the earthquakes in 2011, allowing equipment and supplies to be delivered very quickly.

Current MCPP-N on hand, ground and aviation equipment will require two ships, and a fully attained prepositioning objective will require three ships. It takes 5 days to load each ship and ships can be loaded concurrently if berths and required personnel are available.

Current MCPP-N munitions on hand, and a fully attained prepositioning objective, will require one ship. It will take 5 days to load the current on hand munitions and 9 days to load a fully attained prepositioning objective. Munitions conduct load out from a different port than ground and aviation equipment.

Admiral FERGUSON. Surge Sealift ships can be activated from CONUS and arrive in Norway in approximately 2 weeks. U.S. flagged merchant ships from the MSP may also be called upon on short notice. Since some of the MSP ships already trade in Northern Europe, their response time can likely be reduced to a matter of days.

63. Senator AYOTTE. General Dunford and Admiral Ferguson, how much slower would this response be than if we maintained the first MPSRON in the Mediterranean?

General DUNFORD. A CONUS-based response using strategic sealift could take up to 4 weeks. This depends on the location of the conflict or humanitarian crisis; the number and type of ships required; speed of the ships; and availability of the equipment and/or humanitarian supplies required.

Depending on the scenario, the required equipment set may take less time to load, thereby reducing the response time from MCPP-N reflected below. Port Said, Egypt, and the Gulf of Guinea are used as arbitrary points of reference for comparing response times to EUCOM and AFRICOM, respectively.

MPSRON-1 to Port Said = 5 days

MCPP-N to Port Said = 26-29 days

MPSRON-1 to Gulf of Guinea = 7 days

MCPP-N to Gulf of Guinea = 26-29 days

Twenty nine-day response time for MCPP-N to Port Said and the Gulf of Guinea includes 10 days for sourcing (surge sealift and/or commercial charter) and movement of ship(s) to Norway, an estimated 7-10 days to load ships in Norway, and 9 days transit to destination.

Admiral FERGUSON. CONUS-based response using Strategic Sealift will take an estimated 2 to 3 weeks longer than a Mediterranean-based squadron. The exact timeline will be dependent on the location of the conflict or humanitarian crisis, the number and type of ships required, speed of the ships, and the desired equipment and/or humanitarian supplies required. The advantage to employing surge sealift is this allows for tailored loading of equipment and/or humanitarian supplies, vice traditional pre-stowed equipment in a MPSRON, which is tailored for the higher end of military operations. With the exception of Marine Corps ground combat operations, it may be timelier and more efficient for EUCOM scenarios to employ Surge Sealift vessels from CONUS with the right mix of ships containing exactly the right equipment and/or humanitarian supplies.

64. Senator AYOTTE. General Dunford and Admiral Ferguson, if a national security crisis develops in the Mediterranean that requires maritime prepositioning assets, would the second MPSRON be sent through the Suez Canal?

General DUNFORD. It is possible that the second MPSRON, whether in total or partial, could be sent through the Suez Canal to respond to a crisis in the Mediterranean. MPSRON forces (in total or partial number of ships) retain the flexibility to respond globally as the situation warrants.

Admiral FERGUSON. It is possible the second MPSRON could be sent through the Suez Canal to respond to a crisis in the Mediterranean. There is also the capability to employ a tailored mix of Strategic Sealift ships, equipment, and/or humanitarian supplies from CONUS to meet the specific requirements of an emerging threat. MPSRON forces (in total or partial) retain the flexibility to respond globally as the situation warrants. In some cases, Strategic Sealift ships surged from an east coast port could arrive in the same amount of time as MPSRON ships from the Pacific or Indian Ocean, and could do so without negative impact on the PACOM or CENTCOM operational plans.

65. Senator AYOTTE. General Dunford and Admiral Ferguson, in light of changes in Egypt, can we assume we would have unimpeded transit through the Suez Canal?

General DUNFORD. We know of no mainstream Egyptian political movement that advocates restricting access and our assessment is that the Egyptian military and foreign policy sectors will strive to maintain unimpeded access to the Suez Canal.

Admiral FERGUSON. We have no indication of an impending change in the ability of the U.S. Navy to transit the Suez Canal as we do today.

MARINE CORPS READINESS—MARITIME PREPOSITIONING TRAINING

66. Senator AYOTTE. General Dunford, in Admiral Stavridis's written testimony earlier this year, he discussed Austere Challenge 11, which is a joint exercise with the Israelis. Admiral Stavridis wrote that this exercise focuses on crisis response as well as amphibious and maritime prepositioning objectives. Admiral Stavridis said these exercises sustained warfighting skills, strengthened important theater relationships, and conducted vital interaction with EUCOM and the North Atlantic Treaty Organization (NATO). In this climate in which Israel faces unprecedented security threats, how will U.S. Forces in the EUCOM AOR work on maritime prepositioning objectives if there is no longer a MPSRON in the region?

General DUNFORD. The Marine Corps, as part of its Force Synchronization Process, conducts an annual Prepositioning Exercise Working Group. For 2012, this working group met on 21 June. Through this process, the Marine Corps develops and refines a prepositioning exercise schedule over a 5-year planning horizon to support the development of Service core competencies, expeditionary capabilities, enable seabasing experimentation and doctrine development, while synchronizing efforts with the Navy and across the Marine Corps. Regional Marine Force component headquarters to include Marine Force Europe participate in this process to synchronize the Marine Corps prepositioning exercise schedule with geographic combatant commanders' theater requirements.

Based upon requirement prioritization, timing, funding, and ship scheduling, the Marine Corps seeks to support prepositioning exercise requirements across all the geographic combatant commander AORs, to include the EUCOM AOR, making best use of forward positioned maritime prepositioning platforms in MPSRON-2 and MPSRON-3 located in the PACOM AOR, platforms retained in a reduced operating status and exploiting the capabilities of MCPP-N.

MPSRON-2 and MPSRON-3 remain postured in the PACOM AOR to facilitate timely response to PACOM and CENTCOM contingencies, but are also postured for response to EUCOM and AFRICOM contingencies. Additionally, the Marine Corps continues efforts to transform MCPP-N for crisis response to support the most likely response operations up to the mid-intensity conflict level of the range of military operations while retaining the ability to support the aggregation of a MEB. Use of MCPP-N leverages a mature European multi-modal transportation network to utilize intra-theater lift in addition to strategic lift to equip and sustain crisis response forces. Crisis response forces can be formed using a MEU (from amphibious ready group shipping), the designated global response force, or a fly-in echelon.

67. Senator AYOTTE. General Dunford, how will this negatively impact U.S. and Israeli joint amphibious and prepositioning capabilities?

General DUNFORD. As acknowledged in previous testimony, we accept additional risk in the EUCOM AOR when MPSRON-1 is no longer physically present. The Marine Corps actively seeks to mitigate (or reduce) these risks through best use of transiting maritime forces for theater engagement, training, and exercises in addition to execution of the 5-year prepositioning exercise schedule and active employment and exercise of MCPP-N.

FLEET READINESS

68. Senator AYOTTE. Admiral Ferguson, what is your assessment today of the fleet's material condition and readiness?

Admiral FERGUSON. Navy forces operating forward are ready and certified for their missions. We are ready today to respond to contingencies with the highest quality force in our history, but are strained due to a high operational tempo. Our forces are stressed after over 10 years of combat operations and continued high global demand for naval forces. We see this stress across the nondeployed force and in our readiness and capacity to surge additional forces for emergent operations. The primary stressing factor for our nondeployed forces is a reduced time available in homeport to conduct maintenance and training as they prepare to redeploy to respond to the high demand signal. As an inherently rotational force, the Navy relies on reset-in-stride between deployments and this principle has sustained our readiness above minimum requirements over 10 years of combat operations.

We are addressing previously identified deficiencies in surface ship maintenance planning, crew size, and training. We are also shifting to a more sustainable deployment model to ensure we sustain our force at an appropriate level of readiness in the future.

69. Senator AYOTTE. Admiral Ferguson, what are your readiness priorities with the fiscal year 2013 budget request?

Admiral FERGUSON. Our priority in the Navy fiscal year 2013 budget submission was to deliver a ready and relevant Navy now and in the future. We focused on funding the critical elements of readiness as we balanced our investments in future capability, O&M, personnel, training, and spares. To do so, we reduced force structure and reduced or delayed procurement of new platforms to ensure wholeness of our existing force structure. The decisions were guided by the CNO's Sailing Directions and the three tenets he provided:

- We prioritized "warfighting first" in the readiness accounts by providing the requisite operations funding (flying hours and steaming days) to meet the operational requirements of the combatant commanders for our forward forces and to conduct training and certification requirements with manageable risk;
- We focused on "operating forward" globally, forward basing and forward deploying ships to reduce transit time and mitigate reduced force structure; and
- In order to "be ready," we fully funded ship maintenance requirements to ensure our ships reach their expected service life. We also invested in maintaining a sustainable deployment model to allow for the reset-in-stride of our forces between rotational deployments.

SHIP RETIREMENT

70. Senator AYOTTE. Admiral Ferguson, how does retiring seven *Ticonderoga* *Aegis*-class cruisers early and putting two dock landing ships in reduced operating status support the Secretary of Defense's new DSG, which puts renewed emphasis on the Asia-Pacific region?

Admiral FERGUSON. The Navy has certified to the Secretary of Defense that we will meet the fiscal year 2013 GFM Allocation Plan and requirements in the DSG with the current and projected force structure provided in the Navy's fiscal year 2013 budget submission.

The fiscal year 2013 budget reflects the Navy's strategy to build ships better suited for current and future needs. The Navy is funding this effort, in part, by deactivating older, less-capable ships that are increasingly expensive to maintain, operate, and upgrade to remain relevant. Keeping these ships in service would divert funding from other programs vital to the Navy's mission, including the modernization and procurement of ships critical to fleet needs, and compete for scarce O&M dollars to sustain fleet readiness.

The cumulative impact of ship deliveries, projected operating patterns, and forward stationing ships will yield an increase in day-to-day naval presence in the

Asia-Pacific region from about 50 ships today to about 58 ships by 2020. We are planning for the forward stationing of LCSs in Singapore, will integrate forward operating JHSVs into the Pacific Fleet, and will support the deployment of marines to Darwin, Australia. More amphibious ships and destroyers will also become available for other missions as the theater cooperation and maritime security missions they fulfill today will be taken on by JHSV and LCS.

71. Senator AYOTTE. Admiral Ferguson, what are the potential operational implications of these early retirements?

Admiral FERGUSON. The potential operational impact caused by early ship retirements is less presence and fewer surge forces for the combatant commanders. Our assessment is that the current and planned Navy battle force is capable of sourcing combatant commanders' demands with manageable risk.

72. Senator AYOTTE. Admiral Ferguson, what would be the cost to keep these ships and not retire them?

Admiral FERGUSON. The cost to restore the CGs and LSDs proposed for decommissioning goes beyond actual costs to retain, modernize, and maintain the ships. The decision freed resources made available by these retirements to allow increased funding for training and maintenance across the force. Restoring the funding would present more force structure than we can afford to man, train, and equip within current fiscal constraints. Six of the seven CGs proposed for early decommissioning are not BMD-capable and would require modernization investments. The seventh, USS *Port Royal* (CG 73), is BMD-capable; however, repairs and modernization would be markedly more expensive due to the damage caused by her previous grounding. The current estimated cost to retain and fully modernize the following three CGs scheduled for decommissioning in fiscal year 2013—USS *Cowpens* (CG 63), USS *Anzio* (CG 68), and USS *Vicksburg* (CG 69)—to include BMD upgrade and MH-60R helicopter procurement is:

- Fiscal year 2013: \$640 million
- Fiscal year 2014: \$590 million
- FYDP: \$2.7 billion

The cost to retain and fully modernize the remaining cruisers will be dependent upon the decisions to be made in fiscal year 2013.

The current estimated cost to retain and modernize, maintain, man, and equip the two LSDs proposed for decommissioning is:

- Fiscal year 2013: \$63 million
- Fiscal year 2014: \$105 million
- FYDP: \$512 million

73. Senator AYOTTE. Admiral Ferguson, DOD has cited reversibility in connection with its new DSG. What is the Navy doing to enable it to reactivate at a later date the seven cruisers it plans to retire early?

Admiral FERGUSON. In the Addendum to the Report to Congress on the Long-Range Plan for the Construction of Naval Vessels in Fiscal Year 2013, the seven cruisers are designated to be retained in an Out of Commission In Reserve (OCIR) status. Ships in OCIR status are retained on the Naval Vessel Register and assigned Maintenance Category B. Category B ships receive a standard inactivation lay-up which determines the amount of maintenance and repair that will be performed prior to and during the inactivation. The ship and its equipment will be preserved in an as-is condition with the application of dehumidification and cathodic protection to minimize long-term degradation and maintain the ship's condition at decommissioning. All C-3/C-4 Casualty Report deficiencies will be corrected before decommissioning unless waived by the responsible Ship Resource/Platform Sponsor.

MARINE CORPS READINESS

74. Senator AYOTTE. General Dunford, in your written statement about the readiness of non-deployed Marine Corps combat units, you stated that the primary concern with the out-of-balance readiness of our operating forces is the increased risk in the timely response to unexpected crises or large-scale contingencies, since the non-deployed forces likely would be the responders. This country relies on the Marine Corps as our 9-1-1 emergency responders. I am concerned that a significant majority of our non-deployed Marine Corps forces are in a degraded state of readiness and will remain so through fiscal year 2017, according to your testimony. How do you propose we reduce the risks associated with a degraded state of readiness?

General DUNFORD. The Marine Corps is resetting “in-stride” without an operational pause, while fighting OEF and transitioning to the new DSG. The new DSG provides a framework by which the Marine Corps will balance the demands of the future security environment with the realities of current fiscal constraints. The Marine Corps has a strategic trajectory to reconstitute and reset to a ready force by fiscal year 2017. Reconstitution will restore and upgrade the Corps’ combat capability and ensure its units are ready for operations across the range of military operations. Reshaping the Active-Duty Force will entail some risk relative to present and future capacity requirements; but it’s manageable with the retention of the Reserve component’s operational capability. Our current strategic reset estimate is \$3.2 billion over a 2- to 3-year period following the return of our equipment from Afghanistan and it is critical that the Marine Corps reset the force following a decade of continuous combat operations. The Marine Corps’ 2013 budget request maintains the high levels of readiness the Nation has come to expect of its marines by balancing capacity and capability.

75. Senator AYOTTE. General Dunford, would additional funding improve the readiness of nondeployed marine units? If so, in what accounts?

General DUNFORD. The new DSG provides a framework by which the Marine Corps will balance the demands of the future security environment with the realities of the current fiscal constraints. Though the choices of the last year have been difficult, we are confident that we have carefully managed risk by balancing capacity and capability. To that end, the Marine Corps’ 2013 budget request ensures that we maintain the high levels of readiness the Nation has come to expect of its deployed Marine forces. Continued funding from OCO appropriations will ultimately help us reset the force and improve home station readiness.

76. Senator AYOTTE. General Dunford, I have heard that the Marine Corps originally set an end strength goal of 186,000 marines, but due to the reduction in defense accounts, had to drop to 182,000 marines. Is this true?

General DUNFORD. To ensure the Marine Corps is best organized for a challenging future security environment, we conducted a comprehensive and detailed force structure review aimed at identifying a balanced force that is postured for the future. Using the lessons learned from 10 years of constant combat operations, the review, which released its results in the summer of 2011, arrived at end strength of 186,800 marines in a post-Afghanistan security environment. The Marine Corps affirms the results of this initial effort, but has readjusted its parameters based on the fiscal realities of spending cuts and is moving to a final end strength of 182,100. While taking additional risk in capacity, this force provides affordability while maintaining a ready and capable Marine Corps fully capable of executing all assigned missions in the new DSG. It is optimized for forward-presence, engagement, and rapid crisis response and balances capacity and capabilities while maintaining the high levels of readiness for which the Nation relies on the Marine Corps.

77. Senator AYOTTE. General Dunford, would a higher end strength for the Marine Corps beyond that proposed in the budget request reduce risk and improve readiness of our forces over the long run?

General DUNFORD. The Marine Corps’ budget request achieves a necessary balance across the five readiness pillars of high quality people, unit readiness, and the capacity to meet the requirements of combatant commanders, infrastructure sustainment, and equipment modernization. These pillars support institutional readiness, sustain operational requirements, and prepare Marine Corps Forces for crisis and contingency response. The Marine Corps’ 2013 budget request maintains the high levels of readiness the Nation has come to expect of its marines by balancing capacity and capability.

ATTACK SUBMARINE SHORTAGE

78. Senator AYOTTE. Admiral Ferguson, during the Navy posture hearing, the CNO confirmed for me that the Navy was only able to support 61 percent of combatant commanders’ requirements for attack submarines in fiscal year 2011. The CNO confirmed that the Navy has a requirement for 48 attack submarines. He also confirmed that, in 2030, based on low submarine build rates in the 1990s and normal life cycle retirements of the *Los Angeles*-class submarines over the coming 15 to 20 years, the Navy projects that it will only have 39 attack submarines—9 submarines short of what our Nation needs. What impact will this attack submarine shortfall have on the forward presence of attack submarines and undersea strike volume?

Admiral FERGUSON. The Navy continues to meet 100 percent of the adjudicated requirements tasked through annual Joint Staff-led GFM process which balances competing combatant commanders' demand with the available resources and priority requirements. While unable to meet all combatant commanders' submarine demand, the Navy sources all adjudicated requirements for SSN presence covering critical intelligence and warfighting requests from the combatant commands.

The Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2013 results in an SSN force structure below the minimum 48 SSN requirement from 2022 until 2034—with a low point of 43 SSNs in 2028. During this period, SSN forward presence and undersea strike volume will be reduced.

79. Senator AYOTTE. Admiral Ferguson, Secretary Mabus has said that the decision to delay the procurement of a *Virginia*-class submarine from 2014 to 2018 was made to help free up budget resources in the FYDP. Earlier this year, Vice Admiral Blake testified that if the Navy were provided additional resources, its top priorities would be to restore the guided missile destroyer and the *Virginia*-class submarine that we had to give up in 2014. How has the *Virginia*-class submarine performed?

Admiral FERGUSON. To date, delivered ships are exceeding expectations and performance on deployment has been extremely successful. USS *Virginia* (SSN 774), USS *Texas* (SSN 775), and USS *Hawaii* (SSN 776) all completed their first full length deployment with high OPTEMPO (84.6 percent for SSN 774, 85 percent for SSN 775, and 84 percent for SSN 776). The first ship of the class, USS *Virginia*, recently completed a successful Extended Docking Selected Restricted Availability (EDSRA). Lessons learned will be shared with Pearl Harbor Naval Shipyard as they prepare to conduct the next EDSRA on USS *Texas*. Further details may be provided in a classified forum, if desired.

80. Senator AYOTTE. Admiral Ferguson, in light of the inability to meet combatant commanders' requirements for attack submarines, how helpful would it be to the Navy to not have to postpone the procurement of the second *Virginia*-class submarine?

Admiral FERGUSON. The Navy continues to meet 100 percent of the requirements tasked through annual GFM adjudicated process. No Service has sufficient force structure to source every geographic combatant commanders' request for forces. While unable to meet all submarine demand, the Navy continues to source all critical intelligence and warfighting requests within the sustainable FRP.

The projected Navy battle force is fully capable of meeting the strategic guidance found in "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense." The current construction plan will build that force, while sustaining the national shipbuilding design and industrial base. Removing the second fiscal year 2014 SSN and shifting its procurement to fiscal year 2018 was purely a financial decision. In the current budget environment, the Navy must carefully prioritize its commitments in various AORs. Buying additional SSNs in the near-term, provided they are affordable and do not disrupt other priorities, would help address this growing gap between the supply of these multi-purpose warships and the combatant commanders' demand for more assets.

RISK FROM SEQUESTRATION

81. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, the Secretary of Defense has described the defense sequestration cuts as catastrophic, inflicting severe damage to our national defense for generations. He compared the cuts to shooting ourselves in the head. What would be some specific impacts of defense sequestration on each of your Services?

General AUSTIN. To echo Secretary Panetta, the magnitude of these cuts would be catastrophic. The indiscriminate nature of the reductions would not give the Army flexibility to provide a force that is ready to deal with unknown contingencies. However, we are bound by the OSD and OMB to wait for specific budget guidance before determining and providing definitive impacts.

Admiral FERGUSON. A detailed review directed by OMB would be required to determine the specific impacts from sequestration. Under sequestration, automatic percentage cuts are required to be applied without regard to strategy, importance, or priorities, resulting in adverse impact to almost every operation within DOD.

General DUNFORD. Sequestration will create unacceptable risk to the Marine Corps' mission as America's Force-in-Readiness; these cuts will negatively affect the Marine Corps' operations abroad, stagnate the reset of the forces coming out of Afghanistan, and reduce or halt modernization and procurement. Imposition of seques-

tration cuts would require a fundamental reassessment of what the Nation expects of the Marine Corps and what we are capable of providing.

In all cases, sequestration-imposed cuts would fundamentally alter the manner in which we recruit, train, and fight, and would have a lasting impact on the Marine Corps.

General BREEDLOVE. Sequestration would drive additional major reductions to the Air Force fiscal year 2013 budget request. As Air Force leadership has testified, the proposed fiscal year 2013 budget is a balanced and complete package with no margin of error. Under sequestration, additional programs would need to be restructured, reduced, and/or terminated to implement the across-the-board reductions.

82. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, what would be the most significant military risk?

General AUSTIN. Sequestration will cause a reduction in total force readiness, limiting our ability to surge, regenerate, and mobilize to confront and defeat aggression anywhere in the world. This significant military risk requires a new security strategy to redefine the appropriate balance among the objectives sought, the methods to pursue those objectives, and the limited resources available.

Admiral FERGUSON. The proposed methodology for execution with automatic percentage cuts across each major investment and construction program would cause significant risk to the Navy, and depending on available transfer authority to consolidate these cuts, would severely limit the ability to preserve operations and major acquisitions programs.

General DUNFORD. Sequestration would impact our ability to procure equipment, modernize the force, and train our marines. Accordingly, our ability to maintain our forward presence may be impacted and possibly result in a lack of access and an inability to influence areas of the world that our country believes to be important.

General BREEDLOVE. DOD has not begun any planning for sequestration per OMB guidance. Once OMB issues guidance, deliberate planning will begin with all actions aligning to the new DSG, "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense." The Air Force assesses risks through a corporate process aligning each budget item and platform with the DSG. The Air Force's budget proposal for fiscal year 2013 is the culmination of an intensive, collaborative, and inclusive process to balance risk across all the Air Force core functions. This comprehensive effort resulted in an increased but manageable risk to the Air Force's ability to meet the revised DSG. Under sequestration, additional programs would need to be restructured, reduced, and/or terminated to implement additional across-the-board reductions.

83. Senator AYOTTE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, in light of the lack of progress to date to address the threat of sequestration, what DPG has been issued to the Services for preparation of the 2014 defense budget?

General AUSTIN. The Services have been directed by the Secretary of Defense to not plan for sequestration.

To develop the fiscal year 2014 budget, each Service received topline guidance in March 2012 based on the fiscal year 2014 discretionary caps. As we develop our fiscal year 2014 budget request, we will ensure it supports the President's NDS and reflects the guidance set forth by the Secretary of Defense's DPG.

Admiral FERGUSON. No DOD guidance has been provided regarding sequestration and no planning has occurred. Any planning for sequestration would be a government-wide effort guided by OMB.

General DUNFORD. The Marine Corps is developing its fiscal year 2014 budget in order to meet its mission as prescribed in the DSG while guided by the fiscal realities we face today. We will build the best Marine Corps the Nation can afford, and we will only ask for what we need.

General BREEDLOVE. DOD has not begun any planning for sequestration per OMB guidance. Once OMB issues guidance to OSD, the Air Force will begin the deliberation process to prioritize programs to try and meet the new DSG, "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense." It is difficult to predict the effect that such a major disruption would have on funding requirements for fiscal year 2014 and beyond.

84. Senator AYOTTE. General Austin, how much further might the Army have to reduce its Active component and Reserve component end strengths?

General AUSTIN. If military personnel funding is sequestered, then we would have to take highly disruptive steps: halt most accessions, stop promotions, end most per-

manent change-of-station (PCS) moves, and halt discretionary bonuses and pays. Again, we need to turn off sequester for both defense and non-defense.

85. Senator AYOTTE. General Austin, would the Army have to make increased use of involuntary separations?

General AUSTIN. Involuntary separation of military personnel would, for most individuals, result in added costs in fiscal year 2013 because of separation pays, lump sum leave, and PCS moves home. Involuntary separation is not a viable tool to meet sequester of military personnel funding. Also, involuntary separation is a highly complex process requiring the convening of Separation Boards coupled with a careful analysis of what skill sets are required to sustain mission readiness—not something that can be done quickly.

86. Senator AYOTTE. General Dunford, would the Marine Corps be able to support one major combat operation if defense sequestration goes forward?

General DUNFORD. We believe sequestration would have devastating effects, both because of the size of the cuts and the across-the-board manner in which they must be applied in fiscal year 2013. While we would seek to protect wartime operating budgets, this would lead to heavy cuts in training and operations funding—particularly in the Marine Corps. Training would be adversely affected and units would be available later in the event of an unexpected contingency. There would also be adverse effects on other types of training.

87. Senator AYOTTE. General Dunford, would defense sequestration require a fundamental reassessment of what our Nation asks the Marine Corps to do?

General DUNFORD. We know that readiness would be adversely affected, but we do not have the specific estimates for each category of readiness inputs. Again, we believe we should focus on turning off sequestration rather than planning a new budget.

88. Senator AYOTTE. General Breedlove, which major acquisition programs would be at risk if defense sequestration goes forward?

General BREEDLOVE. Sequestration will affect every single defense program and project—more than 2,500 of them across DOD. We will be forced to institute costly delays and cuts in buys that increase unit costs. We may have to cancel or renegotiate some contracts within a program. But I would not expect that sequestration itself would lead to widespread cancellations of entire programs in fiscal year 2013. Among other reasons, each program must be cut by the same percent, so the law will make cancellation impossible unless we reprogram. However, if sequestration cuts continue beyond fiscal year 2013, we would be forced to consider program cancellations.

89. Senator AYOTTE. Admiral Ferguson, the CNO testified during the Navy posture hearing that defense sequestration would force the Navy to cut 50 to 55 ships, bringing the total fleet size down to about 230 to 235 ships. Is that your estimate as well?

Admiral FERGUSON. This is our estimate. A more detailed review directed by OMB would be required to determine specific details regarding additional impacts to the Navy.

90. Senator AYOTTE. Admiral Ferguson, what readiness risks would a fleet of 230 ships incur?

Admiral FERGUSON. The Navy would be unable to meet the requirements of the current NDS. A smaller force of 230 ships would provide less presence, longer response times for crises, and greater risk to current contingency plans.

TANKER READINESS

91. Senator AYOTTE. General Breedlove, I note that in your opening statement, you stated that the Air Force tanker fleet averages 47-years-old, and that we are not procuring aircraft at a rate that is fast enough to even begin to reduce the average age of our aircraft inventory. I have been following the procurement of the KC-46A tanker as replacement for our aging tanker fleet. The specter of congressional sequestration required under the BCA exposes the new KC-46A tanker replacement program to considerable risk. Can you elaborate on that risk?

General BREEDLOVE. I cannot elaborate at this point, because much is still unresolved. Any reductions imposed by sequestration rules could adversely impact the

Air Force's ability to perform its missions. At this point, however, it is too early to determine the specific impacts to the KC-46 program because such cuts could require the Air Force to rebalance its entire portfolio of programs.

92. Senator AYOTTE. General Breedlove, if sequestration goes forward, will the Air Force have to break the KC-46A contract and renegotiate a new contract?

General BREEDLOVE. Any reductions imposed by sequestration rules could adversely impact the Air Force's ability to perform its missions. At this point, however, it is too early to determine the specific impacts to the KC-46 program because such cuts could require the Air Force to rebalance its entire portfolio of programs.

93. Senator AYOTTE. General Breedlove, what would be the impact of breaking the existing contract on our taxpayers?

General BREEDLOVE. At this point, it is too early to determine the specific impacts to the KC-46 program because such cuts could require the Air Force to rebalance its entire portfolio of programs.

94. Senator AYOTTE. General Breedlove, what would be the impact on the KC-46A fielding timeline?

General BREEDLOVE. At this point, it is too early to determine the specific impacts to the KC-46 program because such cuts could require the Air Force to rebalance its entire portfolio of programs.

95. Senator AYOTTE. General Breedlove, what operational risk would a delayed fielding of the KC-46A incur for the Air Force's air refueling capability?

General BREEDLOVE. Delayed fielding of the KC-46A extends the short-term risk the Air Force initially accepted by retiring KC-135E fleet and expanded with the retirement of an additional 20 KC-135R models in fiscal year 2013. Delayed fielding of the KC-46A would mean an increased investment in KC-135 depot to keep more KC-135s flying into the 2024 timeframe. For war planners, continued reliance on the KC-135 equates to an increased number of KC-135s airborne to meet the missions planned for the KC-46A. The KC-46A brings increased air refueling capability and an anticipated higher aircraft availability rate.

A 2009 RAND report on aging aircraft indicated that: "The preponderance of the evidence analyzed by RAND is consistent with an expectation that well before 2040 a combination of fatigue cracking, corrosion, and other aging mechanisms will drive the need for inspections, repairs, and materiel replacement to unsustainable levels in terms of both aircraft downtime and costs." Because of its multi-role mission, our global force posture simply cannot operate without a reliable tanker force.

Additionally, from a fiscal stewardship perspective, DOD was able to very effectively leverage competition, resulting in an exceptional contract with our industry partner. Delaying the current engineering and manufacturing development effort could require us to renegotiate the contract and the government would forgo the pricing achieved under competitive pressure. The resulting renegotiation would occur in a sole-source environment which would likely result in a higher overall cost of the program. There is some flexibility built into the follow-on production effort which allows for variable quantities of aircraft for each lot. As long as the quantity adjustments are within the bounds of the pre-established variable quantities, the procurement of aircraft could be delayed without requiring a costly price renegotiation; however, it is important to note that the individual unit cost of each aircraft will be higher at these lower quantities. Aircraft reductions beyond what is captured in the pre-established variable quantities would result in a price renegotiation where we could potentially lose billions of dollars in savings that the competitive source selection provided. Simply stated, there could be an exceptionally burdensome cost impact, on DOD and the Nation, if the decision were to delay fielding of the KC-46A.

96. Senator AYOTTE. General Breedlove, even with this acknowledgement of risk in weapons systems acquisition, the Air Force continues to take a more immediate risk by underfunding the sustainment of these aging weapons systems including requesting funds for only 79 percent of the requirement in the fiscal year 2013 budget. Knowing the strain of over 20 years of contingency support on these airframes, why is the Air Force taking risk in WSS?

General BREEDLOVE. As a whole, the Air Force WSS is funded at 79 percent, including OCO funds. The total Air Force KC-135 and KC-10 tanker fleets are funded at 94 percent, including OCO. The tanker WSS for aircraft and engine depot level maintenance is funded at 95 percent and 100 percent, respectively. In 2008, the Air Force instituted the Centralized Asset Management (CAM) process to manage WSS

requirements and funding. The CAM process provides a degree of flexibility, within congressional limitations, to manage any remaining risk during the execution year. The Air Force is confident that, with the proposed WSS budget, we can adequately support WSS for the tanker fleet without grounding aircraft due to funding shortfalls.

DELAY OF THE SSBN(X)

97. Senator AYOTTE. Admiral Ferguson, from a national security perspective, how important is the sea leg of the nuclear triad to our Nation's nuclear deterrent?

Admiral FERGUSON. Each leg of the triad possesses inherent advantages. Nuclear-powered ballistic missile submarines (SSBN) represent the most survivable leg of the U.S. nuclear triad. Today, there appears to be no viable near- or mid-term threats to the survivability of U.S. SSBNs. The April 2010 Nuclear Posture Review concluded that ensuring a survivable U.S. response force requires continuous at-sea deployments for SSBNs in both the Atlantic and Pacific oceans, as well as the ability to surge additional submarines in crisis was of vital importance to the Nation.

98. Senator AYOTTE. Admiral Ferguson, the current budget proposes to delay the replacement ballistic missile submarine by 2 years. This follows prior-year statements from the Navy that the procurement schedule for 12 follow-on ballistic missile submarines is inextricably linked to legacy, i.e. *Ohio*-class, ballistic missile submarine retirements and there is no leeway in this plan to allow a start or any delay in the procurement plan. By delaying the replacement ballistic missile submarine by 2 years, what additional risk is the Navy assuming in its ability to maintain the same at-sea availability rates required under current nuclear force posture?

Admiral FERGUSON. As a result of the 2-year delay in the *Ohio* Replacement Program, there will be less than 12 SSBNs from 2029 to 2042 during the transition from the current *Ohio* class to the *Ohio* Replacement SSBNs. During that timeframe, a force of 10 SSBNs will support current at-sea presence requirements but provides little margin to compensate for unforeseen issues that may cause reduced SSBN availability and poses some challenges to meeting U.S. Strategic Command strategic deterrent requirements. There are no major SSBN overhauls planned during this timeframe, and the Navy will be closely managing risk during this transition period. As the *Ohio* Replacement SSBNs begin their first docking availability in 2049, 12 SSBNs will be required to offset ships in planned maintenance.

99. Senator AYOTTE. Admiral Ferguson, what is the strategic rationale for this delay?

Admiral FERGUSON. The decision to delay the procurement of the *Ohio* Replacement SSBN by 2 years reflects the need to balance total battleforce procurement requirements in a period of increased fiscal austerity. Based on current at-sea presence requirements, the Navy will be able to meet its operational SSBN requirements despite the delay with some increased operational risk. Additionally, design work will continue, albeit at a slower pace, which will support start of construction for the first *Ohio* Replacement SSBN in 2021.

100. Senator AYOTTE. Admiral Ferguson, is this purely budget driven?

Admiral FERGUSON. The decision to delay the procurement of the *Ohio* Replacement SSBN by 2 years reflects the need to balance total battleforce procurement requirements in a period of increased fiscal austerity. Based on current at-sea presence requirements, the Navy will be able to meet its operational SSBN requirements despite the delay with some increased operational risk. Additionally, design work will continue, albeit at a slower pace, which will support start of construction for the first *Ohio* Replacement SSBN in 2021.

F-35 JOINT STRIKE FIGHTER

101. Senator AYOTTE. Admiral Ferguson, General Dunford, and General Breedlove, what is the difference in terms of capability between legacy aircraft and a fifth generation fighter like the F-35?

Admiral FERGUSON. The primary difference between the F-35 and fourth generation fighter aircraft is the ability to effectively engage a wide range of missions, targets, and threats in contested air space with far fewer support assets. JSF's core missions include Strategic and Tactical Destruction of Enemy Air Defenses, Suppression of Enemy Air Defenses, Strategic Attack, Offensive Counter Air, Defensive Counter Air, Close Air Support, Interdiction, and Armed Reconnaissance.

The fundamental capability and attribute differences that distinguish a fifth generation fighter include:

1. Very low observable stealth with a full combat load of weapons and fuel;
2. Fully fused multi-spectral and multi-ship sensor integration that supports air-to-air and air-to-ground target detection, track, and identification, as well as overall situational awareness;
3. Multi-function Advanced Data Link is an advanced high band-width data-link, which is extremely jam-resistant and essential to support multi-aircraft operations and multi-spectral fusion in contested jamming environments;
4. Advanced electronic protection capability that effectively counters the most stressing jammer threats, which was demonstrated in Exercise Northern Edge in 2011;
5. Integrated electronic attack/offensive jamming capability combined with very low observable stealth provides a synergistic effect that severely complicates the air-to-air and surface-to-air threats ability to engage F-35s; and
6. Advanced sustainment and maintenance capabilities that reduce logistics footprint, support personnel and equipment requirements, while improving overall aircraft availability.

General DUNFORD. Fifth generation aircraft like the F-35 provide a combination of stealth, sensor power, networking, and survivability that our legacy aircraft do not have nor can attain cost effectively with continual upgrades. Stealth provides access and offensive capability in a denied environment that our legacy aircraft cannot achieve. In addition, due to this inherent access, fifth generation aircraft will require fewer support aircraft to accomplish their missions in these environments. Modern computers driving the most capable networked sensors on a fighter aircraft provide increased awareness throughout the spectrum of warfare. The addition of a robust defensive suite combined with the previously mentioned stealth ensures enhanced aircraft survivability in all situations over legacy aircraft. Lastly, the combination of all of the above attributes on a Short Takeoff/Vertical Landing (STOVL) aircraft provide the MAGTF commander superior flexibility and capability when compared to any current 4th generation Marine Corps aircraft.

General BREEDLOVE. Fifth generation capability is a mix of maneuverability, fused advanced sensors, multi-role capability, and low observability. These capabilities afford our Nation's leaders the ability to provide air dominance and deliver precision engagement in A2/AD environments where fourth generation aircraft lack survivability. The fifth generation capability is required to address currently-fielded and rapidly-evolving threats which are specifically targeted to neutralize the superiority delivered by our Air Force.

102. Senator AYOTTE. Admiral Ferguson, General Dunford, and General Breedlove, what additional capabilities does the F-35 provide that the legacy aircraft the F-35 is replacing do not?

Admiral FERGUSON. The F-35 is an effective weapon system platform for improving interoperability and jointness between U.S. Forces and our allies because of design and mission systems commonality. In addition, by sharing these advanced technology capabilities of the F-35 with our allies, combatant commanders will be able to effectively task more of our allies to carry a greater share of the operational tasking and risks in coalition endeavors. Commonality between air vehicles, mission systems, and interoperability systems helps improve the ongoing drive for improved jointness and commonality across DOD, especially with supporting systems like future weapons, communication systems, support, and training systems.

General DUNFORD. First and foremost, the stealth characteristics of the F-35 provide offensive capability, access, and superior survivability in all environments. Modern threat upgrades have made it increasingly difficult to ensure our legacy F-18s, AV-8Bs, and EA-6Bs can operate in all environments as required without large numbers of supporting assets. Due to the powerful suite of networked sensors, the F-35 will provide increased awareness to the Joint Force across the full-spectrum of conflict. Our legacy aircraft, while capable, cannot provide the same amount and quality of data to the Joint Force. The F-35 also provides tremendous growth potential for decades to come; whereas our legacy aircraft are rapidly reaching the limits of their spiral development capability. Finally, the F-35B provides the MAGTF commander with all of the above capabilities on a STOVL aircraft. Legacy aircraft cannot provide this combination of lethality and survivability with the flexibility of STOVL.

General BREEDLOVE. The F-35 provides:

- Low observable airframe with advanced countermeasures to ensure survivability;

- Multi-role avionics with advanced electronic attack/electronic protection attributes;
- Advanced multi-spectral detection and situational awareness;
- Ability to first detect, locate, identify, and kill next generation air-to-air and surface-to-air threats;
- Real-time threat awareness via advanced data link networks;
- Autonomous combat identification to reduce reaction times; and
- Significantly smaller logistics foot-print than legacy aircraft.

103. Senator AYOTTE. Admiral Ferguson, General Dunford, and General Breedlove, why does our Nation need a fifth generation fighter aircraft?

Admiral FERGUSON. A fifth generation fighter aircraft brings the ability to effectively engage a wide range of missions, targets, and threats in contested air space with far fewer support assets. It provides day-one strike capability enabling the tactical agility and strategic flexibility required to counter a broad spectrum of threats and win in operational scenarios that cannot be addressed by current legacy aircraft, to include operations in an A2/AD environment. Additionally, the aircraft's fused sensors improve upon and leverage many other, already existing systems and capabilities across the Services.

General DUNFORD. Our Nation needs a fifth generation fighter in order to gain access; enable follow-on forces; and provide operational flexibility and capability in a dynamically broad spectrum of environments and venues against widely proliferating next generation air threats and integrated air defense systems.

The F-35 is the only aircraft that can provide the required combination of lethality, flexibility, and survivability that meets this requirement in the emerging and future security environment.

General BREEDLOVE. Fifth generation fighters provide the Nation combat command-required air dominance and precision strike capabilities in an A2/AD environment. In addition to advanced avionics and fused sensors, the fifth generation aircraft are defined by stealth characteristics which enable our First Look, First Shot, First Kill capability against rapidly evolving threats. The level of stealth required to meet and defeat these threats in the denied airspace we may be required to operate in is a characteristic that simply cannot be added on to our existing fleet of fourth generation aircraft. Without fifth generation aircraft, we can't operate and survive against the current and forecast threats.

104. Senator AYOTTE. General Breedlove, are the Russians or the Chinese working on their own fifth generation fighter capabilities?

General BREEDLOVE. Yes, both Russia and China are developing their own fifth generation fighter capabilities. Prototypes of the Russian T-50 (PAK-FA) and the Chinese J-20, with technologies and capabilities similar to the United States' F-22 and F-35, are currently in flight test with initial operation likely by the end of this decade. Both aircraft are designed to provide Russia and China with advanced air-to-air combat lethality, plus an unprecedented long-range precision strike capability against land and sea targets. These aircraft introduce a leap forward in Russian and Chinese combat aircraft technology due to advanced avionics and sensors, longer range weapons, stealth design, and aerodynamic capability. Both countries plan to sell their respective aircraft on the global arms market to compete with the F-22 and the F-35.

PAK-FA

The PAK-FA is a result of a tender issued by President Putin for a next generation fighter in 2001. In January 2010, the twin-engine heavy fighter, designed by Sukhoi, conducted its first flight. Three flying prototypes have been built to date and more than 150 flights have been conducted. A fourth prototype is expected later this year. When fully mature, the PAK-FA will combine low-observable technology, super maneuverability, an active electronically-scanned array radar, integrated avionics, and super cruise capability, and prove Russia's first operational stealth aircraft. According to Russian Air Force public statements, they hope to begin initial serial deliveries to the force in small numbers between 2015 and 2016, with an initial operational capability (full squadron) by the end of the decade. Additionally, Russia is working with India to develop a two-seat variant for Indian Air Force operation after 2020. India is contributing design concepts and subsidiary funding. While total production plans remain unclear, the Russian Air Force expects to acquire 250 aircraft. Russia will also likely produce a variant for export as well.

J-20

The January 2011 initial flight test of the J-20 next-generation fighter prototype highlights China's aggressive ambition to produce a fighter that incorporates stealth attributes, advanced avionics, and super cruise-capable engines within their air defense network to challenge the United States for air dominance. Launched in the late 1990s, the program won the People's Liberation Army Air Force (PLAAF) endorsement in 2008. To date, two flying prototypes have been built and are in flight testing. When fielded, the J-20 will incorporate fifth generation attributes including low-observability (stealth), super maneuverability, super cruise, and sensor fusion. In late 2009, PLAAF Deputy Commander Gen He Weirong stated that the J-20 will be operational between 2017 and 2019. Like the PAK-FA, total production plans are unknown at this time, though either the J-20 itself or a variant could eventually be offered on the export market.

ARMY COMBAT FORCE READINESS

105. Senator AYOTTE. General Austin, I was very surprised that your written statement did not mention the Army's goals for dwell time. Providing enough time between deployments has for years been the foundation of the balance of training and manpower readiness for the Army. What is the impact on readiness when there is insufficient time at home between deployments?

General AUSTIN. The high operational demand on Army units of the previous 10 years significantly stressed our military personnel and their families. To fully reconstitute our units, soldier, and their families must be given the time and resources they need to reintegrate and reverse the effects of the sustained operational tempo. Experience indicates that soldiers require a proper balance of time at home station between deployments to fully recover, both mentally and physically, from the rigors of a combat deployment. The Army's goal is to achieve and maintain a dwell time of at least 2 days at home for every day deployed for the Active component soldier and 4 days at home for every day mobilized for the Reserve component soldier. In the second quarter of fiscal year 2012, we met the dwell goal of 1:2 for individuals. Given the expected reduced demand for forces deployed to OEF, assuming we reduce Army combat brigade requirements by the end of fiscal year 2014 to a minimal degree, and assuming there will be no other large-scale deployments in the foreseeable future, we can expect individual dwell time for the Active component to continue to improve. Considering these current assumptions, we anticipate we will reach an individual BOG-to-dwell ratio of 1:3 sometime in fiscal years 2017 to 2018. We expect to reach a unit BOG-to-dwell ratio of 1:2 in fiscal year 2015.

The withdrawal of forces from Iraq has contributed to restoring operational depth and strategic flexibility in our formations. Additionally, the ongoing drawdown of forces in Afghanistan will continue to increase the time at home for our soldiers. As recovery time at home station increases, the Army will be able to focus on training units to effectively perform unified land operations.

106. Senator AYOTTE. General Austin, what are the Army's current dwell time goals for the Active component and for the Reserve component?

General AUSTIN. The Army plans to achieve a 1:2 BOG-to-dwell ratio for the Active component and 1:4 BOG-to-dwell ratio for the Reserve component beginning in 2015.

107. Senator AYOTTE. General Austin, is this goal for units or for individuals?

General AUSTIN. The Army tracks the dwell time of both soldiers and units. The current plan of 1:2 for the Active component and 1:4 for the Reserve component applies to both individual soldiers and units.

108. Senator AYOTTE. General Austin, what military specialties and types of units are receiving the least time at home between deployments?

General AUSTIN. Military specialties such as aviation, intelligence, military police, engineers, psychological operations, civil affairs, and special forces are stressed and receive the least time at home station between deployments. For example, aviation has a historical BOG-to-dwell ratio average of 1:1.3. In an effort to improve that ratio, the Army is adding an additional Combat Aviation Brigade beginning in fiscal year 2013. The Army and SOCOM have developed new initiatives to grow and synchronize special forces capabilities to reduce stress on the force. The Army is projected to meet global requirements and achieve its BOG-to-dwell goal of 1:2 for Active component units and 1:4 for Reserve component units beginning in 2015.

109. Senator AYOTTE. General Austin, what are the current dwell times for these specialties and units?

General AUSTIN. These low density and high demand units (aviation, civil affairs, intelligence, military police, psychological operations, engineers, and special forces) remain just above the Secretary of Defense's mandated 1:1 BOG-to-dwell ratio.

110. Senator AYOTTE. General Austin, do you believe the Army should be reducing its end strength before achieving its dwell time goals?

General AUSTIN. The Army is programmed to meet peacetime and contingency plan requirements, supplemented with OCO dollars while ramping down to a force structure of 490,000. This ramp is in synch with a corresponding reduction of OCO demands. The Army recently met the goal of 1:2 for individual soldiers and will meet a unit BOG-to-dwell of 1:2 in fiscal year 2015. Reductions beyond 490,000 will challenge the Army's ability to meet timelines for current identified requirements and to maintain necessary dwell for units and soldiers, thereby imposing a significant readiness risk to the force and strategic risk to the Nation.

NATIONAL GUARD AS AN OPERATIONAL RESERVE

111. Senator AYOTTE. General Austin, in your written statement you state that we envision a progressive readiness model which will better align our Active and Reserve component units to leverage their unique capabilities and be responsive to geographic combatant commanders' requirements. I am wondering how this statement relates to the standing of the Army National Guard as an operational reserve or a strategic reserve?

General AUSTIN. The Army National Guard plays a pivotal role as an operational force conducting missions around the world in support of America's effort to deter and defeat our enemies. Through the progressive readiness model, Army units build readiness to accomplish directed missions and support any operational plan requirements. This model allows sustainable and predictable programming to ensure geographic combatant commanders have the forces and capabilities they require to accomplish their mission.

112. Senator AYOTTE. General Austin, in the New Defense Strategy, does the Army consider the National Guard a part of its operational reserve?

General AUSTIN. The Army consists of the Active component and the Reserve component forces (Army National Guard and U.S. Army Reserve) providing operational capabilities and strategic depth to meet U.S. defense requirements in support of combatant commanders' missions. The Reserve component complements and supplements the Active component ensuring the Total Force remains capable of providing trained and ready forces to rapidly meet sustained operational requirements, surge to unforeseen contingency operations, and support to Federal, State, and local governments for Homeland defense and defense support to civil authorities missions, as needed.

113. Senator AYOTTE. General Austin, if the National Guard is to be ready to respond to combatant commanders' requirements, then they should be resourced, trained, and ready, like any other operational unit. Is that the Army's plan?

General AUSTIN. The Army's force generation model ensures progressive readiness for the Total Force, to include the National Guard. Through the progressive readiness model, units move through resourcing gates over time, meeting manning, equipping, and training goals before the unit is considered available for deployment. Army National Guard units being prepared for operational deployments will be resourced to meet the same readiness requirements as an Active component unit, consistent with the 5-year progressive readiness model established for the Reserve component. We have resourced their equipment, ensured adequate training resources, opportunities for leader development in Army schools, and improved health and dental readiness to improve the readiness of Guard units.

114. Senator AYOTTE. General Austin, will those resources come from the base budget in future years or from supplementals?

General AUSTIN. Forces scheduled to be available for combatant commanders and other missions should be resourced in our base program at a level that will allow them to attain the levels of readiness required to meet the mission.

However, if additional forces are required to meet contingency operations that would present demands for forces that exceed the production of the force generation model, we would need help to ready those additional forces.

QUESTIONS SUBMITTED BY SENATOR JAMES M. INHOFE

ALTERNATIVE ENERGY

115. Senator INHOFE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, I believe DOD can and should improve efficiencies in energy use and expand in the use of alternative energy sources; however, it should not come at the cost of manning, training, or equipping the force. Do you agree?

General AUSTIN. The Army's investments in energy efficiency and renewable energy enhance the Army's ability to man, train, and equip its force. These investments enhance mission capability and reduce reliance on outside sources of energy. Reduced reliance means reduced risk to missions due to supply disruption, price volatility, and increased mobility achieved by not being tethered to supply lines and foreign suppliers. Investment in energy capabilities, including renewable energy and energy efficient technologies, will help ensure the Army can meet mission requirements today and into the future.

Admiral FERGUSON. Yes. The Navy will not let our force become hollow, and will balance current requirements to man, train, and equip our forces against requirements to make the future fleet more combat capable in this challenging fiscal environment. The majority of funding in the Navy's energy program, both operational and facilities, focuses on improvements in efficiency to increase our energy security and reduce our energy demands—reducing our vulnerabilities, expanding the tactical choices for operational commanders, and reducing the lifecycle cost of operations. In fiscal year 2012, less than 1 percent of the Navy's overall fuel bill will be spent on biofuel to further the Navy's ongoing test and certification efforts. This small investment in testing and certifying drop-in alternative fuels is designed to achieve a less petroleum-dependent future, but the Navy has no plans to purchase alternative fuel for operational use until it is cost competitive with conventional fossil fuels.

General DUNFORD. Yes. The Marine Corps is investing in energy efficient and renewable energy capabilities for one purpose: to increase combat effectiveness of the force. The Commandant has called out expeditionary energy as one of the six pillars of modernization for the force—prudent investments we must make to ensure we are prepared for future missions. For this reason, we consider energy performance as an independent variable in our development of combat capability. It must hold its own in the tradeoffs that we make when we design and procure our warfighting systems and demonstrate value to the force.

We measure our return on investment from our operational energy investments in terms of increased military effect—forces that go farther, stay longer, and operate as less risk. For example, we estimate that our President's fiscal year 2013 budget energy investment will enable the future MEB to operate 1 day longer than it can today over a 15-day assault; for a 365-day mission, the MEB will have 1 more month of operations, and a weight reduction of 7 million pounds fuel, which translates to approximately 208 fuel trucks off the road.

General BREEDLOVE. Energy is a necessity for all Air Force missions and operations, and the Air Force recognizes energy as an integral part of its systems and not simply as a commodity. Every action taken by the Air Force to improve its energy security and efficiency is executed in support of the Air Force mission. By reducing the Air Force's demand for energy and diversifying its potential sources of energy, the Air Force is continuing to improve its resiliency to ensure it has the ability to recover from energy interruptions and sustain the mission, and have energy where and when the Air Force needs it. The Air Force has also shown that investments in energy efficiency can result in significant cost avoidance. For instance, in fiscal year 2011 the Air Force avoided over \$257 million in facility energy cost due to previous years' investments in efficiency and demand reduction.

116. Senator INHOFE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, with the continued decline of the defense budget over the past 3 years—forcing cuts to personnel, ships, and aircraft—what will be the impact of tripling or quadrupling your fuel costs?

General AUSTIN. This hypothetical situation would have significant impacts upon the ability of the Army to train and sustain the current force and to ensure that modernization keeps up with emerging threats on the battlefield. To provide some context, in 2010 the Army received \$243 billion in total obligation authority, in the form of base budget and OCO funding. The Army spent approximately \$2.44 billion in base budget and OCO on fuel.

The Army's 2012 budget for both base and OCO funds is \$203 billion, with a projected fuel expenditure of nearly \$3 billion. In this hypothetical scenario where

Army fuel requirements increase by \$3 billion to \$6 billion, we would be forced to examine current OPTEMPO, readiness, and modernization accounts, and curtail, defer, or delay lower priority missions, training, maintenance, or modernization efforts to pay for the increased fuel costs. Reducing OPTEMPO and training would have the added benefit of reducing fuel expenditures; nonetheless, such a scenario would have serious impacts on the Army's ability to conduct current operations, our immediate readiness, and the pace at which we modernize existing capabilities.

Admiral FERGUSON. Any increase in fuel prices during execution year must be resolved within the Navy's O&M account. Reconciling this deficit comes at a cost to flying hours, steaming hours, sustainment of our facilities, and/or our procurement program. As of May 10, 2012, increased fuel price volatility of conventional fossil fuels resulted in an additional \$1 billion bill to the Navy for this year, on top of the \$4 billion budgeted for liquid fuel. If the Navy were to reconcile this bill exclusively by cutting flying hours and steaming hours, it would represent a 20 percent decrease in those hours. For fiscal year 2012, the Navy will likely resolve the deficit by reducing sustainment of our facilities, delaying new programs, and cutting flying and steaming hours.

General DUNFORD. The Marine Corps would be negatively impacted by rising fuel cost as a direct correlation exists between increased fuel cost and our operational budget. The Marine Corps relies on fuel resources to support the training and deployment of our marines, and each successive increase in fuel cost requires the Marine Corps to adjust our budget estimates and identify offsets from other programs. Thus, any significant increase in fuel cost, without a comparable increase in our total budget, degrades the Marine Corps' readiness and limits our ability to respond to crisis.

General BREEDLOVE. As one of the largest consumers of fuel in DOD, the Air Force is committed to reducing energy consumption in our aircraft and facilities through various efficiency initiatives. If fuel costs were to drastically increase, the Air Force, along with DOD, would need to make tough decisions to properly balance Air Force modernization and readiness priorities to fund fuel increases. In order to mitigate risk and control costs, the Air Force will continue to identify and implement fuel efficiency initiatives to reduce consumption in both aircraft and facilities.

117. Senator INHOFE. Admiral Ferguson and General Breedlove, have your energy costs increased due to the required and directed use of green energy?

Admiral FERGUSON. The Navy's energy costs have not increased due to the employment of green energy. Only 0.2 percent (\$12 million) of the Navy's overall fuel bill will be spent on biofuel in fiscal year 2012 to further the Navy's ongoing test and certification efforts. In fiscal year 2013, over 85 percent of Navy's operational energy program is focused on efficiency initiatives while the remaining 15 percent is directed to alternative energy development. These investments in alternative energy technology are focused on reducing costs over time for the fleet. Some initiatives have payback periods as short as 1 year, while others will take longer but clearly reduce costs over the life of the ship. The Navy has no plans to purchase alternative fuel for operational use until such alternatives are cost competitive with conventional fossil fuels.

General BREEDLOVE. Air Force energy costs have not increased due to the use of renewable or alternative energy sources. Although the DLA is responsible for the purchases of fuels for DOD, it is Air Force policy that the purchase of energy be cost competitive with traditional sources and any energy projects must be supported by a BCA. Energy usage on our installations has actually decreased 32 percent since 2003. The increased cost is purely due to per unit energy price increases.

118. Senator INHOFE. Admiral Ferguson, at what cost to the readiness will you continue to advocate for defense funds on green energy?

Admiral FERGUSON. The Navy's small investment in testing and certifying drop-in alternative fuels has little impact on overall fuel costs and no impact on readiness. For fiscal year 2012, only 0.2 percent of the Navy's overall fuel bill will be spent on biofuel. The bigger challenge to the readiness of our naval forces is due to increased fuel price volatility of conventional fossil fuels. In fiscal year 2012 alone, this volatility resulted in an additional \$1 billion bill to the Navy. This deficit must be resolved within our O&M account, which comes at a cost to flying hours, steaming hours, sustainment of our facilities, new programs, and procurements.

The Navy is pursuing alternative fuels to achieve a less petroleum-dependent future, but has no plans to purchase alternative fuel for operational use until it is cost competitive with conventional fossil fuels. In fiscal year 2013, only 15 percent of the Navy's operational energy program is directed to alternative energy development which includes not only alternative fuels, but also improved energy storage, fuel

cells, and portable energy alternatives for expeditionary forces. Given the increasingly volatile and challenging market and supply constraints associated with conventional fossil fuel-based petroleum, a small investment in the alternative fuels market is prudent to increase our national energy security and reduce our energy demands. Advanced drop-in domestically-produced alternative fuels that use renewable feedstocks provide a secure, assured alternative that reduces the risks associated with petroleum dependence.

F-35

119. Senator INHOFE. Admiral Ferguson, General Dunford, and General Breedlove, does prolonging production of the F-35 increase overall cost of the program?

Admiral FERGUSON. Prolonging production of the F-35 results in an increase to the cost of the program due to a longer production run and more years of inflation impacting the production program. However, the Navy believes this decision provides a balanced approach between correcting concurrency issues and incurring a higher unit flyaway cost. This approach also allows for allocation of funds to other priorities in a resource-constrained fiscal environment.

General DUNFORD. Given that the number of JSFs required has remained unchanged, prolonging the production of the F-35 by decreasing the production rate—and thus extending the reliance on our legacy aircraft—does increase the overall cost of the JSF program while concurrently precluding the anticipated cost reduction of sustaining our legacy aircraft inventory.

By reducing the JSF procurement rate we do not realize the cost efficiencies reaped from procuring increasing quantities and the stabilization of our supplier base. In order to meet our operational commitments, and because the JSF is not available, we must continue to invest in replacing aging and obsolete parts, and re-institute programs to retain combat capability and relevancy in our legacy fleets much longer than anticipated.

General BREEDLOVE. Yes, prolonging production of the F-35 results in a small overall increase to the cost of the program due to a longer production run and more years of inflation impacting the production program. However, over the FYDP, DOD believes this provides a balanced approach between concurrency bills and respect for unit recurring flyaway costs. In addition, this allows for allocation of scarce money to other department priorities in a resource constrained fiscal environment.

120. Senator INHOFE. Admiral Ferguson, General Dunford, and General Breedlove, have concurrency issues been mitigated by producing only 30 aircraft per year for 5 years?

Admiral FERGUSON. Yes, quantities of roughly 30 aircraft per year in the fiscal year 2013 budget request have reduced the total number of aircraft that will require retrofit modifications due to concurrency. This reduction in quantity helps mitigate that expected cost. However, further reductions in production quantities could drive cost increases arising from production assembly and supplier disruptions that would offset any benefits associated with lower concurrency costs.

General DUNFORD. Concurrency issues are a result of the normal discoveries that occur during the development of an aircraft. As development progresses and the confirmation and stabilization of the design mature, the discoveries will diminish. The decision to reduce to 30 aircraft per year over the next few years was initiated to reduce the number of aircraft requiring modification as a result of the high number of discoveries during these past few early years of flight test. From here forward we expect the discoveries to decrease, maturity in the design to improve, and the confidence to increase procurement rates.

General BREEDLOVE. Yes, the President's budget request for fiscal year 2013 quantities of roughly 30 per year have reduced the total number of aircraft that will require retrofit modifications due to concurrency, and as a result, this reduction has yielded some concurrency cost mitigation. However, further reductions in production quantities could drive cost increases arising from production assembly and supplier disruptions that would offset any benefits associated with lower concurrency costs.

121. Senator INHOFE. Admiral Ferguson, General Dunford, and General Breedlove, what does the BCA show when comparing the cost of slowing down and delaying production versus accelerating production and modifying earlier lots of F-35s?

Admiral FERGUSON. In the FYDP we are satisfied the recommended production rate is the best use of DOD's funding. DOD deferred F-35 aircraft outside the

FYDP, in part, to provide a balanced approach between concurrency bills and unit recurring flyaway costs. The concurrency costs for the low-rate initial production Lot 7 aircraft in fiscal year 2013 range from \$7 million per aircraft, if only the must-fix changes are incorporated, and up to \$15 million per aircraft, if all changes are incorporated. While the deferment of aircraft did result in a unit cost increase of approximately \$10 million per aircraft in fiscal year 2013, we believe the realignment of the pace of production balances the need for a stable industrial base with the realities of increasing concurrency modification costs and a resource-constrained fiscal environment.

General DUNFORD. The Services relied on OSD for Acquisition, Technology, and Logistics (AT&L) to conduct an encompassing BCA that addressed all three Services' requirements while incorporating all the acquisition and sustainment variables across DOD, delineating the optimum balance between production rates and concurrency modifications. As such, this question would be better answered by OSD(AT&L).

General BREEDLOVE. The Air Force has not performed a full BCA relating to this specific question. However, DOD held a comprehensive program review and developed a balanced approach between decreasing modification costs and increasing unit costs associated with decreasing production rates. At this time, DOD believes that they have achieved the best balance between the need for stabilizing production rates with the realities of increasing concurrency modification costs. DOD is continuing to monitor the program and will rebalance, as necessary.

122. Senator INHOFE. Admiral Ferguson, recent delays in the F-35 program have required the Navy to procure an additional 41 F/A-18E/F aircraft and to extend the life of 150 F/A-18A, B, C, and D aircraft from 8,000 to 10,000 hours. Will the proposed fiscal year 2013 delay force the Navy to institute more service life extensions or procure more F/A-18s?

Admiral FERGUSON. The JSF shortfall is predicted to peak at 56 aircraft in 2025. The Navy will continue to manage the JSF inventory through the implementation of management and supply initiatives, including the accelerated transition of Legacy Hornet squadrons into Super Hornets and the service life extension of 150 Legacy Hornets.

Change in JSF shortfall projection is mainly attributed to a substantial decrease in Hornet 5-year utilization rates and a reduction in Marine Corps tactical aircraft force structure to 20 squadrons rather than 24 squadrons.

The Navy does not plan presently to increase the F/A-18E/F program of record of 565 aircraft or to conduct service life extension on more than 150 aircraft.

C-130 AVIONICS MODERNIZATION PROGRAM

123. Senator INHOFE. General Breedlove, an analysis of alternatives (AOA) was accomplished and evaluated by the Joint Requirements Oversight Council (JROC). Was the cost of the Avionics Modernization Program (AMP) considerably less than the three alternatives evaluated by the JROC?

General BREEDLOVE. A formal AOA was not conducted on the C-130 AMP. The OSD made an exception for this program since an Institute for Defense Analyses (IDA) paper had addressed many of the issues treated in such an analysis. In April 2000, the Under Secretary of Defense for AT&L directed the Air Force to provide an updated version of that study in lieu of a formal AOA report. Subsequently, IDA conducted new analyses and updated its evaluation of C-130 life-cycle costs over a 30-year period, including acquisition, upgrades, and structural replacements to extend life, operating costs, and residual value. The IDA analyses also discussed C-130 lifetime and mission-capable rates and compared the AMP with two alternative program options.

The three alternatives considered in the IDA study were C-130 AMP, procuring additional C 130J aircraft, and a baseline option that represented the minimal C-130 support required through 2030. The IDA study concluded that the AMP modified aircraft would have lower life-cycle costs than the C-130J alternative. Compared to the baseline option, AMP had a much higher acquisition cost. However, AMP's lower operations and sustainment costs reduced its life-cycle costs compared to the baseline option.

124. Senator INHOFE. General Breedlove, how much will AMP-lite save after factoring in termination costs, new contact costs, delays in modernization, the requirement to maintain the navigator, and other life-cycle costs?

General BREEDLOVE. Per the fiscal year 2013 President's budget, fiscal years 2013 to 2017 investment cost savings from terminating C-130 AMP and initiating the Optimize Legacy C-130 Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM) program is \$2.3 billion.

The termination liability for C-130 AMP is \$5.1 million, and has been factored into the cost savings referenced above. Additional program termination costs have not yet been determined. The C-130 AMP program office will negotiate with Boeing to determine the final C-130 AMP termination costs.

The C-130 CNS/ATM program is currently going through the Air Force Requirements Oversight Council process. We will adjust the C-130 CNS/ATM program cost once final requirements are determined.

125. Senator INHOFE. General Breedlove, what upgrades previously included in the AMP will not be done with AMP-lite?

General BREEDLOVE. The Air Force plans to modernize the legacy C-130H combat delivery fleet in the most economically efficient way possible. Therefore, the C-130 CNS/ATM program will include approximately 40 percent fewer requirements than the C-130 AMP, such as retaining the navigator (which drives less avionics integration). Additionally, fleet commonality is no longer a goal and thus significantly reduces electrical and wiring modifications.

The Air Force is continuing to refine the C-130 CNS/ATM program requirements through the Air Force Requirements Oversight Council process. The goal is for full and open defense industry competition, with a C-130 CNS/ATM program contract award in fiscal year 2014.

126. Senator INHOFE. General Breedlove, what items, such as wiring, electrical system, digital avionics cooling, key CNS/ATM components, integrated defensive systems, and an integrated airdrop system that does not require a navigator, will we have to address at some point in the future?

General BREEDLOVE. Due to fiscal year 2013 budget constraints, the Air Force decided to pursue a less robust AMP for the legacy C-130H combat delivery fleet by replacing the C-130 AMP with the new Optimize Legacy C-130 CNS/ATM program. The C-130 CNS/ATM program addresses select aircraft avionics systems' obsolescence. Therefore, as the legacy C-130H fleet ages, the Air Force plans to analyze the avionics systems' reliability, maintainability, and sustainability issues, and to pursue various options to address any shortfalls.

MISSILE DEFENSE

127. Senator INHOFE. Admiral Ferguson, what is your current level of confidence in being able to deploy the SM-3 2A by 2018 and the SM-3 IIB by 2020?

Admiral FERGUSON. SM-3 block IIA and SM-3 block IIB are being developed by the Missile Defense Agency (MDA). Both programs are expected to begin deliveries in 2018 and 2020, respectively. Based on MDA's current assessment, we believe they will execute the programs as planned.

128. Senator INHOFE. Admiral Ferguson, do we have enough Aegis ships and missiles to meet the wartime requirements of all our combatant commanders?

Admiral FERGUSON. Demand for missile defense assets, to include multi-mission Aegis ships and missiles, continues to exceed supply within each region as stated in the 2010 Ballistic Missile Defense Review. While the Navy is filling the most critical combatant commander demands for multi-mission Aegis ships, the Navy is not able to meet the full demand without exceeding personnel and homeport tempo guidelines designed to sustain a capable force over time.

Combatant commander demands are reviewed periodically and adjudicated by the Secretary of Defense through the GFM process to ensure the demands are prioritized based on overarching global defense priorities and that the Navy's limited BMD capacity is applied to the most critical needs.

The Navy is employing a number of material and non-material approaches to mitigate the capacity shortfall by moving forward with three coordinated efforts to increase the capability and capacity of its BMD-capable combatants. The Navy will also forward deploy four BMD-capable destroyers to Rota, Spain, in order to source EUCOM demands more efficiently.

The Navy continues to review force structure as a function of demand and fiscal conditions and shares the committee's concerns regarding our limited BMD capacity.

129. Senator INHOFE. Admiral Ferguson, is the demand for Aegis ships now and in the future outstripping supply?

Admiral FERGUSON. The Navy currently has sufficient surface combatants to meet the most critical demands for multi-mission Aegis warships; however, the Navy is not able to meet the full demand without exceeding personnel and homeport tempo guidelines designed to sustain a capable force over time. The Navy continues to review force structure as a function of demand and fiscal conditions and is currently conducting a force structure assessment in support of revised strategic guidance.

130. Senator INHOFE. Admiral Ferguson and General Breedlove, as North Korea, Iran, and other states develop their missile technology, we cannot sit idly by without improving our own systems. How should we adjust our national security policy to ensure that our missile defense can meet all future threats?

Admiral FERGUSON. The Navy is cooperating closely with the MDA in developing a series of spiral improvements to our BMD combat systems in Aegis ships and the Standard Missile variants. An example of this cooperative venture is Aegis Baseline 9C to be installed later this year aboard USS *John Paul Jones* (DDG 53). This open architecture, IAMD combat system will employ the latest instantiation of MDA-developed software and hardware to ensure that our Aegis destroyers have both the capability to defeat current threats and the ability to be upgraded for new threats. This combat system will eventually be installed in our most advanced BMD surface combatants.

General BREEDLOVE. In accordance with presidential direction, we continue to improve our BMDs in a phased and fiscally sustainable manner. The Air Force plays a leading role in both global surveillance and command and control of BMD operations. We continue to work with the MDA to maintain and enhance ballistic missile surveillance and tracking capabilities, and the integration of BMDs. We also continue to work with allies and partners to strengthen cooperation, enhance interoperability, and improve data-sharing, to strengthen regional deterrence architectures and establish a foundation for cooperative relationships and appropriate burden-sharing. The Air Force and the MDA are investigating options to take advantage of the inherent speed and flexibility of air and space power to address identified capability shortfalls and to ensure we remain capable of defeating the growing ballistic missile threat. In addition, the Air Force continues to enhance global ISR and global strike capabilities to hold adversary ballistic missile capabilities at risk, where necessary.

131. Senator INHOFE. Admiral Ferguson and General Breedlove, what is our hedge strategy in the event North Korea or Iran is able to develop their ICBM capabilities more rapidly than current U.S. intelligence estimates?

Admiral FERGUSON. The MDA, at the request of the Missile Defense Executive Board, recently developed a series of options to improve our Homeland defense capability for such a contingency. From a Navy perspective, we are cooperating closely with MDA to ensure BMD capabilities are compatible with Navy surface combatants. A current example is the competitive development of the SM-3 Block IIB missile with limited ICBM capability. MDA and the Navy are working hand-in-hand to ensure this missile is developed quickly and economically and are investigating the safe use and utility of employment of this missile from Aegis ships.

General BREEDLOVE. The Air Force is working closely with our joint and international partners to comply with the President's guidance and implement a European Phased Adaptive Approach to the defense of Europe. NATO recently declared an initial capability and we are quickly evolving that capability. I believe we are effectively pacing the threat.

In the Pacific region, the BMD system is mature and growing more robust. Again, I believe we are appropriately pacing the threat.

The Air Force is cooperating with the MDA and the entire DOD to address the potential that the ballistic missile threat to the U.S. Homeland will evolve more quickly than we expect and to recommend options to address that potential.

ARMY END STRENGTH

132. Senator INHOFE. General Austin, how do you plan on growing the Special Operations Forces (SOF) within the Army?

General AUSTIN. Army SOF are programmed to grow 3,677 military manpower authorizations from 31,811 to 35,448 between fiscal year 2013 and fiscal year 2017. Capability requirements are SOCOM-validated and OSD-directed to address QDR identified capability shortfalls, adjust for SOF maneuver force growth, and apply

Army initiatives. The Army has already made capability reductions in the force to support programmed SOF growth. Any additional SOF growth will require further cuts in existing Army force structure.

Growth of Army SOF from fiscal year 2013 to fiscal year 2017 consists of the following:

- SOF Aviation will:
 - Increase crew ratios by adding 88 crew members (fiscal year 2013)
 - Add one MH-47G helicopter company (176 spaces in fiscal year 2014)
 - Add two extended range/multi-purpose unmanned aerial system companies (330 spaces in fiscal year 2014 and fiscal year 2015)
 - Establish the U.S. Army Special Operations Aviation Command (96 spaces in fiscal year 2013)
- Special Forces will:
 - Increase combat support and combat service support to adequately support recently activated 4th Battalion in each Special Forces Group (1,445 spaces in fiscal years 2013/2014)
 - Increase Military Intelligence capability of the Active Special Forces Groups (245 spaces in fiscal year 2014)
- The 75th Ranger Regiment will:
 - Add personnel to support a return to nine-man squads; add a military working dog team; add a Shadow unmanned aerial system platoon; and add three Stryker platoons (639 spaces in fiscal year 2013)
 - Increase Military Intelligence capability in the Ranger Regiment (89 spaces in fiscal year 2014)
- Civil Affairs will increase capacity of the SOF Civil Affairs Brigade at company, battalion, and brigade level (530 in fiscal years 2013 to 2015)
- U.S. Army Special Operations Command (USASOC) will add Behavioral Health Team positions throughout its operational units (39 spaces beginning in fiscal year 2014)

133. Senator INHOFE. General Austin, with an anticipated increase in special operations numbers and capabilities, what is the corresponding increase in the budget that is required?

General AUSTIN. As a result of the 2006 and 2010 QDRs, the Army SOF strength will grow from 32,000 personnel to 35,000 by fiscal year 2015.

This will complete the growth of Army SOF from 26,000 in 2009. While the majority of the growth is within the five Active component Special Forces Groups, all of the USASOC operational formations either have received or are receiving additional growth in both operational and organic sustainment capabilities.

USASOC's fiscal year 2011 budget increased from \$8.6 billion in POM 8-13 to \$9.3 billion for POM 10-15, however, there has been no P2 increase for ARSOF.

In addition to the Army's investment in Army specific special operations formations, the Army is also resourcing personnel across the same period into essential joint SOCOM and control structures such as theater SOCOMs. The recent re-emphasis on the role of SOF within the recently published DSG reconfirms the need for this investment.

134. Senator INHOFE. General Austin, has the overall worldwide threat to the national security interests of the United States decreased over the past year?

General AUSTIN. The overall worldwide threat to national security interests of the United States has remained roughly the same over the past year—due mainly to counterterrorism successes being partially offset by spreading instability resulting from the Arab Spring. Many threats remain unchanged while some, such as in cyberspace, are building.

The Army agrees with the Director of National Intelligence James Clapper's assessment that the al Qaeda-led global jihadist movement is in a slow but steady decline. The 2011 withdrawal from Iraq has substantially reduced the opportunity for attacks against U.S. personnel and soldiers in Iraq. The al Qaeda core in the Afghanistan/Pakistan theater is in a crisis that it may not survive due to continuing leadership losses to U.S. drone strikes. Further, the overall movement itself is in transition to more reliance on regional groups in Africa and the Middle East who, while they most often pursue local military and political goals, have frequently expressed their intention to attack U.S. interests worldwide. For the foreseeable future, the jihadist movement will remain a serious threat and the Army believes that any decrease of the pressure on al Qaeda and its affiliated organization would allow

them the breathing room to renew their attacks on the United States and its interests.

Arab countries are undergoing a variety of contested transitions that affect U.S. national security interests. The countries most affected by the Arab Spring—Egypt, Libya, Syria, Tunisia, and Yemen—suffered setbacks to development, with economic activity stalling or declining which could lead to additional internal instability. Terrorist groups such as al Qaeda and its affiliates are attempting to establish cells and fund newly formed groups in these countries, and considering the significantly weakened state of counterterrorism capabilities in these countries, this could present significant challenges to the U.S. security in the near-term.

The fragile nature of Afghanistan's development, as well as chronic instability in Pakistan, make the area still ideal for the basing of transnational terror groups. Those groups still pose a potential threat to the United States. Other sources of continuing conflict include ethno-religious strife, political rivalries, economic disintegration, and reaction to the continuing U.S. presence in the area. While continuing safe haven for transnational terror networks in region pose a potential threat to the United States, the remaining sources of conflict do not.

Iran continues to pursue its twin goals of asserting regional hegemony and preserving the Islamic regime. Despite its frequent anti-western statements—mostly directed at the United States and Israel; Iran's decisionmaking is guided by a cost-benefit approach that offers the international community influence opportunities. However, Tehran will continue to pursue its regional ambitions by supporting proxies and surrogates, many of whom are violent/extremist actors in their own right.

North Korea remains just as dangerous under the new leadership of Kim Jong Un as it was under the leadership of his father. Despite conventional force degradation, North Korea maintains niche capabilities in such areas as ballistic missiles, nuclear weapons, and SOF. Pyongyang remains committed to its provocation strategy to include missile tests, potential nuclear tests, and rhetoric threatening more violent attacks on South Korea.

Proliferation of WMD capabilities remains largely unchanged in the last year. We do not know if Iran will eventually decide to build nuclear weapons, but it nevertheless is expanding its uranium enrichment capabilities, which can be used for either civil or weapons purposes. The Intelligence Community assesses Pyongyang views its nuclear capabilities as intended mainly for deterrence, international prestige, and coercive diplomacy, but could be used if Pyongyang fears loss of control of its national territory to an external threat.

Threats to cyberspace are the one area where threats to the United States and indeed to the international cyberspace commons are rising. Countries such as Russia and China are the primary concerns with regard to protection of U.S. interests in this domain, but capabilities of many other countries as well as non-state actors are rising. The United States has so far managed to keep up with such threats, but developments in cyberspace are so rapid and dispersed that the possibility of surprise remains possible.

China's intent to threaten U.S. interests has neither increased nor decreased over the past year. In the diplomatic sphere, Beijing has moderated some of the assertiveness it showed in 2010, in particular in the South China Sea. The potential for conflict with Taiwan continued to decrease with the reelection of President Ma Ying-jeou who holds a relatively favorable attitude toward Beijing. It has also shown some flexibility in allowing its currency to appreciate. Nevertheless, China's modernization and expansion of its A2/AD capabilities continues at a rapid pace and there remains a mutual lack of trust: the United States desires greater transparency from China as it increases its military capabilities while China believes the United States seeks to contain its rise.

In summary, successes against terrorist groups have increased U.S. security in the past year to some extent, but other developments and conditions around the world remain much the same, and new risks resulting from developments related to the Arab Spring and cyber warfare have created new future challenges.

135. Senator INHOFE. General Austin, have any worldwide long-term combatant command operational planning requirements changed?

General AUSTIN. Based on the changing strategic environment, our ability to execute operations globally, and emerging threats, long-term operational planning requirements will continue to evolve. As our strategy shifts and resources decline, DOD will continue to evaluate operational planning requirements to ensure that they are realistic and our combatant commanders have the capabilities to meet them. Most recently, the Army has worked with the other Services and all the combatant commands through the CJCS Strategic Seminar Series to identify capability gaps and assess our ability to meet requirements to execute top priority plans.

136. Senator INHOFE. General Austin, how would you quantify the increased risk to our Army and our Nation caused by the shrinking of land power in regards to Army end strength?

General AUSTIN. There is a risk in our ability to respond to multiple contingencies within compressed timelines. We've been participating in the CJCS's Seminar Series to assist in identifying what we can do to mitigate any risk associated with change to our strategic guidance. In addition to the mitigation measures I've already discussed such as investment, regional alignment, and interoperability with our sister Services, access to the Reserve component remains essential for our capacity to respond quickly to crises. Retaining adequate funding for training and equipping all of our units for a full range of capabilities is our requirement for controlling risk resulting from a smaller force.

JOINT REQUIREMENTS OVERSIGHT COUNCIL RESPONSIBILITIES

137. Senator INHOFE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, is the JROC solely responsible for approving the joint military requirements of both existing and future weapons programs?

General AUSTIN. No, the JROC is not solely responsible for approving all military requirements. The CJCS Instruction 5123.01F, dated January 10, 2012, states that the JROC is the final validation authority for capability requirements unless otherwise delegated to a subordinate board or to a designated validation authority in a Service, combatant command, or other DOD component. The JROC retains initial approval authority for Major Defense Acquisition Programs and programs identified as special interest by combatant commanders, DOD leadership, or Congress. Requirements validation authority for smaller programs is typically delegated to the sponsoring component. The Army Chief of Staff's validation authority is exercised through the Army Requirements Oversight Council.

Admiral FERGUSON and General DUNFORD. Yes. The JROC assists the CJCS and Secretary of Defense in identifying and managing Joint requirements. The Joint Capabilities Integration and Development System (JCIDS) is the primary process used by the JROC and its subordinate boards to fulfill advisory responsibilities to the CJCS in identifying, assessing, validating, and prioritizing joint military capability requirements.

General BREEDLOVE. The JROC is not solely responsible for approving Joint military requirements. JCIDS documents are assigned by the Joint Staff gatekeeper to one of five Joint Staffing Designators (JSD). The JSD is assigned based on actual/potential acquisition category and Joint Staff equities. The five JSDs include: JROC Interest, Joint Capabilities Board (JCB) Interest, Joint Integration, Joint Information, and Independent. The JROC is the approval authority for all JROC Interest programs. The JROC delegates approval authority for other JSD programs. The JCB is the approval authority for all JCB Interest programs. The Sponsor (usually the Service) is the approval authority for Joint Integration, Joint Information, and Independent programs (JCIDS Manual, Enclosure C, pp. C-3 to C-4).

138. Senator INHOFE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, who has the authority to make changes to those requirements?

General AUSTIN. We are actively examining ways to increase our capabilities in a variety of areas. Though we may reduce our capacity in some areas, such as major combat operations, we are maintaining our resolve to rapidly deploy and deter threats by reinvigorating our rapid deployment ability in response to global crises and investing resources in air and BMD. This is based in part on our assessment of the likely scenarios the Army would have to support in the event of a contingency. We are currently retaining sufficient force for any one major combat operation according to our scenarios, while we are mitigating the risk resulting from multiple contingencies through retaining the ability to expand our end strength, when necessary.

Admiral FERGUSON and General DUNFORD. The JROC is the final authority for validation of and changes to requirements. However, in addition to the JROC, Services, combatant commands, and other DOD components with delegated validation authority may validate Service-, combatant command-, or component-specific capability requirements using variations of the JCIDS process.

General BREEDLOVE. The authority to make changes to validated requirements is generally determined by the Joint Staffing Designator. Only the JROC can authorize changing requirements for JROC Interest programs. Only the JCB can authorize changing requirements for JCB Interest programs. The Sponsor (usually the Service) can authorize changing requirements for Joint Information, Joint Integration,

and Independent programs. In addition, requirements are further defined by KPPs and KSAs. The authority to change KPPs, the critical performance attributes, cannot be delegated to a lower level of authority. However, the authority to change KSAs, the non-critical attributes, is often delegated to the Sponsor (usually the Service) by the JROC or the JCB (JCIDS Manual, Enclosure C, pp. C-3-C-4).

139. Senator INHOFE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, once the JROC established the requirements, are those requirements used to establish development and testing criteria?

General AUSTIN. Yes, the approved operational requirements serve as the common baseline for system development and testing criteria.

Admiral FERGUSON and General DUNFORD. Yes. Requirements documents, known as the Capability Development Document (CDD) and Capability Production Document (CPD), are approved by the JROC or a Board with delegated authority. These documents provide authoritative, testable capability requirements, in terms of KPPs, KSAs, Concept of Operations, and additional performance attributes for the Production and Deployment (P&D) phase of an acquisition program.

General BREEDLOVE. Yes. The Integrated Defense Acquisition, Technology, and Logistics Life Cycle Management System has an event-driven defense acquisition system that addresses systems engineering, test and evaluation, and supportability. The systems engineering portion, as described in the Defense Acquisition Guidebook (chapter 4), takes the requirements, ascertains any derived requirements, works the design, and uses test to verify/validate as the design matures. The system engineering is embodied in the system engineering plan, but also relies upon the acquisition strategy and concept of operations to shape the requirements and inform developers and testers. JROC approval of the requirements is just the first step, but it is a vital step.

140. Senator INHOFE. General Austin, Admiral Ferguson, General Dunford, and General Breedlove, does DOD test community have authority to test to a different standard, higher or lower, than the established JROC requirement without the JROC changing the requirements document?

General AUSTIN. The test community does not have the authority to modify the system requirements to be tested. The entire requirements community, to include testers and system developers, ensures that the requirements presented for approval are developed in sufficient detail to support the identification of testable performance standards. Once the data is collected, the test community determines to what degree the system met the test requirements. They also evaluate whether performance to the approved standards will result in an operationally-effective capability.

Admiral FERGUSON and General DUNFORD. No. Testing against new or evolved threats typically does not require changing the JROC-approved KPPs and KSAs, but may involve different employment of JROC KPPs as a result of system CONOPs and critical operational issues as described in the Test and Evaluation Master Plan. If the new or improved threat requires KPP modification or establishment, a change to the CDD is staffed to the JROC for approval.

General BREEDLOVE. No. The DOD test community performs rigorous testing to determine system performance and then evaluates systems against established requirements. Testing provides a continuous stream of data and information about whether or not the requirements are realistic, and whether the system is likely to meet the user's needs. The feedback from tests and evaluations may influence the user community and program offices to coordinate requirements changes via the formal JCIDS process. Testers do not test to different standards nor do they evaluate KPPs against values without JROC changing the requirements document.

[Whereupon, at 11:45 a.m., the subcommittee adjourned.]

