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S. HRG. 112–80, PT. 3

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

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

ON

S. 1253

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

PART 3
READINESS AND MANAGEMENT SUPPORT

MARCH 17 AND MAY 18, 2011

Printed for the use of the Committee on Armed Services

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

THURSDAY, MARCH 17, 2011

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 2:33 p.m. in room SR–232A, Russell Senate Office Building, Senator Claire McCaskill (chairman of the subcommittee) presiding.

Committee members present: Senators McCaskill, Webb, Udall, Shaheen, and Ayotte.

Majority staff members present: Peter K. Levine, general counsel; Jason W. Maroney, counsel; and Russell L. Shaffer, counsel.

Minority staff members present: Lucian L. Niemeyer, professional staff member; and Diana G. Tabler, professional staff member.

Staff assistants present: Kathleen A. Kulenkampff and Breon N. Wells.

Committee members' assistants present: Ann Premer, assistant to Senator Nelson; Gordon Peterson, assistant to Senator Webb; Tressa Guenov, assistant to Senator McCaskill; Joanne McLaughlin, assistant to Senator Manchin; Clyde Taylor IV, assistant to Senator Chambliss; and Brad Bowman, assistant to Senator Ayotte.

OPENING STATEMENT OF SENATOR CLAIRE MCCASKILL, CHAIRMAN

Senator MCCASKILL. Thank you for being here.

I'd like to take just a moment to acknowledge a moment of history here. There is something happening today that has never happened before in the history of the U.S. Senate. What we have today is a woman chairman and a woman ranking member on a subcommittee in Armed Services, and that has never happened before in our country.

So, with that, I want to welcome Senator Ayotte to the Senate Armed Services Committee, and this subcommittee in particular.

She and I are taking on this responsibility with enthusiasm. I'm honored to have the opportunity to do whatever I can to support the military.

I will give a very brief opening statement and then turn it over to Senator Ayotte for her opening statement. Then we'll look forward to your testimony today.

The Subcommittee on Readiness and Management Support meets this afternoon to hear testimony on fiscal year 2012 budget request for Department of Defense (DOD) Installations and Environment. At today's hearing, we will hear from our witnesses on the request for military construction (MILCON) and environmental programs for fiscal year 2012.

This is our first subcommittee hearing in the 112th Congress, and I want to welcome all of the members of the subcommittee and say how much I look forward to working with everyone this year.

I'd also like to thank our witnesses for rearranging their schedules to appear today on such short notice. It is very 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.

The subcommittee has scheduled a hearing on the Secretary's efficiencies initiatives for later this month. As far as I'm concerned, however, every hearing that we hold will be about efficiencies.

Earlier this week, the Congressional Budget Office reported that the DOD budget has grown by 75 percent over the last decade. That is the base budget, not including the cost of overseas contingency operations. I do not believe there is anything DOD is doing that they cannot do better. I do not believe that there is any part of the budget that can be off limits as we look for potential savings. I will be looking at every area of this subcommittee's jurisdiction as we attempt to cut duplicative projects and programs, increase management efficiencies, and reduce waste while we stay very focused on maintaining the finest military in the world.

Overall, the President's budget request for MILCON and family housing is $14.7 billion in fiscal year 2012, as compared to a $19.3 billion authorized in last year's National Defense Authorization Act (NDAA). That sounds like a huge drop, and it is. However, it is worth noting that more than half of the decrease is attributable to a drop in requests for Base Realignment and Closure (BRAC) construction as we near the completion of the 2005 BRAC recommendations, and a drop of $1.2 billion in requests for MILCON in the budget for overseas contingencies operations.

This budget arrives at a time when DOD has embarked on a number of large force posture adjustments that should have significant impacts on our MILCON programs, such as the realignment of the U.S. forces on Okinawa and Guam, and the 2005 BRAC round scheduled to be completed this year.

Indeed, I'm told that DOD plans to announce another significant decision today, the number of brigade combat teams (BCT) it expects to retain in Europe. I'm assuming that announcement has not been made yet, or has it? Was it made today?

Dr. ROBYN. It was delayed.

Senator MCCASKILL. It was delayed. Okay. I'm on the edge of my seat. I just wanted to make sure I hadn't missed it. [Laughter.]

I'm very curious to see what happens there.

Force posture decisions like these come with associated costs, and those costs are often first apparent in the MILCON accounts, as infrastructure and facilities are either prepared or closed. Making sure those initial expenditures are the result of well thought out and planned decisionmaking should result in more effective and efficient results. As chairman, I plan to be very aggressive in my oversight to make sure these large, costly, force-posture actions are accompanied by careful, rigorous planning and analysis. Too often, when we look back on failed projects and programs, we see that the analysis and decisionmaking on the front end were deficient.

In this regard, I have concerns about DOD's plan to move 8,000 marines and their dependents from Okinawa to Guam by the agreed-upon date of 2014. Successful execution of this program will require the coordination of over $10 billion in construction projects on Guam and the construction of a new airfield at Camp Schwab in Okinawa. Congress has asked DOD repeatedly for a master plan laying out the costs and schedule for the various projects necessary to effect this large realignment. To date, we have not received such a master plan, which makes it difficult to determine when certain projects must be funded.

For instance, the fiscal year 2012 budget again includes a request for $181 million for two projects on Guam that Congress cut from last year's budget because they were clearly ahead of need. The Navy claims that if, for some reason, the Marine squadron scheduled to use the utility project at Andersen Air Force Base does not arrive as planned, then the Air Force would use it. However, the Air Force has its utilities requirements for Andersen Air Force Base on Guam planned as a part of the planned fiscal year 2013 budget, and states that the Air Force would have no need for the Navy's planned project. This is one example, but there are others.

Obviously, we have to talk about what the impact of the decision to assist Japan, where clearly they are going to have huge needs in their budget for rebuilding their country, regaining their manufacturing, and all—everything that's associated with that disaster. As we all know, a huge part of our decision to move that force to Guam had to do with Japan's willingness to foot a large part of the bill. The question is, are they still going to be in a position to foot a large part of the bill, and what impact does that have on our decision? I certainly don't want to spend a lot of money on preparing to move this force, knowing that, at the end of the day, all of the predicates that we made the decision on are no longer valid. I think it's time for a real pause and a look at the whole decision to move the marines from Okinawa to Guam.

There are other areas in which we can, and should, do better. For example, the budget request includes funding for a new medical center near Ramstein Airbase, Germany, at an expected cost of $1.2 billion. That is as much as the entire DOD budget for family housing this year, for one single hospital. I recognize that the medical facility at Ramstein has been the first stop for our wound-

ed warriors returning from Iraq and Afghanistan. But, we will be out of Iraq, and maybe out of Afghanistan, before this facility is ever built.

The budget request includes four new fitness centers, with a cost of over $100 million, including a single fitness center that will cost almost $50 million to build. I understand that fitness is a requirement of the job. We will always need fitness centers for our military. But, at a time when our Nation is facing fiscal cuts, I have trouble seeing how we can justify spending $50 million on a single fitness center. I want to examine that more fully in the questions that will follow our statements.

The budget also includes funding for working dog facilities at $3.5 million and $4.9 million. Those are expensive working dog facilities.

Simply put, the era when cost was no object for DOD construction projects must come to an end. Critics of the DOD acquisition system have long complained about our tendency to build so-called gold-plated weapon systems. What the Secretary of Defense has referred to as "exquisite" designs.

Unfortunately, this problem is not limited to weapon systems. I believe we have a similar problem in the area of MILCON. I'll be asking today's witnesses how they intend to address that issue.

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.

[The prepared statement of Senator McCaskill follows:]

PREPARED STATEMENT BY SENATOR CLAIRE MCCASKILL

The Subcommittee on Readiness and Management Support meets this afternoon to hear testimony on the fiscal year 2012 budget request for Department of Defense (DOD) installations and environment. At today's hearing we will hear from our witnesses on the request for military construction and environmental programs for fiscal year 2012.

This is our first subcommittee hearing in the 112th Congress, and I would like to begin by welcoming all of our members and say how much I look forward to working with you this year. I am particularly pleased to welcome Senator Kelly Ayotte as our new ranking member. We have already seen Senator Ayotte's sharp focus on readiness and management issues in full committee hearings this year, and I look forward to a very productive partnership with her as we get to work on these important issues.

I'd also like to thank our witnesses for rearranging their schedules to appear 1today on short notice. It is very important for us to have this hearing as early in the congressional budget process so we can have full and frank discussions of the President's request that inform this year's defense authorization bill, and we appreciate your help in enabling us to do that.

The subcommittee has scheduled a hearing on the Secretary's efficiencies initiatives for later this month. As far as I am concerned, however, every hearing that we hold will be an efficiencies hearing. Earlier this week, the Congressional Budget Office reported that the DOD budget has grown by 75 percent over the last decade—and that is the base budget, not including the cost of overseas contingency operations. 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 as we attempt to cut duplicative projects and programs, increase management efficiencies, and reduce waste.

Overall, the President's budget request for military construction and family housing is $14.76 billion in fiscal year 2012 as compared to $19.3 billion authorized in last year's National Defense Authorization bill. That sounds like a huge drop, and

it is, but it is worth noting that more than half of the decrease is attributable to a drop of $1.3 billion in requests for the Base Realignment and Closure (BRAC) construction, as we near the completion of the 2005 BRAC recommendations and a drop of $1.2 billion in requests for military construction in the budget for overseas contingency operations.

This budget arrives at a time when DOD has embarked on a number of large force posture adjustments that should have significant impacts on our military construction programs, such as the realignment of U.S. forces on Okinawa and Guam and the 2005 BRAC round scheduled to be completed this year. Indeed, I'm told that the Department plans to announce another significant decision today—the number of brigade combat teams (BCT) it expects to retain in Europe.

Force posture decisions like these come with associated costs, and those costs are often first apparent in the military construction accounts as infrastructure and facilities are either prepared or closed. Making sure those initial expenditures are the result of well thought out and planned decisionmaking should result in more effective and efficient results. As chairman, I plan to be very aggressive in my oversight to make sure these large, costly force posture actions are accompanied by careful, rigorous analysis. Too often when we look back on failed projects and programs we see that the analysis and decisionmaking on the front end were deficient.

In this regard, I have concerns about the Department's plan to move 8,000 marines and their dependents from Okinawa to Guam by the agreed upon date of 2014. Successful execution of this program will require the coordination of over $10 billion in construction projects on Guam and the construction of a new airfield at Camp Schwab on Okinawa. Congress has asked DOD repeatedly for a master plan laying out the costs and schedule for the various projects necessary to effect this large realignment. To date, we have not received such a master plan which makes it difficult to determine when certain projects must be funded.

For instance, the fiscal year 2012 budget again includes a request for $181 million for two projects on Guam that Congress cut from last year's budget because they were clearly ahead of need. The Navy claims that if, for some reason, the Marine squadron scheduled to use the utilities project at Andersen Air Force Base does not arrive as planned then the Air Force would use it. However, the Air Force has its utilities requirements for Andersen Air Force Base on Guam planned as part of the planned fiscal year 2013 budget and states that the Air Force would have no need for the Navy's planned project.

There are other areas in which we can and should do better. For example:

- The budget request includes funding for a new medical center near Ramstein Air Base, Germany at an expected cost of $1.2 billion. That is as much as the entire DOD budget for family housing this year, for a single hospital. I recognize that the medical facility at Ramstein has been the first stop for wounded warriors returning from Iraq and Afghanistan—but we will be out of Iraq, and may be out of Afghanistan, before this facility is ever built.
- The budget request includes four new fitness centers with a total cost of over $100 million—including a single fitness center that will cost almost $50 million to build. I understand that fitness is a requirement of the job, and we will always need fitness centers for our military. But at a time when our Nation is facing a fiscal crisis, I have trouble seeing how we can justify spending $50 million on a single fitness center.
- The budget also includes funding for working dog facilities at $3.5 and $4.9 million each. You could buy an exceptional house in St. Louis for that much money.

Simply put, the era when cost was no object for DOD construction projects must come to an end. Critics of the DOD acquisition system have long complained about our tendency to build so-called "gold-plated" weapon systems—what the Secretary of Defense has referred to as "exquisite" designs. Unfortunately, this problem is not limited to weapon systems. I believe that we have a similar problem in the area of military construction, and I will be asking today's witnesses how they intend to address the issue.

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 that she may have.

STATEMENT OF SENATOR KELLY AYOTTE

Senator AYOTTE. Thank you so much, Madam Chairman. It is an honor to be able to work on this committee with you. I had not ap-

preciated the historic nature of today's hearing, so thank you so much for raising that.

I thank all of you, first of all, for coming to testify before us today. This is our first hearing together, and I look forward to working with you in the years to come to address the critical programs under the oversight of this committee.

As the wife of an Air National Guardman who has served in the Iraq war as an A–10 pilot, I share your concerns and commitment to ensure that the resources we provide to our men and women in uniform are used wisely and effectively to sustain the readiness of our forces, as well as the quality of life of our military.

I want to thank our witnesses for their dedicated public service. I know that the issues you deal with are not easy.

As we consider the overall DOD budget, as well as MILCON, environmental, and BRAC funding issues, more specifically, I believe the dire fiscal condition of our country must guide our efforts. In our current fiscal crisis, as Chairman McCaskill also identified, we cannot afford to waste even $1 on a program that does not address a valid military need or shortfall. As Admiral Mullen has said, the national debt is a threat to our national security. In the midst of this fiscal crisis, the spending of every department of the Federal Government requires scrutiny, including DOD. At the same time, I believe we have a sacred obligation to our servicemembers and veterans. As we go forward, we must fulfill our moral obligation to our troops while reviewing every program to eliminate duplication and waste.

DOD has proposed, for 2012, a budget that includes $14.8 billion for MILCON, BRAC, and housing programs, as well as $10.6 billion for facility sustainment. Many aspects of this request for 2012 certainly deserve praise and recognition, based on prior history of the work done on this committee. I commend DOD's commitment to invest in new K–12 schools run by DOD, and a full range of facilities to support our Special Operations Forces who've we asked so much of in Afghanistan and in Iraq, as well.

I note that DOD has abandoned a former set of goals for facility recapitalization. While some deferrals may be necessary in light of the current fiscal crisis, we must scrutinize these deferrals to ensure that none of them endanger our mission. I look forward to working with DOD to scrutinize these deferrals and to reinstate standards, which I think is very important that we have standards that will serve as benchmarks to assess future funding requests.

In the midst of the 10th year of war, the Guard and Reserve components have shouldered an increasing share of the burden. For example, the New Hampshire National Guard is currently undergoing its largest deployment since World War II. The Guard and Reserve is now a critical component of our operational force, not an infrequently used Strategic Reserve, as it was historically. Yet, in some important areas, DOD budget levels and prioritization have not evolved to reflect this reality. For example, I'm concerned about the levels of investment for proposed facilities for our Guard and Reserve. We certainly owe it to our Guard and Reserve, given the multiple deployments that they are now undertaking, to make sure that we review this carefully.

In response in the past, Members of Congress have used earmarks to provide the Guard and Reserve the facility funding that their operational tempo requires. Utilizing earmarks to meet these essential Guard and Reserve needs is not the proper way to provide adequate resources for our citizen soldiers. DOD cannot continue to rely on Congress to direct additional spending for the programs that are actual needs. I ask each of you to review your Service's priorities for your Reserve components.

I look forward to hearing from the witnesses their views on the conclusion of the 2005 round of BRAC, which has a statutory deadline to be completed by September 15 of this year. For the local communities that faithfully support our military bases, I know how important it is to have certainty regarding schedules for BRAC.

It is also important to control the cost growth in every aspect of BRAC. We cannot afford to spend even one dollar more than is absolutely necessary to complete the moves directed by BRAC.

As the Honorable Chairman has mentioned, I also look forward to discussing the complex issue of the realignment of the U.S. Marines on Okinawa and the relocation of 8,000 marines and their families to Guam. Again, I think the issues in Japan further complicate this decision, and we should not make this investment if it is going to be one that we cannot afford and we're not going to be able to get the support from the Japanese Government, given the current events in Japan.

In the environmental area, the President's budget request for fiscal year 2012 proposes an investment of nearly $4.25 billion for DOD's environmental program, a level that is consistent with funding provided in past years. While DOD continues to make steady progress in achieving its cleanup goals, which includes having a cleanup remedy in place, or completed cleanup, at all Active-Duty military installations by 2014, I certainly would like our witnesses to address the actions of the Environmental Protection Agency (EPA) at Tyndall Air Force Base. The EPA is threatening to take enforcement action which could impact military training and readiness activities there and in the adjoining airspace over the Gulf of Mexico. I would like both Dr. Robyn and Mr. Yonkers to address the situation with the EPA and overall cleanup at Tyndall.

Finally, Madam Chairman, I hope we will look into DOD's position on the use of Defense funds to support grants and other initiatives for nonmilitary requirements. Given our Nation's fiscal crisis, I fully support the Secretary of Defense's initiatives to spend each Defense dollar wisely and only on critical military priorities. Therefore, I believe this committee must lead the way in stopping the use of Defense funds to support special interests for medical research, local roads, and other public infrastructure. While these projects may be worthwhile, non-Defense projects should be funded by other Federal, State, or local agencies, and should go through the proper committees of jurisdiction in the Senate.

I would like to conclude by thanking you again, Madam Chairman. I look forward to serving alongside you on this important subcommittee to sustain the readiness of our military forces, eliminate wasteful DOD spending, and improve the quality of life for our military members and their families.

Thank you again.

[The prepared statement of Senator Ayotte follows:]

PREPARED STATEMENT BY SENATOR KELLY AYOTTE

Madam Chairman, I thank you for calling this hearing to review the 2012 budget request for military installations and environmental programs. This is our first hearing together and I look forward to working with you in the years to come to address the critical programs under the oversight of this committee. As the wife of a member of the Air National Guard, who served in the Iraq War as an A–10 pilot, I share your concerns and commitment to ensure the resources we provide our men and women in uniform are used wisely and effectively to sustain the readiness of our forces as well as the quality of life for our military members and their families.

I want to thank our witnesses for their dedicated public service as you manage the full range of installation, environment and energy programs for your respective departments. Many of these programs have complex and difficult issues associated with them, and you deserve our gratitude and appreciation for your service.

As we consider the overall Department of Defense (DOD) budget, as well as military construction, environmental, and base realignment and closure (BRAC) funding issues more specifically, I believe the dire fiscal condition of our country must guide our efforts. In our current fiscal crisis, we cannot afford to waste even one dollar on a program that does not address a valid military need or shortfall. As Admiral Mullen has said, the national debt is a threat to our national security. In the midst of this fiscal crisis, the spending of every department of the Federal Government requires scrutiny—including DOD.

At the same time, I believe we have a sacred obligation to our servicemembers and veterans. We must ensure our warfighters have everything they need to succeed in their missions and to keep us safe. We must also ensure that servicemembers and veterans and their families have access to the support they have earned. We have a moral obligation to ensure we take care of those who have taken care of us, not just now—but years from now—when the current wars end. As we go forward, we must fulfill our moral obligation to our troops while reviewing every program to eliminate duplication and waste.

DOD has proposed a budget for 2012 that includes $14.8 billion for military construction, BRAC, and housing programs as well as $10.6 billion for facility sustainment. Many aspects of this request for 2012 deserve praise and recognition. I commend the Department's commitment to invest in new K through 12 schools run by the Department and a full range of facilities to support our Special Operations Forces.

I note that DOD has abandoned a formal set of goals for facility recapitalization. While some deferrals maybe necessary in light of the current fiscal crisis, we must scrutinize these deferrals to ensure none of them endanger the mission. I look forward to working with the Department to scrutinize these deferrals and to reinstate standards that will serve as benchmarks to assess future funding requests.

In the midst of the 10th year of war, the Guard and Reserve components have shouldered an increasing share of the burden. For example, the New Hampshire National Guard is currently undergoing its largest deployment since World War II. The Guard and Reserve is now a critical component of the operational force, not an in frequently used Strategic Reserve. Yet, in some important areas, DOD budgeting levels and prioritization processes have not evolved to reflect this new reality. For example, I am very concerned about the levels of investment proposed for new facilities for our Guard and Reserve components in the 2012 budget. Underfunding of Guard and Reserve facilities is a chronic problem based on the processes used by the Services to prioritize military construction projects. In response, in the past Members of Congress have used earmarks to provide the Guard and Reserves the facility funding their new operational tempo requires. Utilizing earmarks to meet these essential Guard and Reserve needs is not the proper way to provide adequate resources for our citizen soldiers. DOD cannot continue to rely on Congress to direct additional spending to Guard and Reserve construction programs. I ask each of you to review your Service's priorities for your Reserve components.

I look forward to hearing from the witnesses their views on the conclusion of the 2005 round of BRACs, which has a statutory deadline to be completed by September 15, 2011. For the local communities that faithfully support our military bases, I know how important it is to have certainty regarding schedules for base closures and realignments. It is also important to control cost growth in every aspect of BRAC. We cannot afford to spend even $1 more than is absolutely necessary to complete the moves directed by BRAC.

I also look forward to discussing the complex issue of the realignment of U.S. marines on Okinawa and the relocation of 8,000 marines and their families to Guam.

This issue has been further complicated by the catastrophic events in Japan which the recovery will affect each and every funding decision by the Government of Japan for some time to come. I am extremely concerned that the Department has decided to award construction contracts on Guam to support the relocation of forces without having any sign of tangible progress by the Government of Japan on the relocation of Marine Corps Air Station Futenma on Okinawa. This decision represents a potential substantial waste of U.S. taxpayer funds. Our warfighters will find no stronger advocate, but I will look to all departments of the U.S. Government—including DOD—to identify and eliminate redundancies and waste.

In the environmental area, the President's budget request for fiscal year 2012 proposes an investment of nearly $4.25 billion for the Department's environmental program, a level that is consistent with funding provided in past years. While the Department continues to make steady progress in achieving its clean up goals, which includes having a cleanup remedy in place or a completed clean up at all Active-Duty military installations by 2014, I would like our witnesses to address the actions of the Environmental Protection Agency (EPA) at Tyndall Air Force Base. The EPA is threatening to take enforcement action which could impact military training and readiness activities there and in the adjoining airspace over the Gulf of Mexico. I would like both Dr. Robyn and Mr. Yonkers to address the situation with EPA over cleanup at Tyndall.

Finally, Madam Chairman, I hope we will look into the Department's position on the use of defense funds to support grants and other initiatives for non-military requirements. Given our Nation's fiscal crisis, I fully support the Secretary ofDefense's initiatives to spend each defense dollar wisely and only on critical military priorities. Therefore, I believe this committee must lead the way in stopping the use of defense funds to support special interests for medical research, local roads, and other public infrastructure. While these projects may be worthwhile, non-defense projects should be funded by other Federal, State, or local agencies.

I would like to conclude by thanking you again, Madam Chairman. I look forward to serving alongside you on this important subcommittee to sustain the readiness of our military forces, eliminate wasteful DOD spending, and improve the quality of life for our military members and their families.

Thank you, Madam Chairman.

Senator MCCASKILL. We have just had two votes called on the Senate floor.

So, why don't we begin, Dr. Robyn, with you. Approximately how long is your testimony?

Dr. ROBYN. Just a few minutes.

Senator MCCASKILL. Okay.

Dr. ROBYN. Just a couple of minutes.

Senator MCCASKILL. Why don't we do your testimony and then the three of us will go vote.

Dr. ROBYN. Okay.

Senator MCCASKILL. By then we'll be at the end of the first vote and near the beginning of the second vote and we can be more efficient—since this is about efficiencies——[Laughter.]

—we'll be more efficient, in terms of getting over there and getting back, and not keep all of you waiting any longer than absolutely necessary.

Dr. ROBYN. Terrific.

Senator MCCASKILL. Thank you, Dr. Robyn.

Dr. ROBYN. Thank you.

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

Dr. ROBYN. Madam Chairman, Senator Ayotte and Senator Udall, thank you for the opportunity to testify on the President's fiscal year 2012 budget request.

I will submit my written statement for the record, and it includes details on the numbers that you all have been citing—$14.8 billion

for MILCON, family housing, and BRAC, $17.9 billion for sustaining, restoring, and upgrading the condition of our existing facilities, and $4.3 billion for environmental programs. The $14.8 billion for MILCON, as you said, Madam Chairman, is down about $4 billion from last year, largely due to the fact that we're completing BRAC. Conversely, a request for sustainment and recapitalization is up by about the same amount, primarily reflecting efforts by the Army and the Air Force to upgrade their existing facilities. Finally, the environmental program is fairly level, reflecting maturity and stability of our efforts in this area.

My service colleagues will detail parts of the budget—of the request within their individual budgets. I want to use my time to highlight two key priorities, both of which I think drive your major interest in efficiency.

The first is energy. Energy is important to DOD for two reasons. The first is mission assurance. Our installations support combat operations more directly than ever before. From domestic bases, we pilot unmanned aerial vehicles, perform intelligence analysis, and even deploy long-range bombers. These bases rely, in turn, on a fragile and vulnerable commercial electricity grid.

The second reason energy is important to DOD is cost. We have 300,000 buildings, 2.2 billion square feet of space. That's three times as much as Walmart, 10 times as much as General Services Administartion. We have an energy bill that matches that: $4 billion a year. That's fully a quarter of DOD's total energy bill.

With an eye toward lowering those energy bills and improving the energy security of our installations, we've adopted a multifaceted strategy. We're using our MILCON and sustainment budgets to drive the effort to make our buildings more energy efficient. We're installing renewable and alternative sources of energy on our installations, primarily using third-party financing. We're taking steps to make our installations more secure, in the event of a major disruption to the electric grid, such as what is happening now in Japan. I should say that renewable energy is helpful in this regard.

These efforts to green DOD are good for the environment, to be sure. But, that's not the main reason we're pursuing them. The main reason is cost savings and mission assurance. They're smart investments for DOD, and they will pay for themselves many times over.

The second theme I want to hit is technology. One of the great opportunities we have to improve our performance and lower cost is to leverage technology. This has been DOD's great advantage when it comes to combat operations, and the same is true when it comes to running installations.

Let me just give you one example from the environmental area. We have a major program to clean up unexploded ordnance (UXO). The estimated bill is $17 billion. The cost is high because current cleanup methods can't distinguish between UXO and harmless scrap metal—beer cans, barbed wire, horseshoes. As result, contractors have to dig up literally hundreds of thousands of items. Each one is remotely exploded in order to retrieve just a handful of UXO—pieces of harmful UXO.

A program that I help oversee has developed technology that can reliably distinguish UXO from scrap metal. Over the next 4 years,

we will validate and test this technology. We think it can save up to $12 billion in cleanup costs.

Let me mention just give one other quick example. We are using our installations as a testbed for next-generation energy technology. This emerging energy technology has the potential to produce dramatic savings in our energy bill. But, there are huge impediments to the commercialization of this technology. A lot has been written about it. It's the nature of the building sector.

It is in our direct self-interest, as the owner of 300,000 buildings, to help overcome these impediments. We're doing that by demonstrating these technologies at our installations, using our installations as a virtual testbed. For those technologies that prove effective, we'll go on to serve as an early customer, creating a market, just as we did with aircraft, with electronics and the Internet. We have about 40 projects underway, and we expect to have results later this year.

Let me thank you for the opportunity to testify. I look forward to your questions. I look forward to working with you on your agenda.

[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 2012 budget request for the Department of Defense (DOD) programs to support installations, installations energy and the environment.

Installations are the military's infrastructure backbone—the platform from which our soldiers, sailors, airmen, and marines accomplish their missions. Installations have long supported the maintenance and deployment of weapons systems and the training and mobilization of combat forces. Increasingly, they have an even more direct link to the warfighter, by providing "reachback" support for combat operations. Our installations are also becoming more important as a staging platform for homeland defense missions.

Installations affect not just our mission effectiveness but the very quality of life that our servicemembers and their families enjoy. Families' satisfaction with the most critical services they receive—housing, healthcare, childcare, on-base education—is linked to the quality and condition of our buildings and facilities.

My testimony addresses four key topics: first, international and domestic basing decisions, including the buildup of marines in Guam and the 2005 Base Realignment and Closure (BRAC) process; second, the Department's management of the built environment, including the programs that support military construction, family housing, and sustainment and recapitalization; third, our strategy for improving the energy efficiency and energy security of our installations; and, fourth, our programs for protecting the natural environment.

I. THE GLOBAL PICTURE: INTERNATIONAL AND DOMESTIC BASING

Global Basing

To project power globally, the Department must have the right mix of military forces and facility infrastructure at strategic locations. My office supports the Department's strategic security objectives by ensuring that decisions about international basing of troops and facilities are the product of joint planning and rigorous analysis. We also seek to leverage existing infrastructure wherever possible. As examples, we are assisting the Services with planning for the U.S. Forces Korea transformation initiatives, the recapitalization and consolidation of the Landstuhl Regional Medical Center in Germany, and the relocation of thousands of marines and their families from Okinawa to Guam.

Rebasing Marines from Okinawa to Guam

The realignment of marines from Okinawa to Guam represents a major change in our force posture in Asia. It is designed to further several strategic goals. First, it will strengthen our alliance with Japan by relieving longstanding pressures associated with our presence in Okinawa. Second, it will ensure the long-term presence

of U.S. forces in Japan and the Western Pacific. Third, by making better use of Guam's strategic advantages, it will more effectively array U.S. forces to deal with the complex and evolving security environment in Asia.

The United States is unlikely to get another opportunity to craft a strategic realignment that both enhances our regional force posture and incorporates substantial funding from a key ally—in this case, the Government of Japan, which has pledged more than $6 billion. As a testament to its commitment to the realignment plan, Japan has already provided $834 million in direct funding for construction and has another $582 million in its current budget, $415 million of which will go to improve Guam's utilities infrastructure.

The President's fiscal year 2012 budget request includes $181 million for construction projects to support the marine relocation to Guam. Our request includes another $33 million for projects to address the socio-economic impact of the buildup, including a repository for the preservation of artifacts unearthed during military construction as required by the National Historic Preservation Act (NHPA). Recognizing that the strategic value of the buildup warrants a "whole-of-government" approach, the fiscal year 2012 budget request also includes $34 million in commitments from other Federal agencies. These projects will yield long-term benefits for U.S. military forces as well as help mitigate the impact of the marked increase in Guam's population that a major military construction program and the subsequent realignment will produce. They will also demonstrate our commitment to working with the Goverment of Guam, whose support for the relocation is key. As one indication, Guam last week signed the "Programmatic Agreement" required under the NHPA, which paves the way for military construction by establishing protocols for the preservation of artifacts that we uncover.

The movement of marines from Okinawa to Guam gives us a rare opportunity to build an installation from the ground up. We intend to take full advantage of this opportunity, using contemporary urban planning techniques to avoid sprawl and minimize land use. We will also integrate modern energy technology and sustainability practices to create an enduring base that meets our current and future requirements while minimizing impact on the local community and the island's natural resources.

Domestic Basing: Base Realignment and Closure

Turning to domestic basing, we are in the final year of implementation of BRAC 2005, with all 222 recommendations required to be completed by September 15. While the Department is facing challenges to meeting that schedule in a few cases, we are working diligently to ensure that we satisfy our legal obligations. Once implementation is completed, we expect to realize an estimated $4 billion in annual savings.

While our investments are creating economic opportunities for communities experiencing growth as a result of BRAC, some of those communities feel that the Department has ignored potential adverse effects. One particular concern is the impact of growth on local transportation networks. Although we have the authority to mitigate transportation impacts of BRAC through the Defense Access Road (DAR) program, we have been criticized for defining those impacts too narrowly. In response to congressional direction, the National Academy of Sciences studied the effects of BRAC on local transportation, and we plan to revise the DAR funding criteria based on the findings of this recently completed study. This revision will make it easier for us to mitigate adverse traffic impacts caused by the Department's actions, particularly in congested urban areas.

A significant action under BRAC 2005 that my office has championed is the consolidation of 26 installations into 12 Joint Bases. Joint Bases represent a fundamental change in our approach to installation management. Predictably, we are beginning to realize efficiencies from this initiative, many of them the result of economies of scale. For example, consolidating all recycling operations at Joint Base McGuire-Dix-Lakehurst saved $1 million in facility and equipment requirements and reduced overall contract costs by $200,000 annually. Far more important, however, is that our Joint Base commanders—faced with parallel and often-conflicting Service rules and requirements—are successfully implementing new, cross-cutting business processes. This ability to transcend traditional practices and develop innovative solutions to long-standing inefficiencies is key to positioning ourselves for future, Department-wide reforms.

I had the opportunity to meet personally with most of the Joint Base Commanders in February at our Program Management Review. I am excited about the prospects for using Joint Bases as "incubators for innovation," as one Joint Base commander put it. I also continue to be encouraged by their can-do attitude and

dedication to providing the highest quality service, not only in support of the military missions on their sites, but to servicemembers and their families as well.

Finally, one of the key tools for disposing of property under BRAC is the Economic Development Conveyance (EDC), which was created in 1994 to promote the rapid transfer of BRAC property for job-creating economic development. In recent years, EDC conveyances have been delayed by complicated negotiations over the value of one-of-a-kind parcels of property. As negotiations dragged on, the Department paid for property maintenance and the community was unable to redevelop the property and create jobs. Last year, Congress amended the statutory authority underlying EDCs to remove the requirement that the Department seek to obtain Fair Market Value for an EDC. The amended law also provides explicit authority for the Department to use flexible tools for determination of "consideration" (payment), such as so-called "back-end" financing. We are finalizing a regulation that will implement these much-needed amendments to the EDC law, and we hope to issue it soon. Our goal is to simplify and accelerate the EDC process by allowing both communities and the Department to share in the success of redevelopment efforts.

II. MANAGING OUR BUILT ENVIRONMENT

The President's fiscal year 2012 budget requests $14.8 billion for Military Construction (MILCON) and Family Housing—a decrease of approximately $4.0 billion from the fiscal year 2011 requested level. This decrease primarily reflects the decline in investment needed as we approach the end of BRAC 2005.

MilCon and Family Housing Budget Request, FY 2012 vs. FY 2011

			Change from FY 2011	
($ Millions)	FY 2011 Request	FY 2012 Request	Funding	Percent
Military Construction	13,705.7	12,006.4	-1,699.3	-12%
Base Realignment and Closure IV	360.5	323.5	-37.0	-10%
Base Realignment and Closure 2005	2,354.3	258.8	-2,095.5	-89%
Family Housing Construction/Improvements	356.8	373.7	16.9	5%
Family Housing Operations & Maintenance	1,448.7	1,318.2	-130.5	-9%
Family Housing Improvement Fund	1.1	2.2	1.1	100%
Homeowners Assistance Program	16.5	1.3	-15.2	-92%
Chemical Demilitarization	125.0	75.3	-49.7	-40%
Energy Conservation Investment Program	120.0	135.0	15.0	13%
NATO Security Investment Program	258.9	272.6	13.7	5%
TOTAL	**18,747.5**	**14,767.0**	**-3,980.5**	**-21%**

Military Construction

We are requesting $12.5 billion for "pure" military construction—i.e., exclusive of BRAC and Family Housing. This request addresses routine needs for construction at enduring U.S. and overseas installations and for specific programs such as the NATO Security Investment Program and the Energy Conservation Investment Program. In addition, we are targeting MILCON funds in three key areas.

First and most important, we are supporting operational mission requirements. MILCON is key to initiatives such as Grow the Force and the Global Defense Posture Realignment, as well as to the fielding of modernized and transformational weapon systems such as the F–22, the F–35, and the MQ–9. Our budget request

also includes a range of mission support facilities—for Special Operations Forces, Guard and Reserve units, and the Army's transformation into a brigade-centric, modular force.

Second, the President's budget request supports the continued recapitalization of our DOD-dependent schools here in the United States and overseas. We are now in the second year of a 6-year plan to repair or replace all 134 schools that were in poor or failing physical condition. The fiscal year 2012 budget request includes $550 million to recapitalize 15 of these schools.

Third, the fiscal year 2012 budget request includes more than $1.1 billion 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. Our budget addresses projects that directly affect patient care by improving and expanding existing facilities, and providing additional capacity to support Grow the Army. It also allows us to continue improving the medical research facilities that support vital chemical-biological defense efforts.

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. The fiscal year 2012 budget request includes $8.8 billion for sustainment and $9.0 billion for recapitalization (restoration and modernization) of our facilities.

Sustainment represents the Department's single most important investment in the health of its facilities. It includes regularly scheduled maintenance and repair or replacement of facility components—the periodic, predictable investments an owner should make across the service life of a facility to slow its deterioration and optimize the owner's investment.

Sustainment and Recapitalization Budget Request, FY 2012 vs. FY 2011

			Change from FY 2011	
($ Millions)	FY 2011 Request	FY 2012 Request	Funding	Percent
Sustainment (O&M & MilPers)	9,042	8,835	-207	-2%
Recapitalization (O&M, MilCon, MilPers, RDT&E)	4,583	9,031	4,448	97%
TOTAL	**13,625**	**17,866**	**4,241**	**31%**

We use a Facilities Sustainment Model (FSM) based on industry benchmarks to estimate the annual cost of regularly scheduled maintenance and repair for different types of facilities. Our policy calls for the Services to fund sustainment at no less than 90 percent of the FSM-generated estimate. For fiscal year 2012, however, the Navy and Air Force have opted to take risk, funding sustainment at only the 80 percent level.[1] As a result, our fiscal year 2012 budget request funds sustainment DOD-wide at only 86 percent of the FSM-generated estimate.

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 man-made or natural causes. Compared with sustainment, recapitalization needs are harder to forecast because they are a function of change—in functional standards (e.g., a new requirement for the configuration of enlisted housing rooms), in available technology (e.g., new lighting fixtures and next-generation boilers) and even in the mission that the facility supports. The fiscal year 2012 budget requests $9.0 billion for recapitalization—$4.4 billion more

[1] The Navy and Air Force believe they can manage this risk by prioritizing their sustainment needs. However, the recent flooding of the U.S. Strategic Command headquarters demonstrates how difficult it is to do this: the flooding was due in part to a history of insufficient preventive maintenance at what is a mission-critical facility.

than the fiscal year 2011 request. This reflects an increased emphasis by the Army and Air Force on upgrading their existing facilities.

Finally, demolition (including deconstruction to recycle and reuse building parts) is an important tool in any recapitalization effort. Our fiscal year 2012 budget requests $409 million to eliminate more than 17 million square feet of facilities—a demonstration of our commitment to demolish what we no longer need or cannot economically repair.

Family and Unaccompanied Housing

Housing is key to quality of life—in the military no less than in the civilian world. The fiscal year 2012 budget requests $1.7 billion for family housing, which supports our goal of having 90 percent of family housing in good or fair condition starting in fiscal year 2012.

The Services have relied largely on privatization to address a dual problem: traditionally, much of the military-owned family housing was in poor condition, and military families often could not find affordable rental housing in the local economy. In my view, 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. First, it is extremely cost effective: with an investment of only $2.7 billion, the Services have generated $27 billion in privatized housing—a 10:1 leverage ratio. Moreover, the private owners are responsible for maintenance and operation, including necessary recapitalization, for the full 50 years of the project. Second, the housing is of high quality; most of it is more appealing to young families than what the MilCon process would produce. Finally, the private owners have a strong incentive to maintain the housing because they need to be able to attract and retain military tenants.

Family Housing Budget Request, FY 2012 vs. FY 2011

			Change from FY 2011	
($ Millions)	FY 2011 Request	FY 2012 Request	Funding	Percent
Family Housing Construction/Improvements	356.8	373.7	16.9	5%
Family Housing Operations & Maintenance	1,448.7	1,318.2	-130.5	-9%
Family Housing Improvement Fund	1.1	2.2	1.1	100%
Homeowners Assistance Program	16.5	1.3	-15.2	-92%
TOTAL	**1,823.1**	**1,695.4**	**-127.7**	**-7%**

For government-owned family housing, the fiscal year 2012 budget requests $374 million to replace or improve 2,412 units at U.S. bases and enduring locations overseas. We are requesting an additional $1.3 billion to operate and maintain 42,000 units worldwide.

The Department is committed to improving housing for its unaccompanied servicemembers as well. In past 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 2012 budget request includes about $1.7 billion for construction of new and replacement projects for nearly 15,000 unaccompanied servicemembers.

As the Department nears the goal it set for new construction of unaccompanied housing, we are shifting the focus to long-term sustainment of the modernized inventory. My office has worked closely with the Comptroller to establish quality standards and performance goals for sustainment of unaccompanied housing. In this year's budget process, we instituted a key performance goal: 90 percent of unaccompanied housing should be in good or fair condition by the end of fiscal year 2017.

III. MANAGING OUR ENERGY USE

The performance of an installation is increasingly linked to its management and use of energy. Installation, or facilities, energy is important for two reasons. First, it represents a significant cost. In 2010, DOD spent $4.0 billion, or 26 percent of the Department's energy bill, on facilities energy. Second, facilities energy is key to mission assurance. According to the Defense Science Board, DOD's reliance on a fragile grid to deliver electricity to its bases places critical missions at risk.[2] Most installations cannot manage their demand for and supply of power and are thus vulnerable to intermittent and/or prolonged power disruption due to natural and man-made disasters.

The Department has three interrelated goals with respect to facilities energy:

- Reduce energy usage and intensity
- Increase renewable and onsite (distributed) energy generation
- Improve energy security

Our strategy directly reflects those goals.

First and most important, we are reducing the demand for traditional energy through conservation and energy efficiency. The Department spends almost $10 billion a year to sustain, restore and modernize our existing facilities. As part of this process, we are retrofitting our buildings with energy efficient components and systems, such as improved lighting, high-efficiency HVAC systems, double-pane windows, energy management control systems and new roofs. Fully one-fourth of the $7.4 billion that the Department spent on facility sustainment and recapitalization under the American Recovery and Reinvestment Act (ARRA) went directly to improve energy efficiency.

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. All new construction must meet the Leadership in Energy and Environmental Design (LEED) Silver standard and/or the five principles of High Performance Sustainable Buildings. In either case, new construction must exceed the energy efficiency standard set by the American Society of Heating, Refrigerating and Air-Conditioning Engineers by at least 30 percent.

In short, the Department's Sustainment and Milcon programs are the engine of our drive to reduce facility energy use. To be sure, this effort to "green" our facilities is good for the environment. But it is driven above all by our desire to get major cost savings.

Second, the Department is increasing the supply of renewable and alternative energy on our installations. Our installations are well situated to support solar, wind, geothermal and other forms of renewable energy. The geothermal plant at Naval Weapons Center China Lake in California provides 270 MWs of power to the State's electrical grid—enough to supply a small city; and Nellis Air Force Base in Nevada has the second largest solar array in North America. Although opportunities for utility-scale solar may be limited (one impediment is the lack of water), the roofs of our buildings represent a major resource. For example, in Hawaii, the 5,900 units of privatized Army family housing feature rooftop photovoltaic (PV) solar panels, making this the world's largest residential PV project. As a matter of policy, the Navy and the Marine Corps now require that all new roofs and roof replacements incorporate solar panels or some other green feature.

Third, we are striving to improve the energy security of our installations, with an emphasis on the risk from potential disruptions to the commercial grid. The Department is participating in interagency discussions on the magnitude of the threat to the grid and how best to mitigate it. Closer to home, we are looking at how to ensure that we have the energy needed to maintain critical operations in the face of a major disruption. As required by the National Defense Authorization Act (NDAA), the Department recently gave Congress a preliminary plan for identifying and addressing areas in which electricity needed to carry out critical military missions on DOD installations is vulnerable to disruption. The development of renewable and alternative energy sources on base will be one element of this effort: in combination with other investments such as smart microgrid technology, renewable and onsite energy sources can help installations carry out mission-critical activities and support restoration of the grid in the event of disruption.

As DOD strives to improve its energy efficiency and security, accurate, real-time information about energy use is essential: to borrow the oft-used phrase, you can't manage what you can measure. My office is developing policy guidance that will re-

[2] "More Fight-Less Fuel," Report of the Defense Science Board Task Force on DOD Energy Strategy, February 2008.

quire the Services to meter a larger share of their energy consumption. We are also leading the effort to develop a DOD-wide energy information management system. Leading firms such as Walmart have such a system, and so should DOD. Toward that end, we have defined a standard set of energy information management requirements and are assessing which information management technologies (future and current) will best support them.

Although the Department is steadily improving its installation energy performance, we have failed to meet key statutory and regulatory goals for the last 2 years. We fell short of the 2010 goal for energy intensity (15 percent reduction relative to 2003) largely because of the Army's performance. On another key metric, renewable energy, while we are on track to meet the NDAA target (produce/procure 25 percent of electricity from renewable sources by 2025), we missed the Energy Policy Act target (7.5 percent renewable use by 2013), which excludes geothermal. See the Appendix for more detail.

Fiscal Year 2012 Budget Request

Let me highlight two programs in our fiscal year 2012 budget request that are particularly important to the Department's energy strategy: the Installation Energy Test Bed and the Energy Conservation Investment Program (ECIP).

Installation Energy Test Bed

We are requesting $30 million in fiscal year 2012 for energy technology demonstrations by the Environmental Security Technology Certification Program (ESTCP).[3] ESTCP began these demonstrations—known as our Installation Energy Test Bed—as a pilot in 2009 with $20 million in ARRA funds. Seeing the value of these demonstrations, in 2010, the Department directed $30 million from ECIP, a flexible MILCON line, to ESTCP to continue the Test Bed. This year, we are seeking to fund the Test Bed as the RDT&E activity it is. It is a high leverage program that we believe will produce major savings.

The purpose of the Test Bed is to demonstrate new energy technologies in a real-world, integrated building environment so as to reduce risk, overcome barriers to deployment and facilitate wide-scale commercialization. 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. There is an extensive literature on the impediments to commercialization of emerging technologies for the building energy market. 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.

It is in DOD's direct self-interest to help firms overcome the barriers to deployment and commercialization of their technology. We have a vast inventory of buildings: nearly 300,000 structures and 2.2 billion square feet of space—three times the footprint of Walmart and ten times that of the General Services Administration. Given what we spend to power our facilities ($4 billion a year), the potential cost savings are significant.

One indication of the value of this approach is that Walmart, the largest private sector energy consumer in the United States, has its own test bed. Walmart systematically tests innovative energy technologies at designated stores to assess their performance and cost effectiveness. For technologies that prove to be cost effective (not all of them do, which is itself a valuable finding), Walmart deploys them in all of its stores. This approach has helped Walmart dramatically reduce its energy consumption. But whereas Walmart's focus is narrow because all of its stores are identical (big-box design), the military needs solutions for a diverse mix of building types and sizes—everything from barracks and office buildings to aircraft repair depots and data centers.

ESTCP has successfully piloted the Test Bed over the last 2 years.[4] Each year, ESTCP has issued a solicitation inviting private firms, universities and government

[3] As discussed in section IV below, we are also requesting $33.6 million for ESTCP for environmental technology demonstrations. These two demonstration programs appear as separate lines under ESTCP in the President's fiscal year 2012 budget request.

[4] The 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.

labs to identify emerging technologies that would meet DOD installation needs. The response has been huge: in 2010, ESTCP received more than 300 proposals from leading corporations in the building energy sector, small startups with venture capital funding and the major DOE labs. Teams made up of technical experts from inside and outside of DOD and Service representatives familiar with the installations' needs review the proposals, and winning proposals (ESTCP has selected about 15 percent of the ones submitted) are matched up with a Service and an installation at which to demonstrate the technology. ESTCP expects some of the projects to begin to show results this year.

The Test Bed has five focus areas: advanced components to improve building energy efficiency; advanced building energy management and control; smart microgrid and energy storage to improve energy security; tools and processes for design, assessment and decisionmaking for energy use and management; and renewable energy generation on DOD installations. The Test Bed requires no new physical infrastructure; rather, it operates as a distributed activity whose key element is the systematic evaluation of new technologies, both to determine their performance, readiness and life cycle costs, and to provide guidance and design information for future deployment across installations.

The timing for an Energy Test Bed is ideal—one reason the response from industry has been so strong. The Federal Government is investing significant resources in building energy R&D, largely through the Department of Energy (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 ESTCP Test Bed can leverage these resources for the military's benefit.

Energy Conservation Investment Program

The second key program to highlight is the Energy Conservation Investment Program (ECIP). The fiscal year 2012 budget requests $135 million for ECIP, a $15 million increase compared to our fiscal year 2011 request. ECIP has a long history of producing savings for the Services, and we are reorienting the program to give it even greater leverage.

ECIP traditionally has funded small projects that promise a significant payback in reduced energy costs, and the Services have relied heavily on it to achieve their energy goals. Although ECIP has enjoyed strong support in Congress and elsewhere, it is and will remain a relatively small program. Thus, it can achieve only a fraction of the Department's energy goals. Moreover, the Services are establishing and funding their own, much larger programs aimed at improving their energy performance.

In keeping with the Department's growing focus on energy, I recently issued policy guidance designed to change the role that ECIP will play—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 and/or security. To illustrate, ECIP projects should have the following types of goals:

- Dramatically change energy consumption at an individual installation, e.g., by fundamentally improving the performance of the power or steam plant;
- Implement across multiple installations a technology validated in a demonstration program sponsored by DOD (e.g., the Installation Energy Test Bed) or DOE;
- Integrate technologies designed to achieve different goals (e.g., energy efficiency and energy security) to realize synergistic benefits;
- Integrate distributed generation and storage technologies to improve supply resiliency for critical loads; and,
- Implement energy security or net-zero energy installation plans, especially at those installations where such investments leverage partnerships with DOE.

In terms of implementation, this new vision for ECIP means that my office will no longer use financial payback as the sole criterion for judging the merits of potential projects. In evaluating a candidate project, we will now give as much weight to its energy impact (reduction in BTUs) as to its financial payback, and we will give secondary consideration to the impact of the project on the nominating installation's energy security.

As this change reflects, ECIP is now part of a portfolio approach in which the Services can pursue the most financially attractive energy projects via third-party financing, such as an Energy Savings Performance Contract, or through their own budgets. ECIP will support projects that will have a big impact on the Services' en-

ergy efficiency and energy security but that cannot be justified under their internal funding strategies.

IV. PROTECTING THE NATURAL ENVIRONMENT

The Department has long made it a priority to protect our natural and cultural resources: as the Marine Corps puts it, "A country worth fighting for is a country worth preserving." The Department protects 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 $42 billion in its environmental programs, and our steady level of expenditure has produced quality results. In fiscal year 2012, we are requesting $4.3 billion to continue this legacy of leadership.

Environmental Program Budget Request, FY 2012 vs. FY 2011

			Change from FY 2011	
($ Millions)	FY 2011 Request	FY 2012 Request	Funding	Percent
Environmental Restoration	1,539	1,467	-72	-4.7%
Environmental Compliance	1,570	1,551	-19	-1.2%
Environmental Conservation	320	380	+60	+18.8%
Pollution Prevention	117	104	-13	-11.1%
Environmental Technology	216	227	+11	+5.1%
BRAC Environmental	445	521	+76	+17.1%
TOTAL	**$4,207**	**$4,250**	**+43**	**+1.0%**

Environmental Conservation

Our installations are home to some of the finest examples of rare native vegetative communities, such as old-growth forests, tall grass prairies and vernal pool wetlands. DOD has a greater density of endangered and threatened species than any other Federal agency. Of the 1,372 species considered threatened or endangered by the U.S. Fish & Wildlife Service (USFWS), more than 420 inhabit DOD land. Nearly 40 threatened and endangered species are found exclusively on DOD installations. The Department develops plans to protect the natural environment while maintaining support for mission requirements in coordination with the USFWS and its State counterparts. These plans have helped us maintain flexibility for mission activities, avoiding critical habitat designations while providing equal or greater protection for endangered species.

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. Using these properties reduces DOD's environmental footprint and retains significant cultural resources for future generations. In addition, many older buildings have features that we consider to be "green" today, 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 $380 million in fiscal year 2012 for environmental conservation, which includes $226 million in recurring funds for ongoing activities and $154 million in non-recurring funds for one-time projects directed at threatened and endangered species, wetland protection, or other natural, cultural and historical resources. This represents an increase of 18.8 percent over the fiscal year 2011 request. Specifically, the Navy has increased its request to meet legal requirements of conservation laws and regulations, primarily in support of offshore range Environmental Impact Statements and consultations under the Marine Mammal Protec-

tion Act and the Endangered Species Act. The Army has increased its request as well to more accurately reflect program requirements.

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.

By the end of 2010, the Department, in cooperation with State agencies and the U.S. Environmental Protection Agency, had completed cleanup activities on 79 percent of IRP sites, and it 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.

We are requesting $2.0 billion for fiscal year 2012 to clean up IRP and MMRP sites. (This includes both $1.5 billion for "Environmental Restoration" and $458 million for "BRAC Environmental.") The budget request for Environmental Restoration is $72 million less than it was in fiscal year 2011, primarily because of a reduction in the Army's MMRP requirement. At the same time, we are asking for $76 million more than in fiscal year 2011 for BRAC Environmental to support requirements at Army and Navy BRAC installations.

Pollution Prevention

The Department employs a number of strategies to reduce pollution of our air, water, and land. They include eliminating the use of certain hazardous materials in our operations and weapon systems, promoting the use of alternative fuels and green products, and implementing innovative technologies. These and other strategies lower our life cycle costs, improve mission capabilities and protect our assets.

Investments in pollution prevention pay dividends. In 2010 the Department diverted 3.9 million tons or 62 percent of our solid waste from landfills, avoiding approximately $176 million in landfill disposal costs. We reduced hazardous waste disposal by 8 percent from 2008 to 2009. Our installations also effectively manage air quality: they reduced hazardous air pollutant emissions by 420 tons, or 25 percent, from 2008 to 2009.

The President's budget requests $104 million for pollution prevention in fiscal year 2012, a reduction of $13 million from our fiscal year 2011 request. This decrease reflects the growing maturity of the pollution prevention program: having completed activities that require significant investment to reduce pollution after the fact, the Department is now focusing on the more cost-effective strategy of preventing pollution in the first place, for example, by influencing the planning and design of weapons systems.

Environmental Compliance

Clean water and air are essential to the health and well being of our communities and ecosystems. The Department maintains a high level of compliance with environmental laws and regulations: although environmental regulators performed more than 3,000 inspections in fiscal year 2010—a 30+ percent increase from 10 years ago—DOD was subject to enforcement actions for only 9 percent of these inspections, which is an all time low.

Our fiscal year 2012 budget requests $1.6 billion for environmental compliance—a negligible ($19 million) decrease from last year's request. This steady level of investment will enable the Department to continue to protect the environment while maintaining operational readiness.

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 the De-

partment'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. Through a competitive process, it invests in applied research and advanced technology development guided by DOD users needs but executed by the leading research establishments in both the private and public sectors. It has a balanced portfolio of projects ranging from high risk leap-ahead technologies to fundamental engineering needed to solve critical near term problems. SERDP has a superb track record: as one of the only R&D programs aimed at reducing DOD operating costs, it has saved the Department billions of dollars in environmental cleanup costs, avoided liability costs and reduced weapons system maintenance and life cycle costs.

One reason SERDP has been so successful is the complementary role played by ESTCP, the Department's environmental test and evaluation program. SERDP and ESTCP are managed out of a single program office. ESTCP's mission is to transition technology out of the laboratory. 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.

One area where SERDP and ESTCP have excelled is the development of technologies to detect unexploded ordnance (UXO). Current clean-up methods cannot discriminate between scrap metal and hazardous UXO; 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 an eye-popping $17 billion. However, 10 years of investment by SERDP and ESTCP have yielded technologies that can discriminate between UXO and harmless metal objects with almost perfect reliability. This is a remarkable achievement and one that many clean-up experts thought was impossible. Based on estimates from the 2003 Defense Science Board Task Force on Unexploded Ordnance, implementation of reliable discrimination technologies can reduce DOD's projected cost for UXO cleanup by 75 percent—or up to $12 billion.

ESTCP has recently funded live-site demonstrations to acquire the data needed to validate, gain regulatory approval for and fully transition these technologies into the field. We are proposing to accelerate these demonstrations so that the technology is ready by 2015, when the Services undertake major UXO clean-up efforts. Recognizing that the challenges go beyond technology, we are addressing other potential impediments to the deployment of new technology. We are talking with environmental regulators to gain their endorsement, working with contracting offices so that contracts allow for early adoption, and cooperating with industry to encourage embrace of the new technology.

The fiscal year 2012 budget request includes $66.4 million for SERDP and $33.6 million for ESTCP for environmental technology demonstrations. (The budget request for ESTCP includes an additional $30 million for energy technology demonstrations, as discussed in section III above.) Of the $33.6 million requested for ESTCP, $7.5 million will go to support the accelerated program of UXO live-site demonstrations.

The overall budget request for Environmental Technology for fiscal year 2012 is $227 million. In addition to SERDP and ESTCP, this request includes funding for the Services' environmental research and development activities. The Services' investments focus on Service-unique environmental technology requirements and complement the larger SERDP and ESTCP investments, which address those issues that are common across the Services. SERDP and ESTCP work closely with the Services in order to coordinate and leverage these investments.

Compatible Development

Encroachment is a growing challenge to the military mission, particularly our test and training activities. I want to highlight two efforts which I spearhead that are designed to deal with this challenge.

Readiness and Environmental Protection Initiative

DOD's ability to conduct realistic live-fire training and weapons system testing is vital to preparing troops and the equipment they use for real-world combat. Sprawl, incompatible land use and other forms of encroachment put the Department's training and testing 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 pushes those species onto less developed military lands, resulting in restrictions on testing and training.

A key tool for combating encroachment is the Readiness and Environmental Protection Initiative (REPI). Under REPI, the Department partners with conservation organizations and State and local governments to preserve buffer land around our installations and ranges. Through its unique cost-sharing partnerships, REPI has directly leveraged the Department's investments by two-to-one. The indirect benefits are even greater: by helping to preserve buffer land, the Department avoids much more costly alternatives, such as training workarounds and investments to replace existing testing capability. 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.

The President's fiscal year 2012 budget requests $54.2 million for REPI, an increase of $15 million over our fiscal year 2011 request.

Renewable Energy Siting

Although most renewable energy projects are perfectly compatible with the military mission, in some cases, they can create a conflict. Until recently, the process through which DOD reviewed proposed projects and handled disputes was opaque, timeconsuming, and ad hoc, and the resulting delays were costly for industry and for our partners elsewhere in governments. Spurred in part by your direction in section 358 of the NDAA for Fiscal Year 2011, we have moved aggressively to develop a timely, transparent review process and to pursue technological fixes that allow for compatible energy siting.

We have made rapid progress. Even before the President signed the NDAA into law, we had created the DOD Energy Siting Clearinghouse to provide a "one-stop shop" within the Department for developers and other government agencies. The Clearinghouse has conducted aggressive outreach to industry, other Federal agencies, environmental advocacy groups, and State and local governments. Among other things, the Clearinghouse hosted a conference with key interagency stakeholders to analyze the backlog of renewable energy projects filed with the Federal Aviation Administration (FAA) and the Department of Interior's Bureau of Land Management, focusing on protecting critical military mission requirements as we promote energy independence. We are also engaged in Interior's efforts to open public lands and the Outer Continental Shelf to renewable energy generation—ensuring that we do this in a way that preserves military testing, training and homeland defense capabilities.

At the same time, the Clearinghouse has worked with interagency partners on R&D to promote mission compatible renewable energy, with an emphasis on technology to mitigate the impacts of wind turbines on radars. DOE has been an enthusiastic collaborator, and we are planning to host an interagency field evaluation of existing mitigation technologies in the near future. Through the Interagency Policy Committee on the Air Domain, we are looking at options to accelerate the process for upgrading older surveillance radars and set the stage for long-term solutions.

Renewable energy is vital to America's future security and economic vitality and it need not be incompatible with the preservation of the Department's irreplaceable test and training ranges and its radar-based surveillance network. We are making great strides in learning how minimize the impacts of renewable energy projects on vital military missions. This effort will help give our Nation a clean, reliable and secure energy future.

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.

APPENDIX

Key Facilities Energy and Water Goals

There are four key statutory and regulatory goals related to installation's consumption of energy and water:

- Reduce energy intensity (BTUs per square foot) by 3 percent per year, or 30 percent overall, by 2015 from the 2003 baseline [Energy Independence and Security of 2007]. Under DOD's High Priority Performance Goals, the interim target is a 21 percent reduction by the end of 2012.
- Increase use of renewable energy to 7.5 percent in 2013 and beyond [Energy Policy Act of 2005, or EPACT]; and produce or procure 25 percent of electricity consumed from all renewable sources by the end of 2025 [National Defense Authorization Act of 2007, or NDAA]. Under DOD's High

Priority Performance Goals, the interim NDAA target is 12 percent by 2012.

• Reduce consumption of petroleum (gasoline and diesel) by non-tactical vehicles by 30 percent by 2020 [Executive Order 13514, October 2009].

• Reduce potable water consumption intensity by 2 percent per year, or 16 percent overall, by 2015 from the 2007 baseline.

DOD reduced its energy intensity by only 11.2 percent from 2005 to 2010, compared to the goal of 15 percent. A key factor has been the demands on the Army related both to the movement of troops and equipment to and from Afghanistan and Iraq and to the completion of the BRAC process (as Army closes some facilities and moves to others, the lights are on in two locations).

DOD increased its consumption of renewable energy by 4.1 percent, compared to the 2010 EPACT target of 5.0 percent. By contrast, we met the NDAA for Fiscal Year 2007 goal (produce or procure 25 percent of electricity consumed from all renewable sources) by achieving 10.4 percent compared to the target of 10 percent.

With respect to consumption of petroleum by non-tactical vehicles, the Department fell short of the target: DOD achieved a 6.6 percent reduction in its petroleum use from the 2005 baseline, compared to the target of 10 percent. The Department continues to pursue replacement of non-tactical fleet vehicles with more efficient models, alternative fuel vehicles and hybrid electric vehicles to decrease petroleum fuel demand.

Finally, the Department far exceeded the 2010 goal for reducing the intensity of our potable water consumption. DOD reduced its potable water consumption intensity by 13 percent from 2007 to 2010, compared to the goal of 6 percent. From 2007 to 2009, we reduced the water consumption intensity of our facilities by 4.6 percent. This dramatic improvement is due to the combination of an aggressive program to detect leaks followed up by a program to repair them.

Senator MCCASKILL. Thank you, Dr. Robyn. I will—we will go vote now, and return. I want to especially apologize for mispronouncing your name, because I know you're from St. Louis, which is particularly painful that I didn't get it right. [Laughter.]

So, we will return in just a few minutes, after we've completed both votes. Thank you for your patience. [Recess.]

Thank you very much for allowing us to run and vote. I'm sure the other members will return quickly.

Secretary Hammack, why don't we begin with you at this point. Thank you.

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

Ms. HAMMACK. Thank you, Chairman McCaskill.

I want to tell you we appreciate your support for the Army programs, our soldiers, and our families, over the years. We're fighting two wars. At the same time, we're relocating, building, and closing with BRAC. We have one-third of our force that is going to be moving as part of the BRAC this summer and fall. We are realigning with global defense posture realignment. We have Grow the Army (GTA), which has grown our force by 50,000. We're transforming to a modular force to face the current wars that we're in. We have housing, barracks, and lodging, and infrastructure modernization programs to compensate for some of the infrastructure that has been neglected over the last 30 years. We are working to reduce our energy boot print. But, at the same time, we lead the Federal Government and water conservation and reduction. We're energy and environmental stewardship. So, we have a lot of programs that we are working on, and I'm going to talk a little bit about each.

But, first, we want to thank you for the NDAA for Fiscal Year 2011, but want to talk a little bit about the continuing resolution and the challenges that it's posing to us.

We have the inability to proceed with many programs. Right now, we have $1.6 billion in MILCON projects. They're on hold, waiting for authorization to proceed or new start authority. They are in, as Secretary McHugh said this morning, 18 different States, and they do affect all of us. These are projects that have already been bid, that are ready to award. As the bids get old, they are at risk for being repriced at a slightly higher amount. As a matter of fact, there are 23 projects in States represented by members of this subcommittee. So, support, as U.S. Senators, to enact appropriate legislation is something we look forward to.

On a MILCON basis, the budget request for the Army is $5.3 billion. This is 3.6 percent of the Army's total obligation authorization. It is a 33-percent reduction, or a $2.6 billion reduction, from the President's budget fiscal year 2011. Although there was a mention that some of the budget reduction was due to BRAC, that is not true for the Army, in that in fiscal year 2011 we did not have any BRAC construction projects budgeted. So, these represent—or, this reduction represents a reevaluation of our facility strategy and investments required to support other programs.

In GTA, we have four projects which are necessary, regardless of end strength reductions, even though it's under the GTA program. They are correcting conditions, not capacity. But, we are working on an analysis of how the end strength change in 2015 will affect our investments, and feel confident it's primarily going to impact future budget requests.

We are focusing to complete our barracks buyout program, transformation to a modular force, and accommodating stationing decisions, such as a combat aviation brigade.

In Europe, the investments that we require are not impacted by any force-structure decisions in fiscal year 2012, and the fiscal year 2011 requirements are necessary to support missions, units, and locations that are known to be enduring. These are validated requirements, and we look forward to your support of them.

Just to let you know, over the last 5 years, we have reduced the sites that we occupy in Germany by 91 and returned 23,000 acres of land to the German Government. Over the next 5 years, we plan to close 29 additional sites and return an additional 7,000 acres to the German Government.

BRAC 2005 is certainly an issue that we are focused on. That program is three times larger for the Army than the last four previous rounds, combined. It is an $18 billion program, of which $13.5 billion are construction programs. There's 330 projects in our construction program. We are closing 12 Active component installations, 1 Reserve installation, and 387 Reserve component installations. At the same time, we are opening 4 centers of excellence through collocation, relocating 5 major headquarter commands, constructing 125 Armed Forces Reserve Centers and restationing, as I said, one-third of the Active Force. The Reserve and the Guard will both say this has been a tremendous boost to their infrastructure and is very well received by all of our Reserve component.

We are making progress, and are on target, with all 102 of the BRAC actions that have been tasked to the Army. There are six actions that are on our close watch list with critical milestones. We have not yet missed any of the critical deadlines, but we are watching them closely, because the deadlines are very close, and we will keep the committee informed if we see any change in that.

Also, just to let you know, we have moved out, on a fairly expeditious basis, to transfer some of the excess land freed up from the BRAC program to the local community. Currently we've transferred 19,000 of the 70,000 acres that will be deemed excess.

In energy, as Dr. Robyn mentioned, it is a key focus, especially energy security, to reduce our vulnerability. We need to retain access to energy in order to operate when there is a catastrophe or supplies are disrupted through acts of nature, accident, or acts of threat. The Army spends $3.9 billion on energy, of which $2.7 billion is spent in theater and $1.2 billion is spent on our bases. We know that, to remain operationally relevant and viable, we have to reduce our dependency on foreign oil, increase efficiencies, and implement renewable and alternate sources of energy strategies.

We have launched a Net-Zero Initiative to focus our installations on reductions in energy, water, and waste. It's a holistic approach. It's an integrated process, which we believe will afford us quite a few efficiencies.

We have made progress on our energy goals with investments in many parts of the budget. In MILCON, we have adopted ASHRAE standard 189.1 as a environmental sustainability standard. It is the most stringent energy efficiency and sustainability strategy in the Federal Government.

We are also implementing renewable energy in both our base operations and in theater. At the end of this month, we have a wind energy project at Fort Huachuca that comes online. I was just over in Iraq and Afghanistan and saw that we—our perimeter security systems—the sensors are solar powered. We have solar-powered announcement systems. We have solar-powered lighting. We are really working on reducing operational energy so that energy can be focused where it's most critical, and that is in our missions.

We do want to invest in science and technology (S&T), as Dr. Robyn mentioned, to research more energy efficient strategies; and for the Army, one of the strategies is more efficient helicopter engines so we can reduce the amount of fuel so that our helicopters can fly further and utilize less fuel. We're also working to leverage commercial, off-the-shelf technologies in both base and theater.

One of the things that did help our energy efficiency program in fiscal year 2010 was American Reinvestment and Recovery Act funding, which we leveraged quite a few energy efficiencies, whether they were renewable energy or improving the insulation in many of our buildings. We understand that investments in energy are operationally necessary, fiscally prudent, and mission essential.

On the environmental standpoint, the Army is investing $1.4 billion in fiscal year 2012 in environmental programs, which is a slight decrease from fiscal year 2011. This enables us to sustain compliance with State and Federal mandates, support conservation programs. We have over 200 endangered species, which we must

monitor. We have over 64,000 archaeological sites. We have 29 sites with compatible-use buffers.

We invest in S&T, as Dr. Robyn mentioned, in the UXO area. We also have investments in chemical demil and other test and evaluation programs. We have required investments in BRAC restoration to enable us to transfer some of the property that is deemed excess to the local community. We also have responsibility for all formerly used Defense sites by the military to implement a remedy-in-place response complete strategy.

On the efficiencies standpoint, we are working on our facility investment strategy. We are reviewing our standards and our criteria to ensure that they are appropriate to the task. We're also looking at modernization and facility restoration as an alternative to MILCON. You will see changes and, hopefully, those strategies enacted as we go forward.

I would close, Ma'am. I appreciate this is a historic moment. I find it very interesting that most of the witnesses here are female, as well, although——

Senator MCCASKILL. We're taking over, aren't we?

Ms. HAMMACK. Absolutely. Terry, God bless you, you're the minority here. [Laughter.]

But, we look forward to working with you and the committee to ensure that our soldiers, civilians, and families have energy efficient facilities and the needed services they have to perform the many missions in defense of our Nation.

So, thank you, and I look forward to your questions.

[The prepared statement of Ms. Hammack follows:]

PREPARED STATEMENT BY HON. KATHERINE G. HAMMACK

INTRODUCTION

Good afternoon Chairman McCaskill, Senator Ayotte, and members of the subcommittee. I appreciate the opportunity to join Dr Robyn to explain the Army's fiscal year 2012 budget needs and requirements.

The Army's 2012 Military Construction (MILCON) budget request will continue to invest in facilities infrastructure required to support highly visible and synchronized initiatives of Base Realignment and Closure (BRAC), growth of the force to 45 Brigade Combat Teams (BCT) with an end strength of 547,400 soldiers, transformation to a globally postured and versatile modular force, and the Reserve components transformation from a strategic force to an operational force. Your committee's commitment to our soldiers, families, and civilians and support of the Army's MILCON 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.

The level of investment required to complete Grow the Army (GTA) and Global Defense Posture Realignment (GDPR) and BRAC is declining and permits the Army to focus on the funding to recapitalize and modernize legacy facilities, construct new facilities to eliminate deficit requirements, such as quality of life, and complete both Permanent Party and Training Barracks buy-out programs. Continued timely and predictable funding is critical as we transition from a period of prolonged conflict to one of increased stability while continuing to focus on re-balancing the force and maintaining a combat edge developed through a decade of war.

IMPACTS OF THE CONTINUING RESOLUTION

Under the current Continuing Resolutions, the Army is unable to proceed with the MILCON projects we requested over a year ago—projects that are needed to continue the momentum required to meet our goals. We have approximately $1.5 billion of Army MILCON projects—across all components—that are ready to award pending receipt of an Appropriations bill or new start authority. As long as new starts are prohibited, we risk increased cost to re-advertize projects, shortened con-

struction seasons—especially in northern climes, and delays to ongoing consolidation and stationing actions. So, I strongly urge the committee to work hard to pass the fiscal year 2011 budget.

OVERVIEW

The Army's fiscal year 2012 President's budget requests $5.3 billion for MILCON, Army Family Housing (AFH), and BRAC, which is $2.6 billion less or a 33 percent reduction from the fiscal year 2011 request. This represents 3.6 percent of the total Army budget. Of the $5.3 billion request, $3.2 billion is for the Active Army, $774 million is for the Army National Guard, $281 million is for the Army Reserve, $300 million is for BRAC, and $682 million is for AFH. Although the overall MILCON funding level declines due to completion of BRAC construction and reduced investments in major initiatives such as GTA and GDPR, the Army continued to follow the "Pillars of Priority" in development of the fiscal year 2012 MILCON program which supports Army Imperatives of: Sustain, Prepare, Reset and Transform.

The five pillars of priority are the foundation of the MILCON program. The pillars address all categories of facilities in the Army facilities portfolio for active and Reserve component forces. The pillars are:

Global Defense Posture Realignment/Grow the Army:

GDPR construction provides facilities to ensure Army forces are properly positioned worldwide in support of the National Military Strategy. GTA supports the fiscal year 2013 Army end strength of 1,111.6K (547,000 Active Army, 358,000 Army National Guard, and 206,000 Army Reserve) necessary to increase Active component dwell time to 1:2 years and Reserve component dwell time to 1:4 years. Construction provides facilities for BCTs and combat support/combat service support (CS/CSS) units activated as part of GTA. The Secretary of Defense recently announced a reduction of 27,000 in Active Army end strength planned for 2015. Unit level details of this reduction, and therefore impacts to facilities, will not be known for some time.

Transformation:

Supports the Army's transformation to a modular force, enables critical force structure initiatives and eliminates inadequate permanent party and trainee barracks. The last inadequate permanent party spaces are planned to be removed after the new barracks are fully occupied in fiscal year 2015, if we have new start authority for our fiscal year 2011 projects.

Modernization:

Supports ongoing investment in recapitalization of Operations infrastructure and Quality of Life facilities.

Training Support:

Supports ongoing investment in modernization and revitalization of Army training ranges, training centers, and supporting infrastructure.

Strategic Readiness:

Supports the modernization and recapitalization of the Army's industrial base, prepositioned stock facilities and transportation infrastructure.

The Army is executing a tightly woven plan integrating BRAC, GDPR/GTA, and transformation to a modular force as facilitated by MILCON. The strategy includes aligning facilities to support a U.S. based force structured as an expeditionary Army; completing facilities and moving personnel to comply with BRAC 2005 law by 2011; and completing GDPR/GTA by 2013. Facilities modernization for modular force units converted from the legacy force structure extends beyond 2016. The fiscal year 2012 MILCON request is crucial to the success of the Army's strategic imperatives to Sustain, Prepare, Reset, and Transform the force.

FISCAL YEAR 2012 BUDGET REQUEST

Military Construction, Army

The Active Army fiscal year 2012 MILCON request is for $3,236 million (for appropriation and authorization of appropriations) to support the Army Imperatives of Sustain, Prepare, and Transform.

Grow the Army ($164 million/5 percent):

The GTA request in fiscal year 2012 funds 4 projects. The total includes $137 million for operations facilities, $23 million for a training barracks, and $3.6 million for one operational support facility. These facilities are essential to support growth

in the Army's combat support and combat service support force structure and establish the appropriate training support infrastructure for a 45 BCT Army.

Global Defense Posture Realignment ($178 million/6 percent):

The request includes $80 million, for barracks, an entry control point and the third phase of the drainage system at Bagram Air Base, as well $49 million for a Brigade Complex at Fort Bragg as part of the Army Patriot units' global realignment, and $49 million for a maintenance facility at Fort Leonard Wood.

Transformation ($1,165 million/36 percent):

The fiscal year 2012 request of $639 million supports the stationing of units in support of weapons systems, Theater High Altitude Area Defense, Joint Land Attack Cruise Missile Defense Elevated Netted Sensor, Combat Aviation Brigades, and Enhanced Range Multipurpose unmanned aerial vehicle units. Another $526 million will provide permanent operations and maintenance facilities and barracks to support the conversion of existing forces into new modular force units for the Active component. The Army strategy is to use existing facility assets to support transformation where feasible and program new construction projects when existing facilities are inadequate.

Barracks Modernization ($296 million/9 percent):

The fiscal year 2012 request will provide for 3,482 new permanent party barracks spaces that will meet Department of Defense "1+1" or equivalent standard and complete the permanent party barracks buyout program by fiscal year 2013 and beneficial occupancy by fiscal year 2015. In addition to the barracks modernization program, additional barracks projects are included in the fiscal year 2012 request that support GTA, Transformation, and Modernization pillars. These projects are located, at Joint Base Lewis-McChord, Forts Bliss, Carson, and Knox, Germany, Honduras, and Korea. The total fiscal year 2012 investment in permanent party barracks is $562 million.

Training Barracks Modernization ($59 million/2 percent):

The fiscal year 2012 request will provide 1,140 new training barracks spaces for our soldiers that meet applicable standards. One trainee barracks complex is at Fort Jackson. In addition to the training barracks modernization program, a second trainee barracks complex at Fort Benning is funded under the GTA pillar. The total fiscal year 2012 investment in training barracks is $82 million.

Modernization ($685 million/21 percent):

The fiscal year 2012 request consists of 30 projects with investments of $258 million for operations facilities, $321 million for operational support facilities and $106 million for quality of life projects.

Training Support ($340 million/11 percent):

Training Support facilities include training ranges to support multiple weapon systems, land acquisitions and other soldier training facilities.

Strategic Readiness ($74 million/2 percent):

Fiscal year 2012 represents the first year the Army will invest in industrial base and deployment facilities under the Strategic Readiness initiative. Prior to fiscal year 2012, these types of facilities fell under general recapitalization and modernization of aging facilities. Five transportation infrastructure projects will be constructed to support railhead, deployment and supply operations, as well as a Maneuver Systems Sustainment Center project at Red River Army Depot.

Other Support Programs ($275 million/8 percent):

The fiscal year 2012 budget includes $230 million for planning and design. As executive agent, the Army also provides oversight of design and construction for projects funded by host nations. The fiscal year 2012 budget requests $25 million for oversight of host nation funded construction for all Services in Japan, Korea, and Europe. The budget request also contains $20 million for unspecified minor construction to address unforeseen critical needs.

Military Construction, Army National Guard

The Army National Guard fiscal year 2012 MILCON request of $774 million (for appropriation and authorization of appropriations) is focused on GTA, Modernization, Transformation, Training Support, and other support programs.

Grow the Army ($101 million/14 percent):

The fiscal year 2012 budget request includes $101 million for 11 energy efficient readiness centers that will support the Army National Guard's end strength growth and ability to react to high levels of force deployment.

Modernization ($198 million/25 percent):

The Army National Guard budget request also includes $198 million to replace 11 obsolete, and energy inefficient readiness centers. There are five Readiness Centers and one Armed Forces Reserve Center, one Maintenance Facility, one Army Aviation Support Facility, one U.S. Property and Fiscal Office, and one Utilities Replacement project that will provide modernized facilities to enhance the Guard's operational readiness.

Transformation ($198 million/25 percent):

The budget request offers the Army National Guard the opportunity to reach higher levels of readiness by equipping Army National Guard units on a comparable level with the active component. The request is comprised of 10 projects which include 3 Tactical Unmanned Aircraft System Facilities, 5 Readiness Centers, 1 Army Aviation Support Facility, and 1 Field Maintenance Shop.

Training Support ($245 million/32 percent):

In fiscal year 2012, the Army National Guard is requesting $245 million for 16 projects which will support the training of its operational force. These funds will provide the facilities Soldiers require as they train, mobilize, and deploy. Included are five Operations Readiness and Training Complexes, seven range projects, one Maneuver Area Training and Equipment Site, one railhead expansion and container facility, and two deployment processing facilities.

Other Support Programs ($32 million/4 percent):

The fiscal year 2012 Army National Guard budget also contains $20 million for planning and design of future projects and $12 million for unspecified minor MILCON to address unforeseen critical needs.

Military Construction Army Reserve

The Army Reserve fiscal year 2012 MILCON request for $281 million (for appropriation and authorization of appropriations) is for Modernization, Training Support, Strategic Readiness, and other support programs.

Modernization ($216 million/77 percent):

In fiscal year 2012, the Army Reserve will invest $216 million in facilities that prepare our soldiers for success in current operations. The construction of 10 new Army Reserve centers and 1 Armed Forces Reserve center will provide the 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.

Training Support ($27 million/10 percent):

The budget request of $27 million provides for three ranges that enable soldiers to hone their combat skills. It also provides for construction of the final phase of a Noncommissioned Officer Academy classroom/training billets complex that, when completed, will allow for a modernized training environment for training.

Strategic Readiness ($5 million/2 percent):

The request includes $5 million for a containerized loading facility supporting mobilization and demobilization missions of the Reserve component.

Other Support Programs ($32 million/11 percent):

The fiscal year 2012 Army Reserve budget request includes $29 million for planning and design of future year projects and $3 million for unspecified minor MILCON to address unforeseen critical needs.

Army Family Housing

The Army's fiscal year 2012 budget includes $681.8 million 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 its housing assets inside the United States, while overseas we primarily house families in government-owned and leased quarters.

Residential Communities Initiative

In 1999 the Army began privatizing housing assets and Residential Communities Initiative (RCI) continues to provide quality housing which 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.

The RCI Family housing is in 44 locations, with a projected end state of over 85,000 homes—98 percent of the on-post family housing inventory inside the U.S. 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. During the 12 years since 1999 through 2010, our partners have constructed over 25,000 new homes, and renovated another 19,000 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 ($186.9 million/27 percent):

The Army's fiscal year 2012 Family Housing Construction request is $186.9 million (for authorization of appropriation, and appropriation) to continue our significant investment in our soldiers and their families. This supports our goal to sustain government-owned housing and eliminate our remaining inadequate inventory at enduring overseas installations.

The family housing construction program includes $76 million for traditional MILCON to provide 128 new homes in Germany, and to acquire 10 acres of land in Brussels for future construction so that the Army can eliminate 7 high-cost leased homes that cost the Army over $1 million annually. The request also includes $103 million for improvements to 276 family homes in Germany, and $7.9 million for planning and design.

Army Family Housing Operations ($494.8 million/73 percent):

The Army's fiscal year 2012 Family Housing Operations request is $494.8 million (for appropriation and authorization of appropriations). This account provides for: Operations, Utilities, Maintenance and Repair, Leased Family housing, and management of RCI. This request supports almost 16,000 Army-owned homes, in the United States and in foreign countries, as well as almost 8,000 leased residences and provides government oversight of more than 80,000 privatized homes.

Operations ($85.4 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 ($73.6 million):

The utilities account includes the cost of delivering heat, air conditioning, electricity, water, and wastewater support for family housing units. The overall size of the utilities account is decreasing in proportion with the reduction in supported inventory due to RCI.

Maintenance and Repair ($105.7 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. Funding reductions result in slippage of maintenance projects that adversely impact soldier and family quality of life.

Leasing ($204.4 million):

The leasing program is another way the Army provides adequate housing for families. The fiscal year 2012 budget includes funding for a total of 9,036 housing units, including 1,080 existing Section 2835 ("build-to-lease"—formerly known as 801 leases), 1,828 temporary domestic leases in the United States, and 6,128 leased units overseas.

Privatization ($25.7 million):

The privatization account provides operating funds for management and oversight of privatized military family housing in the RCI program. RCI 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

BRAC 2005 is a massive undertaking, requiring the synchronization of base closures, realignments, MILCON and renovation, unit activations and deactivations, and the flow of forces to and from current global commitments. BRAC 2005 encompassed: 102 Army recommendations; affected over 150,000 soldiers and civilians, and their family members; 330 construction projects, which includes 125 Armed Forces Reserve centers; closure of 12 Active component installations, 1 Army Reserve installation, 387 National Guard Readiness and Army Reserve Centers, and 8 leased facilities; and over 1,100 discrete actions. BRAC 2005 established Training Centers of Excellence, Joint Bases, a Human Resources Center of Excellence, and Joint Technical and Research facilities.

While the Department is facing scheduling challenges in a few cases, we are working diligently to ensure we satisfy our BRAC legal obligations. Army Senior leaders continue to intensely manage these recommendations and are putting in place mitigation procedures to ensure we meet our legal obligations. Currently, the Army has completed 23 of 102 recommendations and awarded 327 MILCON projects, of which 154 have been completed. The Army has initiated 850 of 1,147 actions and completed 393. The Army has closed 6 Army installations, 1 Army Reserve installation, 42 Army Reserve Centers, and disposed of 19,067 acres associated with the closures. The Army is on schedule to complete the remaining 754 actions and 173 projects in accordance with the BRAC law.

The Army fiscal year 2012 budget request for BRAC 2005 is only $229 million. The budget request is critical to the success of the Army's BRAC 2005 initiative and does not contain funding for new construction projects. The funding request includes $116.9 million in Operation and Maintenance to support facility caretaker requirements. In fiscal year 2012, 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 $112.3 million, which includes munitions and explosives of concern and hazardous and toxic waste restoration activities.

BRAC 95

The Army is requesting $70.7 million in fiscal year 2012 for prior BRAC rounds. The request includes $4.6 million for caretaking operations and program management of remaining properties and $66.1 million for environmental restoration to address environmental restoration efforts at 280 sites at 36 prior BRAC installations. To date, the Army has spent $3.1 billion on the BRAC environmental program for installations impacted by the previous four BRAC rounds. The Army has disposed of 177,842 acres (85 percent of the total acreage disposal requirement of 209,291 acres), with 31,448 acres remaining. As a result, the Army estimates approximately $14.5 billion in savings through 2010—and nearly $1 billion in recurring, annual savings from prior BRAC rounds.

ENERGY CONSERVATION INVESTMENT PROGRAM

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 Energy Conservation Investment Program (ECIP) fiscal year 2012 program includes 10 renewable energy projects and 3 energy conservation projects for $51.5 million. The estimated average annual savings is projected at $4 million dollars or 258 billion British Thermal Units. Although ECIP is an annual Defense wide appropriation ($135 million), the Army is taking a strategic look at requirements and developing an ECIP Future Years Defense Program that will provide the Army the ability to pull requirements forward should such an opportunity arise.

ENERGY SECURITY AND SUSTAINABILITY

The Army is moving forward to address the challenge of sustainability and energy security to ensure the Army of tomorrow has the same access to energy, water, land, and natural resources as the Army of today. The Army realizes that innovative, cost-effective, solutions are critical to success. Addressing these challenges is operationally necessary, fiscally prudent, and mission essential. The Army is ready to lead by example.

Drive Efficiency Across the Enterprise

The Army is working to significantly reduce requirements for natural resources, to include energy and water, both on installations at home and in our combat operations. Reducing demand through efficiency improvements is often the cheapest and fastest way to save funds and reduce dependency. The easiest gallon of fuel to secure and transport is the one that is not required. The need to reduce energy vulnerabilities and associated costs is clear, given experiences in Iraq and Afghanistan. The approach will require a concerted effort involving a combination of new technologies, changes to user behavior, and conversion of "waste" in resource streams to energy with approaches that convert waste heat or garbage into electricity.

Build Resilience through Renewable/Alternative Energy

Army forces must still prevail, even in the face of disruptions due to enemy action, weather, shifting priorities, or energy availability. Given this, it is prudent that the Army take steps to diversify its sources of energy, particularly to include renewable and alternative sources available both here and abroad. The Army is building resilience and flexibility into force capabilities to continue operating in the face of energy disruption. These disruptions can occur at the national, regional, or local level and affect bases, weapons systems, vehicles, and soldiers.

CONCLUSION

The Army's fiscal year 2012 MILCON, AFH, and BRAC budget requests are balanced programs that support our soldiers, families, and civilians; continued rebalancing of the force; completion of BRAC 2005 by September 2011; continued support to Army transformation, GTA and GDPR initiatives, and investments in barracks buyout programs. The Army's facilities investment strategy will be accomplished through your continued commitment to timely and sustained funding of MILCON, BRAC, and family housing.

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

Senator MCCASKILL. Thank you, Secretary Hammack.

Secretary Pfannenstiel.

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

Ms. PFANNENSTIEL. Chairman McCaskill, Senator Ayotte, Senator Shaheen, I'm pleased to appear before you today to provide an overview of the Department of Navy's (DON) investment in our shore facilities.

DON's fiscal year 2012 budget request includes $13.3 billion for installations, which includes MILCON, facility sustainment, restoration, and modernization, BRAC, family housing, environmental programs, energy initiatives, and base operating support.

MILCON request of $2.5 billion is significantly less than our 2011 request of $3.9 billion, primarily due to the completion of the Marine Corps barracks initiatives and the Grow the Force initiative. The MILCON request contains further, though limited, investments to relocate marines from Okinawa to Guam. Marine Corps relocation, along with other DOD efforts to realign forces and capabilities to Guam, represents a unique opportunity to improve the U.S. force posture in the Pacific. This is a major effort, and one we

must get right for both our military families and for the people of Guam.

I'm pleased to share with you that we're making progress in this effort. This week, we achieved an important milestone in the realignment, the finalization of a programmatic agreement, which, after 3 years of consultation, concludes the National Historic Preservation Act section 106 process. We may now move forward, executing construction associated with the realignment and with preparing a record of decision for the training ranges on Guam.

This is an important year for the Guam realignment program. The start of construction is imminent and additional contracts will be awarded over the next several weeks and months at a sustainable pace that Guam can support. Building on fiscal year 2010 and fiscal year 2011 projects, the projects we are requesting in fiscal year 2012 will enable future vertical construction, support the introduction of off-island workers, and support future operations.

Similarly, the Government of Japan's fiscal year 2011 request includes financing for critical utilities projects that will support the Marines in the long run and the boost in construction in the near term.

As for BRAC 2005, we are on track to meet the statutory deadline of September 15th, 2011. Our fiscal year 2012 budget request of $26 million enables ongoing environmental restoration, stewardship, and property disposal efforts. DON has made significant progress during the past year, and, to date, we have completed 328 of the 485 realignment and closure actions, as specified in our established business plans.

The last program I'd like to touch on is our increased investment to support the Secretary of the Navy's ambitious energy goals. DON has requested $1.2 billion for fiscal year 2012 and $4.4 billion across the Future Years Defense Plan (FYDP) for shore and operational energy efficiencies. This supports our capacity to increase energy reliability and security, and to reduce our dependence on fossil fuels.

In closing, your support of DON's fiscal year 2012 budget request will enable us to build and maintain the facilities our sailors and marines need to succeed in their defense, capacity-building, and humanitarian missions.

Thank you for the opportunity to testify before you today. I look forward to your questions.

[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 Navy's 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 2012 budget request includes a $13.3 billion investment in our installations, a decrease of more than $1.6 billion from last year.

The fiscal year 2012 military construction (Active + Reserve) request is $2.5 billion. Although significantly less than the fiscal year 2011 request, it represents con-

tinued investment in quality of life and mission requirements, a continued emphasis on energy conservation, and implementation of the Defense Policy Review Initiative to relocate marines from Okinawa to Guam.

The fiscal year 2012 Family Housing request of $469 million represents a 15 percent decrease from the fiscal year 2011 request. The Navy and Marine Corps continued to invest in housing, particularly the recapitalization of our overseas housing. Having virtually privatized 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 Base Realignment and Closure (BRAC) program consists of environmental cleanup and caretaker, and property disposal costs at prior round BRAC and BRAC 2005 locations.

We do not foresee much 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 2012 in the amount of $129 million. Should land sale revenue accrue from the disposal of any BRAC property sales, we will reinvest them to accelerate cleanup at the remaining BRAC locations.

The fiscal year 2012 BRAC 2005 budget request of $26 million supports ongoing environmental restoration, caretaker, and property disposal efforts. The Department has made significant progress in implementing the BRAC 2005 recommendations during the past year, and to date has completed 328 of 485 realignment and closure actions as specified in our established business plans and we are on track for full compliance with statutory requirements by the September 15, 2011 deadline.

Our fiscal year 2012 request for Base Operating Support is in excess of $7.0 billion. The BOS program finances shore activities that support ship, aviation, combat operations, facilities infrastructure maintenance, public safety, and family Quality of Life programs for both Active and Reserve components.

Finally, the Department's budget request is increased to $1.2 billion fiscal year 2012, and $4.4 billion across the Future Years Defense Program, to support Secretary Mabus' aggressive energy goals to increase energy security, reduce dependency on fossil fuels, and promote good stewardship of the environment. The fiscal year 2012 program funds three military construction projects to decentralize steam plants, continues research and development in operational energy efficiencies for the tactical fleet, and will enable the Services to increase the energy efficiency of its infrastructure.

Here are some of the highlights of these programs.

MILITARY CONSTRUCTION

The DoN's fiscal year 2012 Military Construction program requests appropriations of $2.5 billion, including $87 million for planning and design and $23 million for Unspecified Minor Construction.

The active Navy program totals $1.1 billion and includes:

- $190 million to fund five combatant commander projects: a Bachelor Quarters, a Taxiway Enhancement, and an Aircraft Logistics Apron at Camp Lemonnier, Djibouti; and a Bachelor Quarters and the fourth phase of the Waterfront Development in Bahrain;
- $195 million to fund four Energy Savings and Security projects: a Steam System Decentralization at Naval Support Activity Norfolk, VA; a Steam System Decentralization at Naval Support Activity South Potomac (Indian Head, MD); a Steam System Decentralization at Naval Station Great Lakes, IL; and an Electrical Distribution System Replacement at Pacific Missile Range Facility, HI;
- $128 million to fund a Bachelor Quarters at Naval Station Norfolk, VA in support of the Chief of Naval Operations' Homeport Ashore initiative; and a Fitness Center at Naval Base Coronado, CA;
- $208 million to fund five Nuclear Weapons Security projects: the first increment of a second Explosives Handling Wharf, Explosives Handling Wharf Security Force Facility, and Waterfront Restricted Area Security Enclave at Naval Base Kitsap, Washington; and Waterfront Restricted Area Land/Water Interface and Security Enclave at Submarine Base Kings Bay;
- $114 million to fund five projects to achieve Initial/Final Operational Capability requirements for new systems: a P–8A Trainer Facility, a P–8A Hangar Upgrade, and a Broad Area Maritime Surveillance Operator Training Facility at Naval Air Station Jacksonville, FL; a MH–60 R/S Rotary Maintenance Hangar at Naval Base Coronado, CA; and an E–2D Aircrew Training Facility at Naval Base Ventura County, CA;

- $15 million to fund Massey Avenue Corridor Improvements at Naval Station Mayport, FL, in support of homeporting a nuclear capable aircraft carrier by 2019;
- $198 million to fund additional critical Navy priorities: a Controlled Industrial Facility at Norfolk Navy Shipyard, VA; an Applied Instruction Facility at Eglin Air Force Base; an Aircraft Prototype Facility at Naval Air Station Patuxent River; an Integrated Dry Dock Water Treatment Facility at Naval Base Kitsap, WA; a Navy Information Operations Command FES Facility at Naval Station Pearl Harbor, HI; and a Potable Water Plant Modernization at Naval Support Facility Diego Garcia; and
- $42 million for planning and design efforts.

The active Marine Corps program totals $1.4 billion and includes.

- $59 million for the construction of unaccompanied housing at Camp Lejeune and Quantico in a continuation of the Commandant of the Marine Corps' initiative to improve the quality of life for single marines;
- $48 million to provide quality of life facilities such as a child development center, a dining facility, and a physical fitness center at Twentynine Palms and Quantico;
- $28 million to construct student billeting for the Basic School in Quantico, VA;
- $301 million to build infrastructure to support new construction. These projects include, road improvements, drinking and wastewater systems. These projects will have a direct effect on the quality of life of our marines. Without these projects, basic services generally taken for granted in our day-to-day lives, will fail as our marines work and live on our bases;
- $511 million to fund operational and maintenance projects such as those needed for the MV–22 aircraft at Camp Pendleton and Joint Strike Fighter at Beaufort and Yuma; and operational units in Camp Lejeune, New River, Cherry Point, Twentynine Palms, Barstow, and Hawaii;
- $121 million to provide training facilities and ranges at Camp Pendleton, Camp Lejeune, Twentynine Palms, and Quantico;
- $75 million to support professional military education by providing facilities at Marine Corps University in Quantico;
- $9 million for land expansion for Marine Air-Ground Task Force large-scale training exercises at Twentynine Palms;
- $156 million for facilities necessary to support the relocation of marines to Guam; and
- $42 million for planning and design efforts.

With these new facilities, marines will be ready to deploy and their quality of life will be enhanced. Without them, quality of work, quality of life, and readiness for many marines will have the potential to be seriously degraded.

The Navy and Marine Corps Reserve Military Construction appropriation request is $26 million to construct an Armed Forces Reserve Center at Pittsburgh, PA, and a Marine Corps Reserve Training Center at Memphis, TN. Additionally, $18 million has been realigned to the Department of the Army to construct a Joint Navy, Marine Corps, and Army Reserve Complex at Indianapolis, IN.

Fully-funded and Incrementally-funded Military Construction (MILCON) Projects

Our fiscal year 2012 budget request complies with Office of Management and Budget Policy and the DOD Financial Management Regulation that establishes criteria for the use of incremental funding. The fiscal year 2012 request includes $78 million to support the first increment of a second Explosives Handling Wharf at Naval Base Kitsap, WA. Follow-on increments will be submitted in future budget requests. Otherwise, all new projects are fully funded or are complete and usable phases.

FACILITIES MANAGEMENT

Facilities Sustainment, Restoration, and Modernization (SRM)

The Department of Defense uses a Sustainment model to calculate life cycle facility maintenance and repair costs. These models use industry-wide standard costs for various types of buildings and geographic areas and are 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 2012 budget request funds sustainment at 80 percent and 90 percent for the Navy and Marine Corps, respectively. To maximize support for warfighting readiness and ca-

pabilities, the Navy reduced its facilities sustainment posture to 80 percent of the Office of the Secretary of Defense (OSD) Facilities Sustainment Model; Joint Bases are funded to 90 percent of this model. The Naval Academy, Naval War College, and Naval Postgraduate School are funded to 100 percent of this model. Additionally, the Navy has targeted the allocation of sustainment funds to increase the renovation of unaccompanied housing. As a result, the Navy has minimized operational impacts and ensured the safety of our sailors and civilians by prioritizing projects that address facilities with the lowest quality rating first.

Restoration and modernization (R&M) provides major upgrades of our facilities using Military Construction, Operation and Maintenance, Navy Working Capital Fund, and BRAC, as applicable. In fiscal year 2012, the Department of Navy is investing nearly $1.5 billion in R&M funding.

Naval Safety

Protecting Department of the Navy's sailors, marines, and civilian employees and preserving the weapon systems and equipment entrusted to us by the American People remains one of our highest priorities. I consider continual improvement of our safety performance to be an integral component to maintaining the highest state of operational readiness for our Navy-Marine Corps Team. During fiscal year 2010, DON once again achieved record-setting mishap rate reductions in numerous key mishap categories. The Department is successfully tracking toward becoming a world-class safety organization, where, in step with civilian industry leaders, no avoidable mishap or injury is considered the cost of doing our business.

The Secretary of Defense established a goal to achieve a 75 percent reduction in baseline fiscal year 2002 mishap rates across DOD by the end of fiscal year 2012. By the end of fiscal year 2010, DON exceeded the DOD-wide mishap rate reduction in three of the four mishap categories being tracked by the OSD.

During fiscal year 2010, we continued our Department-wide assault to reduce the loss of sailors and marines to fatal accidents on our Nation's highways. Over the past 5 years, we lost on average 53 sailors and marines to automobile and motorcycle accidents. In fiscal year 2010, we brought those losses down to just 34, our lowest number ever recorded. While we achieved unprecedented reductions in highway fatalities during fiscal year 2010, we still find these losses untenable—we can and must do better.

In fiscal year 2010 DON achieved our best year ever recorded for Total Class A Operational Mishaps.[1] While this represents a significant achievement, fiscal year 2010 was the fourth consecutive fiscal year we achieved, "best year ever recorded" in this category. Additionally, fiscal year 2010 marked DON's best year ever recorded for the number of Off-duty/Recreational Fatalities[2] and for the rate of Class A Aviation Flight Mishaps.

Our efforts also focus on achieving continual improvement in the reduction of workplace injuries. By the end of fiscal year 2010, the Department had achieved Voluntary Protection Program (VPP) "Star" status, OSHA's highest level of achievement, at 14 sites. These activities include all four Naval Shipyards, our largest industrial facilities. Additionally, over the past 8 years, we have reduced the Navy and Marine Corps Civilian Lost Day Rates (due to injury) by 45 percent and 51 percent respectively.

Encroachment Partnering

The Department of the Navy has an aggressive program to manage and control encroachment, with a particular focus on preventing incompatible land use and protecting important natural habitats around installations and ranges. A key element of the program is Encroachment Partnering (EP), 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 on our bases. The program has proven to be successful in leveraging Department of Defense and Department of Navy resources to prevent encroachment.

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[1] A fiscal year 2010 Class A Mishap is one where the total cost of damages to Government and other property is $2 million or more, or a DOD aircraft is destroyed, or an injury and/or occupational illness results in a fatality or permanent total disability. An operational mishap excludes private motor vehicle and off-duty recreational mishaps. Mishaps exclude losses from direct enemy action.

[2] Off-duty/Recreational fatalities do not include off-duty deaths resulting from automobile, motorcycle, or pedestrian/bicycle mishaps.

The Department of Defense 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 nongovernmental organizations. For fiscal year 2010, the Marine Corps acquired restrictive easements over 8,191 acres. REPI and Marine Corps funds totaled and $8.7 million while the encroachment partners provided $11 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 mainly restrictive easements for 32,408 acres of land with $49 million of REPI and Marine Corps funding. Encroachment partners have contributed $54 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.

Compatible Development

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 energy exploration and off-shore wind development play a crucial role in our Nation's security and are not necessarily mutually exclusive endeavors. Therefore, we are engaging with the other Services, the OSD, 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 measurably degrade the ability of naval forces to achieve the highest value from training and testing.

ENERGY

The Department of the Navy (DON) is committed to implementing a balanced energy program that exceeds 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. We place a strong emphasis on reducing our dependence on fossil fuels , reducing overall energy consumption, increasing energy reliability, and environmental stewardship. 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.

Organization

The Secretary established a Deputy Assistant Secretary of the Navy for Energy (DASN-Energy) to consolidate the Department's operational and installation energy missions in the office of the assistant Secretary of the Navy for Energy, Installations and Environment ASN (EI&E). The consolidation of both operational and installation energy portfolios under the DASN (Energy) has led to a more concentrated focus on the Secretary of the Navy's priority of Energy Security and Energy Independence. At the service level, energy efficiency is being institutionalized by the Chief of Naval Operations (CNO) and the Commandant of the Marine Corps (CMC). The Navy Energy Coordination Office (NECO) and Marine Corps Expeditionary Energy Office (E2O) drive energy efforts and initiatives within the Services.

From the Secretary down to the deck plate sailor and the marine in the field, the Department is committed to meeting our aggressive energy goals. We all view energy as an invaluable resource that provides us with a strategic and operational advantage.

Naval Energy Vision, Priorities, and Goals

As part of the Secretary of the Navy's priority on Energy, DON is committed to a Naval Energy Vision that states "The Navy and Marine Corps will lead the Department of Defense and the Nation in bringing about improved energy security, energy independence, and a new energy economy."

With this vision, the Secretary of the Navy has set two priorities for naval energy reform: Energy Security and Energy Independence. Energy Security will be achieved by utilizing sustainable sources that meet tactical, expeditionary, and shore operational requirements and force sustainment functions, and having the ability to pro-

tect and deliver sufficient energy to meet operational needs. Energy Independence will be achieved when Naval forces rely only on resources that are not subject to intentional or accidental supply distributions. As a priority, DON's energy independence will increases operational effectiveness by making naval forces more energy self-sufficient and less dependent on vulnerable energy production and supply lines.

With his vision and priorities, the Secretary of the Navy set forth five energy goals to reduce DON's overall consumption of energy, decrease its reliance on petroleum, and significantly 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. DON will lead the Navy and Marine Corps efforts to improve operational effectiveness while increasing energy security and advancing energy independence. DON will achieve the Secretary of the Navy goals by adopting energy efficient acquisition practices, technologies, and operations.

The Goals are:

Goal 1 – By 2020, 50 percent of total DON energy will come from alternative energy resources;

Goal 2 – By 2020, DON will produce at least 50 percent of shore based energy requirements from alternative resources;

Goal 3 – DON will demonstrate a Green Strike Group in local operations by 2012 and sail the Great Green Fleet by 2016;

Goal 4 – By 2015, DON will reduce petroleum use in commercial vehicles by 50 percent; and

Goal 5 – Evaluation of energy factors will be used when awarding contracts for systems and buildings.

As part of these ambitious energy goals, the Secretary of the Navy released The Department of the Navy's Energy Program for Security and Independence. This strategic roadmap provides guidance and direction to the Navy and Marine Corps. In addition, the CNO and CMC are developing strategic plans, baselines, and metrics to outline energy requirements, funding, profiles, and milestones for achieving energy efficiency and security. The Strategy requires action across the Department of the Navy and is the responsibility of every individual member.

Energy Funding

DON has budgeted $1.2 billion in fiscal year 2012 and approximately $4.4 billion across the FDYP for energy initiatives. Our strategy focused on reducing our dependence on petroleum, lowering our energy cost, and complying with Federal legislation and energy mandates. This focus on energy investment will result in cost savings that will allow DON to continue aggressively pursue the Secretary of the Navy's priorities and goals.

OMN - Projects funded would include testing/certification of Great Green Fleet Fuel, propeller coatings, hull coatings Advanced Metering Infrastructure, simulator upgrades, Aviation & Maritime i-ENCON and facility energy audits and facility energy efficiency upgrades.

OMMC - Projects funded would include completion of mandated energy audits, mobile electric power equipment units, advanced power systems, renovate HVAC system to increase efficiency, and complete SMART metering projects.

NDSF/OPN - Projects funded would include LMSR Light Upgrades, shore power management/monitoring systems, ship engine automation upgrades.

MCN - Projects funded would go towards solar array construction projects, energy efficiency upgrades, Critical Asset Energy Security Enhancements, advanced metering, ground-source heat pumps, small-scale wind projects and steam line distribution upgrades.

RDT&E - Projects funded would include testing of hybrid electric drive, Fleet Readiness R&D Program, the shipboard energy dashboard, LCAC Efficiency initiatives, water purification technologies, man-portable electric power units, and energy storage and distribution.

Achieving these priorities and goals will present challenges for the Navy and the Marine Corps. Final success will depend on advancements on technology maturity, resource availability, alternative fuel availability, and business process transformation. However, with the investments budgeted for energy, DON is taking the leadership role within DOD for this success.

Success

We are on track to meet all our goals, and throughout 2010, we demonstrated progress through an assortment of energy programs, partnerships, and initiatives. Our F/A18, dubbed 'The Green Hornet' reached MACH 1.7 as part of the test and certification process using a 50–50 blend of Camelina based JP–5. We also success-

fully conducted tests on the MH–60 Seahawk helicopter, and ran a Riverine Command Boat on renewable biofuel. These tests represent milestones for the Secretary of the Navy's 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, will generate life-cycle savings of millions of dollars at today's fuel prices. We are not stopping there. We will continue to move forward with installation of a similar system on new construction DDGs and look at the feasibility of retrofitting the fleet with these systems in the course of routine shipyard availabilities.

Additional energy initiatives that will reduce the energy consumption of our ships and make them more efficient are propeller and hull coatings. Stern flaps will also assist in reducing energy consumption. When we look to our future Navy, advanced materials used on our propellers, energy storage and power management systems, and advanced propulsion technology will make our warships more efficient while still allowing them to meet their combat capability.

The Navy is not alone in implementing change. Last year, the Marines tested equipment that could be deployed on battlefields at their Experimental Forward Operating Bases (ExFOB) at Quantico and 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. By deploying these technologies, the Marines have proven that energy efficiency means combat effectiveness.

In addition to these tactical and platform applications, we have implemented a number of energy projects at our facilities ashore. We are actively exploring for new geothermal resources to augment our existing 270 MW geothermal power plant at China Lake. Solar Multiple Award Contracts in Hawaii and the southwest will allow for large-scale solar projects to be built on our installations. We are looking at developing our wind resources, exploring Waste to Energy projects and developing ocean power technology.

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 at a minimum LEED Silver. By exceeding building efficiency standards, we will be able to meet mandated efficiency goals and drive down our need for conventional energy sources.

The Secretary of the Navy is committing DON to transform its requirements-setting, acquisition, and contracting processes to incorporate energy efficiency into decisions for new systems and buildings. Our Preferred Supplier Program (PSP) was developed as a tool to reward contractors with favorable contract conditions that have demonstrated superior performance in the area of cost, schedule adherence, quality of product/services and business relations. Evaluation factors for energy efficiency performance include energy benchmarking, goal setting, and measurement and verification. The PSP program has been renamed Superior Supplier Program (SSP) and transferred over to OSD DDR&E in early 2011.

In October of last year, the Secretary of the Navy Green Biz Ops site was launched in partnership with the Small Business Administration as a way to partner with small businesses and highlight the opportunities within DON.

Communication and awareness are critical to achieving the Secretary of the Navy energy goals. DON is exploring 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.

DON 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 Agriculture, the National Aeronautics and Space Administration (NASA), 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.

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; and

• Military Construction. Military construction (MILCON) will continue to be used where PPV authorities don't apply (such as overseas), or where a business case analysis shows that a PPV project is not feasible.

Our fiscal year 2012 budget includes $101 million in funding for family housing improvements (including planning and design). This request provides for the revitalization of over 400 Navy and Marine Corps housing units in Japan, Spain, and Cuba. The budget request also includes $368 million for the operation, maintenance, and leasing of remaining Government-owned or controlled inventory. As of the end of fiscal year 2010, we have awarded 38 privatization projects involving over 63,000 homes. These include over 43,000 homes that will be constructed or renovated. (The remaining homes were privatized in good condition and did not require any work.) Through the use of these authorities we have secured approximately $9 billion in private sector investment from approximately $1.3 billion of our funds, which represents a ratio of over seven private sector dollars for each taxpayer dollar.

Unaccompanied Housing

Our budget request includes over $267 million in funding for the construction of unaccompanied housing to support over 2,300 single sailors and marines. This includes $59 million to support requirements to continue implementation of the Commandant of the Marine Corps program to construct sufficient housing so that no more than two single marines are required to share a sleeping room. The budget request also includes an $81 million unaccompanied housing project in Norfolk, VA 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 Chief of Naval Operations is committed to providing housing ashore for all junior sea duty sailors by 2016 at the Interim Assignment Policy standard (shared bedrooms at a minimum 55 square feet of space per person).

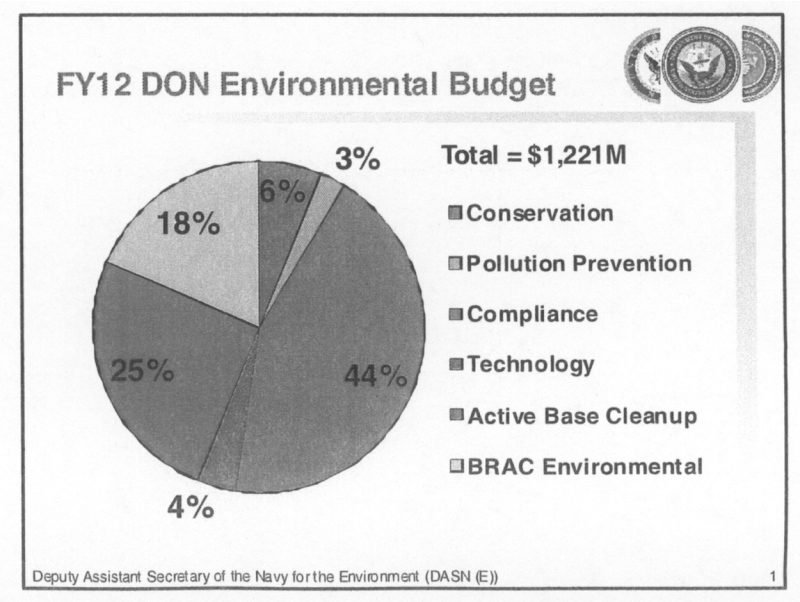
• Commandant's BEQ Initiative. It is the Commandant of the Marine Corps' priority to ensure single marines are adequately housed. Thanks to your previous support of this initiative, the Marine Corps will make significant progress toward fulfilling this priority. MILCON funding since fiscal

year 2008 for the Marine Corps barracks initiative will result in the construction of approximately 25,500 new permanent party spaces at multiple Marine Corps installations. Your continued support of this initiative in our fiscal year 2012 proposal will allow us to construct an additional 800 new permanent party barracks spaces. With this funding we will stay on track to meet our 2014 goal. The fiscal year 2012 request for bachelor housing will provide two barracks projects at Camp Lejeune, NC; and Quantico, VA. We are also committed to funding the replacement of barracks' furnishings on a 7-year cycle as well as the repair and maintenance of existing barracks to improve the quality of life of our marines. These barracks will be built to the 2+0 room configuration, as have all Marine Corps barracks since 1998. This is consistent with the core Marine Corps tenets for unit cohesion and teambuilding.

• 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 Future Years' Defense Plan 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 aforementioned Commandant's BEQ initiative, almost 90 percent of the Marine Corps' unaccompanied housing is now considered adequate.

ENVIRONMENT

In fiscal year 2012, the Department of the Navy (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: fiscal year 2010 - $1,117 million; fiscal year 2011 - $1,094 million; fiscal year 2012 - $1,221 million. Additionally, the relative distribution of environmental funding across the environmental programs, as displayed within the chart to the right, has also remained stable.



Within this mature, stable environment, DON continues to seek to be a Federal leader in environmental management by focusing our resources on achieving specific goals and proactively managing emerging environmental issues. Many of these emerging environmental issues for fiscal year 2012 present unique challenges as well as provide environmental leadership opportunities for the Department of the Navy.

Compliance-Sustainability

The Department's environmental budget invests significantly in complying with existing regulations. Going beyond just simply maintaining compliance, the Department's compliance budget in fiscal year 2012 incorporates a vision of sustainability into our ability to operate into the future without decline—either in the mission or in the natural and manufactured systems that support our mission. Sustainability is seen by DON as a means of improving mission accomplishment and reducing lifecycle costs that apply to all DOD mission and program areas. DON has instituted many policies and practices implementing sustainability tenets including retrofitting/constructing buildings and expeditionary base camps to optimize energy and water use, adopting goals for renewable energy use on facilities, and conducting integrated solid waste management.

The Department recognizes that many key issues facing DOD can be addressed through smart investments that improve sustainability, such as energy efficiency, energy management, renewable energy, water use efficiency, the reduced use of toxic and hazardous chemicals, and solid waste management.

As an example of solid waste management, Naval Facilities Engineering Command Southwest recently completed a large demolition and environmental remediation project at Naval Security Group Activity Skaggs Island (Skaggs Island). Skaggs Island is located 40 miles northeast of San Francisco near the north shore of San Pablo Bay in Sonoma County. It is bounded on all sides by estuarine sloughs and surrounded by salt marsh wetlands beyond the island's levees. Naval Security Group Activity Skaggs Island was commissioned at this site on May 1, 1942, during World War II and was an active communications base for 51 years. The project was able to recycle 6,437 tons of material from demolition of approximately 140 buildings in preparation for the property to be transferred to the U.S. Fish and Wildlife Service (FWS) to become a part of the San Pablo Bay National Wildlife Refuge. Concrete and asphalt were processed for use in a local highway project. All metals were diverted to salvage yards, and the wood was processed with other materials and used as cover material in a landfill.

National Ocean Council

The National Ocean Council (NOC) is a Cabinet-level body established by Executive order in June 2010. There are 27 Federal agencies tasked to engage in developing a comprehensive national ocean policy which uses ecosystem based management and coastal and marine spatial planning as foundational building blocks. The Executive order mandates spatial planning for maximized compatible use. The Department of Navy equity in this Executive order is extensive: for the first time comprehensive spatial planning is being conducted in our Exclusive Economic Zones (EEZs) including the western Pacific, Alaska and the Arctic, the Gulf of Mexico, and the Caribbean. The DON ability to train and test in our current operating areas must be protected. 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, providing staff and administrative support, and participating in plans to produce regional Coastal and Marine Spatial Plans.

The Department participates in numerous interagency ocean-policy working groups formed under the NOC. These include but are not limited to the U.S. Extended Continental Shelf Task Force, the Arctic Policy Group, the Ocean Science Technology (OST) ad hoc biodiversity Interagency Working Group (IWG), Ocean Social Science IWG, Ocean Education IWG, Ocean Acidification IWG, the Facilities and Infrastructure IWG, the Ocean and Coastal Mapping IWG, the Interagency Ocean Observing Committee, and the Climate Change Adaptation Task Force. The Department of the Navy and the Joint Chiefs Staff are leading a new IWG tasked with writing the "Ocean, Coastal, and Great Lakes Observations and Infrastructure" Strategic Action Plan (SAP), and are co-chairs for the "Changing Conditions in the Arctic" and "Coastal and Marine Spatial Planning" SAPs. In addition the Navy provides a full-time NOC staff member who serves as the primary liaison to the National Security Staff, and provides administrative oversight for the Federal Advisory Ocean Research and Resources Advisory Panel (ORRAP).

Chesapeake Bay

After issuing the Chesapeake Bay Strategy in May 2010, the Department has and 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 is working with the States as they develop their Water-

shed 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. DON recently sponsored a meeting with the Maryland Governor and EPA Administrator to partner on means to meet the DOD, DON, and State goals to restore the health of the Chesapeake Bay. We are planning a similar event with Virginia later this year. Through these and other conservation efforts, DON is truly leading by example.

Natural Resources Conservation

Department of the Navy natural resources program managers continue to provide installation Commanders with special subject matter expertise, products and services necessary to ensure they can 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, currently in place at 89 DON installations with significant natural resources, integrate all facets of natural resources management with the installation's operational and training requirements. DON works closely with our Federal and State partners as well as other stakeholders to ensure our INRMPs remain current and effective. One of our primary objectives is to implement conservation measures to protect threatened and endangered species and their habitat which can help to reduce protected species related regulatory constraints. 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.

DON has also developed and implemented a web-based tool for measuring the effectiveness of Navy and Marine Corps Natural Resources Programs and overall ecosystem health as it relates to mission sustainability. The tool provides leadership with the information necessary to focus scarce funds in the right place to protect and conserve valuable natural areas and habitats while also protecting mission integrity.

Cultural Resources Program

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 clear 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.

Our installations have many success stories in which proactive management of cultural resources supported and reinforced the mission. We take very seriously our statutory obligations regarding historic properties. We work with the other Services, and other agencies such as the Advisory Council on Historic Preservation and State Historic Preservation Officers, tribal governments, Native Hawaiian Organizations, Native Alaskans, and interested members of the public, to develop effective and efficient ways to balance our stewardship and fiscal responsibilities. We are also developing a new web-based tool for measuring the effectiveness and efficiency of DON cultural resources stewardship and mission support.

Historic buildings, which are a significant element of our cultural resources, are a valuable part of our portfolio and the Department has been able to rehabilitate historic buildings in ways that support mission requirements as effectively as new construction, with the added benefit of preserving historic property. Of particular concern is energy efficiency and how to retrofit systems to be more efficient while preserving character-defining features. In 2011, the Commandant's House at the Marine Barracks Washington (a national historic landmark) will have photovoltaic panels installed on small portions of the roof to help send the message out to the Marine Corps that alternative energy and historic preservation goals are not mutually exclusive.

Installation Restoration Program (IRP)

The DON continues to make significant progress remediating past contaminants. As of the end of fiscal year 10, the Department has completed cleanup or has remedies in place at 86 percent of the 3,834 contaminated sites on active installations. The DOD goal to have remedies in place or responses completed by 2014 was established in 1996 when the department had 3,256 known contaminated sites. Over the past 15 years the Department has identified 578 additional sites requiring cleanup. We have been working aggressively to achieve remedy in place or response complete for all sites by 2014. As of the end of fiscal year 2010, we are projecting 46 sites will not meet this DOD goal. We consider this a huge success that we have accomplished site cleanup at both our original inventory of sites as well as 532 additional sites in this time period. Also, DOD expanded the universe of DERP eligible sites in 2008. Since that time, we have identified an additional 107 sites. These sites do not have established metrics, but we are working with DOD to establish appropriate metrics to also bring these sites to 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 2010 was completing site inspections at all 330 MRP sites. We successfully completed 97 percent of these inspections. The 3 percent not inspected were because several newly discovered sites were added into the program late in the process. These site inspections will be completed in fiscal year 2011. Additional funding has also been obligated to address high priority sites at Vieques and Jackson Park Housing. DON has used the results of the completed site inspections to prioritize the next phases of work for all sites starting in fiscal year 2011. DON plans to achieve cleanup or remedies in place at all MRP sites (except Vieques) by fiscal year 2020.

Camp Lejeune

The Department remains committed to finding answers to the many questions surrounding the historic water quality issue at Camp Lejeune. Scientific/medical studies on this issue continue to investigate whether diseases and disorders experienced by former residents and workers are associated with their exposure to contaminated water at Camp Lejeune. We continue to fund research initiatives, including several ongoing Agency for Toxic Substances and Disease Registry (ATSDR) health studies. Additionally, the Marine Corps funded a congressionally-mandated National Academies National Research Council (NRC) review, which was released June 13, 2009. In total, the Department has provided approximately $24 million in funding for research initiatives, including over $22.9 million to ATSDR and over $900,000 to the National Academy of Sciences. This total includes $8.8 million transferred on February 26, 2010 to fund ATSDR for fiscal year 2010. In order to ensure total transparency and advance efforts to find answers for our marines, sailors, their families, and civilian workers, DON continues to provide full and timely access to all pertinent information that we possess on this subject.

Marine Mammals

The Department of the Navy 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 decision making 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.

RELOCATING THE MARINES TO GUAM

The fiscal year 2012 budget request includes $181 million to design and construct facilities in support of the relocation. The projects provide the horizontal infrastructure (utilities, site improvements, et cetera) necessary to enable subsequent vertical construction and/or support Marine Corps operations. The Government of Japan, in its JFY–2011 budget (which runs April 1, 2011 through March 31, 2012) has requested a comparable amount of $167 million for facilities and design. The JFY–2011 budget request also includes $415 million in funding for utilities financing, pursuant to the Realignment Roadmap, for water and wastewater projects. This financing will be applied to make improvements to wastewater treatment plants off-base, and to the DON's water system on-base that will interconnect with Guam's

water system. The graph at left identifies the projects each funding stream constructs.

The Marine Corps relocation, along with other DOD efforts to realign forces and capabilities to Guam, represents a unique opportunity to strategically realign the U.S force posture in the Pacific for the next 50 years. This is a major effort and one we must get right. The Department of Defense recognizes Congress' concerns regarding execution of the Guam military realignment and is taking steps necessary to resolve critical issues that will allow the construction program to move forward.

The Guam community has been a gracious host to military personnel and families for decades. As we ask the people of Guam to now host a new Marine Corps base, the Department recognizes that close partnership with the Government and people of Guam is essential so that a long-term, positive relationship is fostered. The effort to relocate thousands of marines and their family members is complex and though there remain issues which separate the Department and the Government of Guam, we are committed to working together to address issues such as cultural preservation, land use, and lessening the impacts on the community.

As such, the Department has outlined four pillars that will guide the approach to the coordinated effort to execute the military realignment. By committing to these four pillars, the Department is demonstrating its willingness to listen and respond to the concerns of the people of Guam.

First, the Department recognizes the added strain that the relocating marines and their family members will place on Guam's infrastructure and is committed to the pursuit of "One Guam". Improvements to quality of life on Guam will result from direct investments in projects to improve and upgrade civilian infrastructure. These projects include those which are directly related to the military realignment, such as upgrades to the commercial port, roads, and utilities systems; and those identified by the Government of Guam as necessary to support the community's socioeconomic needs. The Department has committed to work with other Federal agencies to advocate for support for Guam's needs so that the One Guam vision can become a reality.

Second, the Department understands and supports the great emphasis the people of Guam place on protecting the island's precious natural resources. We will do our part to protect resources and achieve a "Green Guam" by developing the most energy efficient facilities possible and supporting Guam's efforts to develop sustainable and renewable energy projects. We have projects underway with the Guam Power Authority, Guam Waterworks Authority, University of Guam, Department of Energy and other Federal agencies to bring public and private funds to Guam for sustainable projects. We will work with the University of Guam's Center for Island Sustainability to develop and secure funding for green programs.

Third, as discussed in further detail below, the preferred alternative site for the live fire training range complex on Guam that was identified in the Final EIS would require restricted access for safety reasons to the culturally-significant sites of Pagat village and cave when the ranges are in use. Over the past year, the people of Guam made it clear that our plan to provide access to the area only during times when the ranges were not active was unacceptable and had to be changed. In response, we have developed options that will ensure that access to Pagat village and cave will be available 24 hours per day, 7 days per week.

Fourth, we recognize that land is a valued and limited resource in Guam. In response to concerns regarding the expansion of our footprint on Guam, we have committed to a "net negative" growth in the amount of property controlled by DOD. This strategy means that at the completion of the military realignment, the Department's footprint will be smaller than it is today, which directly responds to longstanding concerns regarding land use on Guam.

On Guam, the military realignment is viewed as a Federal Government action, not just a Department of Defense effort. In addition to the concerns noted above that are directly related to the military realignment, Guam's leaders and members of the community are seeking support from across the Federal Government to resolve several longstanding issues. In our role as a partner to the Government of Guam we have committed to advocate for Guam's needs in Washington, as demonstrated by the Department's support for the Guam Loyalty Recognition Act. A whole-of-government approach, including the participation of Federal agencies and Congress, is necessary to demonstrate that the Federal Government at large is sensitive to the concerns of the people of Guam as we prepare to ask them to host an increased military presence.

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, with a formal decision on the configuration of the runway expected in the spring of 2011. The Department is confident in the progress made to date and is satisfied with Japan's commitment to these realignments.

A Record of Decision for the Guam military realignment was signed in September 2010. The ROD included decisions on the locations of the Marine Corps main cantonment, family housing, aviation and waterfront operations, training on the island of Tinian in the Commonwealth of the Northern Mariana Islands, and selection of utilities and road improvement solutions to support the military realignment effort. Action was deferred on a transient CVN pier, pending additional coral surveys and studies under the National Environmental Policy Act; and on the site specific location of a live fire training range complex on Guam, pending resolution of the National Historic Preservation Act Section 106 consultation process. The first two U.S.-funded military construction projects were awarded following the ROD; however, intrusive design, construction, and award of additional projects were delayed pending resolution of the Section 106 consultation process. In March 2011 we completed the Section 106 process with the finalization of a Programmatic Agreement. Now that this significant milestone has been achieved, we will begin construction and award additional contracts. The Department will also consider recent input to issue a ROD for the live-fire training range complex on Guam.

Partnership with the Government of Guam and the Guam community is central to the success of the Marine relocation. Over the past year, senior Department leadership has engaged the Government of Guam to better understand the community's concerns, identify potential solutions, and develop a way forward in implementing the program. From these discussions we now better understand concerns regarding issues such as access to cultural sites and the expansion of DOD's footprint. However, as training is essential for Marine Corps forces, the Department also shares Congress' concern with ensuring Marine Corps training requirements can be delivered on Guam. With respect to the preferred alternative site for location of a live fire training range complex in the Route 15 area—property which is not currently within DOD's inventory—the Department has committed to conduct training activities in a manner which will allow unfettered access to the Pagat Village and Pagat Cave historical sites should the RT 15 site be selected in the Record of Decision for training. Additionally, the Department has communicated to the Governor of Guam and the Guam Legislature that, following the completion of the realignment, DOD will have a smaller footprint than it has today. This commitment will directly address concerns regarding an expanding DOD footprint on Guam. This concept is currently in the early stage of development. Studies will be conducted to determine if missions can be relocated and assess any potentially underutilized properties. As a result of these discussions, the Governor of Guam has stated publicly his willingness to discuss land use issues with the Department. The goal is to have an agreement in principle with the Governor by the fall of 2011, allowing formal land negotiations to commence once appropriate congressional approval for land acquisition has been received. The Department will continue to update Congress on land use matters and the status of informal discussions with the Government of Guam.

The Department recognizes concerns from both the public and other Federal agencies regarding Guam's existing and future infrastructure and socioeconomic needs. DOD has worked closely with both the Government of Japan and with Guam's utilities providers to identify utility system improvement projects for Japanese financing which both support the relocating marines and improve Guam's systems. As discussed earlier, in its JFY–2011 budget the Government of Japan has requested $415 million of its required $740 million contribution in utilities financing. The projects which will be financed by this funding will provide utility system upgrades that are critical enablers to the construction program. Specifically, they will provide for upgrades and improvements to wastewater treatment plants which will support the off-island workforce and future population growth associated with the Marine Corps realignment, as well as treatment, production and storage for potable water on-base. As noted in the Navy's National Environmental Policy Act documents, these projects are critical mitigations to alleviate the impact of the population increase from the military realignment program.

The Department is committed to improving the quality of life for both the people of Guam and the military personnel who make the island their home. The Final EIS acknowledges that the military realignment will affect Guam's social services, such as education and medical facilities, due to the added demand on services to Guam as a result of potential population growth that may result from the military realignment. If the issues surrounding existing infrastructure and other major socioeconomic issues impacting Guam are left unaddressed, we risk creating disparity between conditions on- and off-base and losing the support of the people of Guam,

which will adversely affect our ability to achieve our mission. The Department of Defense is committed to ensuring this does not happen, and is leading the effort to coordinate an interagency approach to "One Guam". The DOD-led, interagency Economic Adjustment Committee (EAC) is working with the Government of Guam to review socioeconomic needs both directly and indirectly related to the military realignment. The fiscal year 2012 budget includes a request for $33 million in Defense-wide O&M funds to address projects assessed by the EAC. In addition, other Federal agencies' fiscal year 2012 budget requests include approximately $30 million in funding for Guam to assist with the implementation of the projects requested by DOD or support other Guam infrastructure and financial management requirements identified by the EAC. The Department will continue to work with other Federal agencies to identify additional opportunities for Federal Government support to address Guam's socioeconomic needs.

In the coming weeks and months, construction will begin, contracts for additional projects will be awarded, and progress will be made with the Government of Guam towards addressing its concerns related to land acquisition. Concurrently, the Department will continue to evaluate the total cost of the realignment based upon the refining of requirements and evolution of planning efforts conducted to date.

BRAC 2005 IMPLEMENTATION

The Department has made significant progress during the past year, and to date has completed 328 of 485 realignment and closure actions as specified in our established business plans. The Department is on track to implement BRAC 2005 realignments and closures by the statutory deadline of September 15, 2011. Going forward, our fiscal year 2012 budget request of $26 million enables ongoing environmental restoration, caretaker, and property disposal efforts at BRAC 2005 installations.

Accomplishments

In total, the Department has awarded all 118 planned BRAC construction projects with a combined value of $2.1 billion. The final 5 projects awarded within the last 6 months total approximately $81 million and are on schedule for completion prior to the statutory deadline. Some noteworthy achievements include:

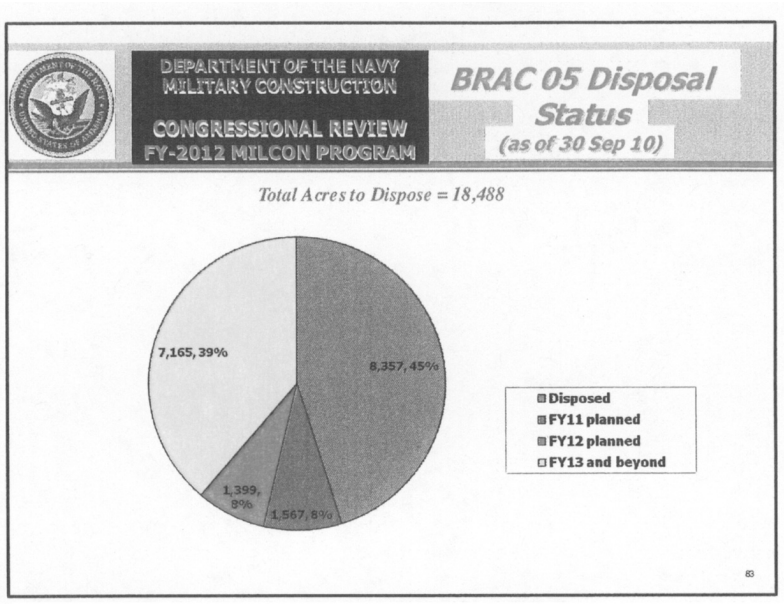
- During the past year, DON closed Naval Station Ingleside, TX, 5 months earlier than planned and reverted the property to the Port of Corpus Christi. We also closed the Navy Supply Corps School in Athens, GA and relocated the personnel and assets to Naval Station Newport, RI. By 15 September, two more installations, Naval Air Station Willow Grove, PA and Naval Air Station Brunswick, ME will be closed.
- Construction was completed in December 2010 on the Consolidated Investigative Agencies facility at Marine Corps Base Quantico, VA. This $350 million project has set the standard for interagency BRAC coordination and it will bring together the Service investigative agencies, the Defense Security Service and the Defense Intelligence Agency to create a premier law enforcement, security and intelligence center that will increase collaboration across DOD and leverage the efficiencies and synergies created by collocating the agencies and Services.
- The Department has 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. Nine of the 11 construction projects at China Lake are complete with the remaining two projects scheduled to complete this summer.

Community Reuse Planning Efforts

Seventeen impacted communities established a Local Redevelopment Authority to guide local planning and redevelopment efforts, and have been receiving financial support through grants and technical assistance from the DOD Office of Economic Adjustment. Two communities are still preparing their plans with submissions planned for later this year and the Department of Housing and Urban Development is reviewing submissions at six installations. At the installations where the reuse plans have been completed, the Department has initiated the National Environmental Policy Act (NEPA) documentation for disposal of those properties. We have completed the NEPA process at eight of those installations.

Land Conveyances and Lease Terminations

By the end of fiscal year 2010, the Department disposed of 45 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, and Federal and DOD agency transfers. Of interest for fiscal year 2010 is the reversion of the 577-acre Main Base at Naval Station Ingleside to the Port of Corpus Christi. Last year we also transferred a lease interest of 34 acres at the Marine Corps Support Activity in Kansas City, MO, for use by the Department of the Army.



The most significant action we have planned for 2011 is the disposal of Naval Support Activity, Athens, GA, this spring when the base will operationally close. This property will be conveyed to the University of Georgia via an Education Public Benefit Conveyance. The 2011 Plan also includes transfer of remaining real property at Marine Corps Support Activity Kansas City, MO, and Naval Support Activity New Orleans, LA. Other significant disposals include about 1,200 acres at Naval Air Station Brunswick, ME, to support aviation and education uses.

Naval Support Activity New Orleans, LA

Construction for the new building that will house Headquarters, Marine Forces Reserve and Marine Corps Mobilization Command is almost complete in the future Federal City. The four floors and approximately 411,000 square-feet of administrative space are currently having furniture and computer equipment installed. When finished, the building will be home to about 2,000 marines. A ribbon cutting ceremony is planned for the end of June 2011.

To support the closure of Naval Support Activity New Orleans and the relocation of base operating support and tenant activities to Naval Air Station Joint Reserve Base New Orleans, 13 construction projects have been completed and the final project is targeted for completion by the end of March 2011.

Naval Air Station Brunswick, ME

The Department's largest BRAC 2005 operational action will close Naval Air Station Brunswick and consolidate the east coast maritime patrol operations in Jacksonville, FL. Runway operations in Brunswick ceased in February 2010. The closure ceremony will occur in May 2011. The runways and adjacent aviation land and facilities totaling more than 900 acres were approved in February 2011 for a no-cost Federal Aviation Administration Public Benefit Conveyance to the Local Redevelopment Authority. These facilities will become an executive airport.

Naval Air Station Joint Reserve Base Willow Grove, PA

In 2007, legislation was enacted directing the Department to transfer Naval Air Station Joint Reserve Base Willow Grove to the Air Force, who would then convey property to the Commonwealth of Pennsylvania for the operation of a Joint Interagency Installation. In November 2009, Governor Rendell of the Commonwealth of Pennsylvania informed the Secretary of Defense that the Commonwealth would no longer pursue the Joint Interagency Installation because of fiscal constraints. The closure of Naval Air Station Joint Reserve Base Willow Grove will again follow the BRAC disposal processes. Federal Screening among other DOD and Federal agencies has been completed and the Local Redevelopment Authority initiated its reuse planning efforts in February 2011.

Navy Leased Locations, National Capital Region

Navy awarded the remaining construction projects for the relocation of over 2,200 DON personnel from leased locations into DOD owned facilities in the National Capital Region. These remaining projects while on track to complete in time to meet the statutory deadline continue to present significant challenges due to the short construction duration, and complex move actions that require close coordination with other services and agencies.

Joint Basing

All 12 Joint Bases established by BRAC law have achieved full operational capability as of October 1, 2010. The Department is the supporting component for the following four bases: Joint Expeditionary Base Little Creek-Fort Story, Joint Region Marianas, Joint Base Pearl Harbor-Hickam, and Joint Base Anacostia-Bolling.

Environmental Cost to Complete and Financial Execution

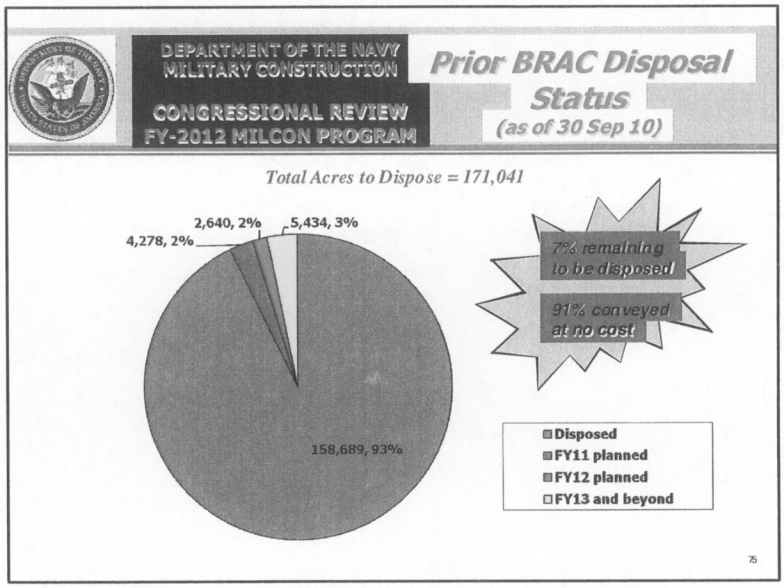
Over the last year, we spent $16 million in cleanup at BRAC 2005 locations. The majority of this funded environmental activities at Naval Air Station Brunswick, ME, Naval Weapons Station Seal Beach Detachment Concord, CA, and Naval Air Station Joint Reserve Base Willow Grove, PA. Our remaining environmental cost to complete for fiscal year 2011 and beyond is $117 million.

Challenges

Completion of large construction and renovation projects and relocations are planned for the last 3 to 6 months of BRAC 2005 implementation. Projects associated with the movement of DON organizations from leased space in the National Capital Region to DOD owned space are scheduled to finish September 2011. Additionally, lack of full funding at the beginning of fiscal year 2011 resulted in rearrangement of implementation plans, leaving little margin for error in meeting the statutory deadline across multiple recommendations.

PRIOR BRAC CLEANUP AND PROPERTY DISPOSAL

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 15 of the original 91 bases and to complete environmental cleanup, including long term monitoring at 23 installations that have been disposed.



Property Disposal

We disposed of 289 acres of real property in fiscal year 2010, for a total of 93 percent of real property disposed in the first four rounds of BRAC. In fiscal year 2010, we completed the disposal of the Defense Fuel Depot Point Molate to the City of Richmond, CA, using the authority to transfer property prior to completion of environmental remediation activities. This conveyance will enable City redevelopment of the property years sooner by incorporating the environmental remediation effort with the construction. 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 2012 budget request of $129 million will enable us to continue disposal actions and meet the legal requirements for environmental cleanup.

With 74 percent of our remaining property requiring supplemental NEPA analysis and completion of environmental remediation activities, disposal actions will continue after fiscal year 2011. Due to changing redevelopment plans, we are currently undertaking Supplemental NEPA analyses at Naval Shipyard Hunters Point, CA and Naval Station Roosevelt Roads, PR. Although supplemental NEPA analysis is not needed at Naval Station Treasure Island, CA, the City of San Francisco is currently completing a state required environmental review of its revised reuse plan. In addition, we may need to undertake Supplemental NEPA analysis at Naval Air Station Alameda, CA depending on future reuse planning decisions by the City of Alameda.

In fiscal year 2011, we plan to convey 627 acres at Naval Air Station South Weymouth, MA, under an Economic Development Conveyance. Other significant actions include issuing deeds for 530 acres at Marine Corps Air Stations El Toro and Tustin in California that are currently under Leases in Furtherance of Conveyance and the initiation of a public sale at Naval Station Roosevelt Roads, PR, for about 2,033 acres. With the completion of these actions, we will have disposed of 95 percent of our Prior BRAC real properties.

Prior BRAC Environmental Cleanup

The Department has now spent about $4.5 billion on environmental cleanup, environmental compliance, and program management costs at prior BRAC locations through fiscal year 2010. Our remaining environmental cost to complete for fiscal year 2011 and beyond is approximately $1.3 billion. This includes about $180 million cost growth which is due in part to additional munitions cleanup at Naval Air

Facility Adak, AK, and Naval Shipyard Mare Island, CA, cleanup at Naval Air Station Moffett Field, CA, and additional long term monitoring program-wide. The increase is also associated with additional radiological contamination at Naval Station Treasure Island, CA, and Naval Air Station Alameda, CA.

Naval Station Roosevelt Roads, PR

The Commonwealth submitted an Economic Development Conveyance application in December 2010 requesting approximately 1,000 acres of the remaining property. We are currently reviewing the application and will soon begin formal negotiations. The remaining property will be sold through public auction.

Naval Shipyard Hunters Point, CA

DOD listed the shipyard for closure as part of BRAC 1991. The Department has spent more than $650 million to investigate and clean up contamination at Hunters Point, including 78 installation restoration sites and 93 radiological sites. Congress has added a total of $160 million to the entire Prior BRAC Program over the past 3 years, and we have used over $100 million to accelerate the cleanup program at Hunters Point.

The additional funding has increased contaminated soil disposal to more than 520,000 cubic yards, nearly 31,000 truckloads, through removal and remedial actions. For radiological contamination, we have received free-release for 17 impacted buildings and removed more than 12 miles of radiological contaminated sewer and storm lines. We continue to utilize emerging technologies to expedite cleanup of groundwater plumes and have streamlined the groundwater monitoring program.

The Department continues to work closely with the City of San Francisco for the potential early transfer of key development parcels within the next year. This transfer of Parcel B (59 acres) and Parcel G (40 acres), followed by additional transfers totaling 60 acres in 2014, make up close to 40 percent of the remaining land for development. With final Records of Decision signed for Parcel C (74 acres) and the anticipated utility corridors, we have made significant strides in readying parcels to support City redevelopment efforts.

Naval Station Treasure Island, CA

With adoption of new Economic Development Conveyance (EDC) language in the National Defense Authorization Act for Fiscal Year 2010, DON was able to complete negotiation of a profit participation model for the transfer of Treasure Island. In August 2010, then-Speaker Pelosi, Secretary Mabus and then-Mayor Newsom signed the term sheet and intent to complete an EDC Memorandum of Understanding (MOU). The formal EDC MOU is expected to be approved and signed by June of this year. The agreement guarantees $55 million to the Navy paid over 10 years with interest and an additional $50 million paid once the project meets a return of 18 percent. Then after an additional 4.5 percent return to investors (22.5 percent total), the Navy would receive 35 percent of all proceeds.

The environmental cleanup of Treasure Island is nearing completion. The city has finalized its California Environmental Quality Act (CEQA) documentation and will submit the CEQA Environmental Impact Report and EDC MOU for approval by the Board of Supervisors in the summer of this year. At that point, we will be in position for the transfer of more than 80 percent of the base. The remaining cleanup includes the continued treatment of two small groundwater plumes and removal of low level radiological contamination. These projects and the remaining transfer are expected to be complete well before the land is needed for subsequent phases of the redevelopment project.

Naval Air Station South Weymouth, MA

Naval Air Station South Weymouth was closed by a 1995 BRAC action. In 2008, Navy and the Local Redevelopment Authority executed an EDC term sheet, but the Local Redevelopment Authority was unable to obtain the necessary bonds to complete the transaction. The Navy has subsequently revalued the property and the parties are negotiating a new payment structure that emphasizes Navy participation in revenue sharing for an EDC of 627 acres.

Naval Air Station Moffett Field, CA

Naval Air Station Moffett Field was transferred to NASA in 1994 with Navy retaining environmental cleanup responsibilities for past Navy releases. Hangar 1, which was built in the 1930s to house the USS *Akron* and its sister ship, USS *Macon*, is a Navy Installation Restoration Program site as a result of contamination in its siding and interior paint leaching to the environment. Due to it being a contributing element to the Naval Air Station Sunnyvale Historic District and individual eligibility for the National Register of Historic Places, the Navy's environ-

mental response, which will leave the hangar without siding, has generated tremendous public and congressional interest.

The Navy has completed all Hangar 1 interior work and removal of siding is scheduled to begin in April 2011 for completion at this calendar year's end. NASA, as the Federal facility owner and operator, has committed to reusing and residing Hangar 1. They are seeking additional financial support for this effort.

BRAC SUMMARY

The Department is on schedule to meet the statutory requirement 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 present significant challenges, we feel we have a reasonable plan in place to meet this requirement.

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 innovative EDCs.

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, reequip, train, and shelter our forces. With your support of the Department's fiscal year 2012 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 warfighting readiness and quality of life for the most formidable expeditionary fighting force in the world.

Senator MCCASKILL. Thank you.

Secretary Yonkers.

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

Mr. YONKERS. Good afternoon, Chairman McCaskill, Senator Ayotte, Senator Udall, and Senator Shaheen. I want to thank you for inviting me here today to be able to talk to you about our wonderful Air Force.

I'd be remiss if I did not say thank you very much for the strong support that this committee has given the U.S. Air Force in all of these years. So, thank you very much for doing that.

I would also be remiss if I didn't say I didn't like A–10s, as well. [Laughter.]

So, we're all in, as far as the Air Force is concerned.

A right-sized and efficient infrastructure is essential in enabling our total-force airmen to perform their duties while ensuring responsible stewardship of our fiscal resources. Our fiscal year 2012 budget request contains $2 billion for MILCON, military family housing, and BRAC; $1.4 billion of this is for new MILCON to ensure alignment with our new weapons system deliveries and strategic basing initiatives. It keeps us on track to eliminate the inadequate dormitories for our unaccompanied airmen by 2017. Our efforts to provide quality housing for airmen and their families also includes nearly $500 million to sustain and modernize primarily overseas housing and support housing privatization in the United States continental.

Moreover, the Air Force is on track to fully implement all assigned BRAC recommendations by September 2011. We had on the order of 400 of those assignments. To this end, we are requesting 125, for $4 million, to continue completing our legacy BRAC programs; in particular, the environmental cleanups.

We have all been challenged by the Secretary to find efficiencies in our program areas. We have done this, and we are going to continue to do this. Earlier this year, I issued a policy that refocuses our environmental cleanup program. This policy moves us towards completing cleanup and closure of contaminated sites by leveraging innovative technologies and business acumen. Our new goals are to achieve completion of 75 percent of all our active base sites by the end of 2015, and 90 percent of all our BRAC sites by the same timeframe.

As importantly, our cleanup decisions, going forward, are going to be better informed by a lifecycle cost analysis. To meet our aggressive goals, we're refocusing the program on a—fixed-price performance-based contracts with clear performance standards and endpoints. Starting in fiscal year 2014, we expect to achieve initial reductions in our program cost, eventually leading to at least a 30-percent program efficiency.

On our Air Force installations, we continue to focus on reducing energy demand through greater energy efficiency and by increasing supply through renewable energy projects. In fiscal year 2010, the Air Force funded 100 percent of our eligible MILCON projects to meet Leadership in Energy and Environmental Design silver standards. All new buildings designed since 2007 are 30-percent efficient or more.

On the supply side, the Air Force is a leader among Federal agencies in renewable energy use, with 6.4 percent of electricity coming from renewable. As of last year, the Air Force had 85 renewable projects on its bases, producing over 70 megawatts of power. These numbers are truly growing fast. Within the next few years, we expect to add 100—or, excuse me, 1,000 megawatts of power from solar, wind, waste-to-energy, and biomassed energy. As Dr. Robyn said, we are engaging with the private sector to use their dollars and the authorities that you've granted us to fund these projects.

The budget request in efficiencies described here represent only a small sample of our efforts to meet our environmental and energy security responsibilities and to increase the quality of life for our airmen.

While there are certainly challenging times for everyone, the Air Force remains committed to fulfilling its obligation to fly, fight, and win like never before.

Madam Chairman, Senator Ayotte, distinguished members of the committee, it's been an honor to be here before you today and to be able to represent our wonderful airmen and their families.

Again, I want to thank you for your continued support. I am really looking forward to working with you. I'm ready to answer any questions you may have.

[The prepared statement of Mr. Yonkers follows:]

PREPARED STATEMENT BY HON. TERRY A. YONKERS

INTRODUCTION

The United States faces diverse and complex security challenges that require a range of agile and flexible capabilities. From the ongoing conflicts in Afghanistan and Iraq, to potential confrontation with aggressive state and non-state actors, to providing humanitarian assistance, the U.S. Air Force continues to provide capabilities across the range of potential military operations. As part of this effort, we must ensure that we have right-sized and efficient infrastructure that enables our most valuable resource, our Total Force airmen, to perform their duties, while ensuring responsible stewardship of fiscal resources. To maximize our contributions to the joint team, we structured our resource choices by balancing them across the near- and long-term.

Over the last year, the Air Force has striven to deliver our trademark effectiveness in the most efficient way possible. We are focused on five priorities, which serve as a framework for this testimony: (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 cyberspace inventories, organizations, and training; and (5) recapture acquisition excellence.

OVERVIEW

Our fiscal year 2012 President's budget request contains $2 billion for military construction, military family housing, and Base Realignment and Closure (BRAC). The $1.4 billion military construction request represents an increase of $97 million over fiscal year 2011, allowing us to invest in the top priorities of the Air Force and our combatant commanders, even in a fiscally constrained environment. This request also ensures new construction is aligned with weapon system deliveries and strategic basing initiatives. In addition, we continue our efforts to provide quality housing for airmen and their families by dedicating nearly $500 million to sustaining and modernizing overseas housing, and supporting housing privatization in the continental United States. Our unaccompanied airmen remain a top priority; we request $190 million to invest in dormitories, keeping us on track to meet our goal of eliminating inadequate housing for unaccompanied airmen by 2017. Finally, we also request $124 million to continue completing our legacy BRAC programs and environmental clean-up.

In the course of building the fiscal year 2012 budget request, we applied asset management principles to ensure maximum efficiency without compromising the effectiveness of our installation weapons systems, the platforms from which we fly and fight. This was accomplished through the judicious funding of our sustainment priorities (for example spending money in the right place at the right time to keep our good facilities good) and using military construction to recapitalize existing facilities first, as a preferred alternative to growing our footprint.

CONTINUE TO STRENGTHEN THE NUCLEAR ENTERPRISE

Since its inception, the Air Force has served as a proud and disciplined steward of a large portion of the Nation's nuclear arsenal. We steadfastly secure and sustain these nuclear weapons to deter potential adversaries and to assure our partners that we are a reliable force providing global stability. Reinvigorating stewardship, accountability, compliance, and precision within the nuclear enterprise remains the Air Force's number one priority. While we have made progress in this area, we have taken additional steps in the fiscal year 2012 budget to continue to strengthen and improve this core function.

Air Force Global Strike Command achieved full operational capability on September 30, 2010, moving all Air Force nuclear-capable bombers and Intercontinental Ballistic Missiles under one command. In addition to ensuring that our organizations and human resource plans support this mission, we are also concentrating on the infrastructure and facilities that are crucial to our success. Air Force civil engineers have conducted enterprise-wide facility assessments and understand that a significant portion of the existing infrastructure will require modernization or complete replacement in the years ahead. Our fiscal year 2012 budget request begins to address these issues with $75.6 million in military construction for the nuclear enterprise, including a B–52 maintenance dock at Minot AFB, ND, and an addition to the Air Force Nuclear Weapons Center at Kirtland AFB, NM. These and similar projects in the years to come will ensure maximum effectiveness for the Air Force's most important mission.

PARTNER WITH THE JOINT AND COALITION TEAM TO WIN TODAY'S FIGHT

Our Air Force continues to project air, space, and cyber power to great effect in our conflicts in Afghanistan and Iraq, and our men and women make incredible contributions every day. We currently have more than 33,000 airmen deployed, including nearly 2,300 Air Force civil engineers. Nearly half of these engineers are filling Joint Expeditionary Taskings, serving shoulder-to-shoulder with our solider, sailor, and marine teammates. Due to their wide array of skills, 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 in high demand in several theaters of operation.

In addition to the contributions and sacrifices of our airmen, our fiscal year 2012 budget request invests $366 million in projects that directly contribute to today's fight. Examples include the following:

- Projects supporting our combatant commanders that will greatly enhance ongoing operations. These include the recapitalization of Headquarters, U.S. Strategic Command at Offutt AFB, NE, and a new Air Freight Terminal Complex at Andersen AFB, Guam.
- New facilities for operations and mission support. A new Air Support Operations Facility at Fort Riley, KS, will further our efforts to support Joint Terminal Attack Control specialists as they partner with ground forces to integrate airpower in Iraq and Afghanistan. Additionally, we are strengthening communications capabilities of combatant commanders with a SATCOM relay in Sigonella, Italy, and a Communications and Network Control Center at Nellis AFB, NV.
- Improvements at Andersen AFB, Guam. Three projects continue to support the "Guam Strike" initiative, consolidating operational capability for fighter and bomber operations at the base.

DEVELOP AND CARE FOR AIRMEN AND THEIR FAMILIES

The All-Volunteer Force provides the foundation for our flexibility and agility. Our fiscal year 2012 budget request reflects a commitment to providing first-class housing, while focusing on training and education, and striving to improve the overall quality of life for our airmen and their families.

The best airmen in the world deserve the best facilities in the world, and our fiscal year 2012 budget request supports that goal. We aim to build upon the foundation laid during the Year of the Air Force Family, and utilize new data such as our 2010 Dormitory Master Plan to ensure we effectively allocate taxpayer dollars to our most pressing requirements.

Billeting

We continue our efforts to provide quality housing for our airmen deployed to the U.S. Central Command theater with the fourth phase of the Blatchford-Preston Complex at Al Udeid AB, Qatar. This $37 million project will build two dormitories, raising the billeting capacity there to 3,332 rooms.

Dormitories

Housing for our unaccompanied airmen remains a top priority, and our Dormitory Master Plan provides valuable insight into how to maximize the impact of our investment. Our fiscal year 2012 budget request includes seven dormitory projects totaling $190 million. These include dorms at Travis AFB, CA; Osan AB, Korea; Eielson AFB, AK; Minot AFB, ND; Ramstein AB, Germany; Thule AB, Greenland; and Cannon AFB, NM. This investment keeps us on track to meet our 2017 goal to provide adequate housing for all unaccompanied airmen. We are also supporting our partners at Joint Base Elmendorf, AK; Joint Base San Antonio, TX; and Joint Base Langley-Eustis, VA, with the construction of three dormitories worth $193 million. These projects represent the last of the Joint Base military construction funds transferred to the Air Force.

Training and Education

The most professional airmen in the world grow into the world's best noncommissioned officers because of the investments we make in their education, starting from the day they enlist. We have two projects in this year's program totaling $78 million that address these areas. They include the fourth phase of the Basic Military Training Complex at Lackland AFB, TX, and an Education Center at Vandenberg AFB, CA.

Military Family Housing

We are carrying forward the momentum we gained during the Year of the Air Force Family with continued investment in building thriving housing communities. Our fiscal year 2012 budget request for military family housing is nearly $500 million. Included in this request is $85 million to improve nearly 1,400 homes in Japan and the United Kingdom and an additional $405 million to fund operations, maintenance, utilities, and leases, and to manage privatized units for the family housing program.

Housing privatization has leveraged $423 million into $6.5 billion in private sector financing; it is central to the success of our housing initiatives. At the start of fiscal year 2012, we will have 47,700 privatized units, increasing to 52,500 by January 2012, when 100 percent of our family housing in the United States will be privatized.

Child Development Centers

The final component of Caring for Airmen and Families is ensuring the children of our service men and women receive the same standard of care at installations around the world, from bases in major metropolitan areas to those in remote locations to those overseas. The American Recovery and Restoration Act allowed us to allocate $80 million for eight new child development centers, to help ensure that our force has adequate child care capacity. This year, we have only one requirement for a Child Development Center, at Holloman AFB, NM. This $11 million project will get our airmen's children out of temporary, substandard facilities.

MODERNIZE OUR AIR, SPACE, AND CYBERSPACE INVENTORIES, ORGANIZATIONS, AND TRAINING

Modernizing our force to prepare for a wide range of future contingencies requires a significant investment. For fiscal year 2012, a key focus area is enabling the beddown of several new weapon systems. Therefore, we are requesting $233 million for a variety of military construction projects, including:

- Five projects to beddown our newest fighter, the F–35. This includes the F–35 force development and evaluation mission at Nellis AFB, NV, the second training location at Luke Air AFB, AZ, and the first operational unit at Hill AFB, UT.
- Three projects supporting our HC/EC/C–130J fleet. These projects include a Joint Use Fuel Cell at Davis-Monthan AFB, AZ, and flight simulators at Davis-Monthan and Pope AFB, NC.
- Three projects supporting the Pacific Regional Training Center at Andersen AFB, Guam. This requirement was driven by the relocation of the 554th RED HORSE from Korea to Guam in 2007, along with an increased need for expeditionary training in the Pacific.
- Other projects. These will support diverse mission areas, including C–5 training, F–22 support, the F–16 beddown at Holloman AFB, NM, and support operations at Barksdale AFB, LA, Fairchild AFB, WA, the U.S. Air Force Academy, CO, and Cannon AFB, NM.

RECAPTURE ACQUISITION EXCELLENCE

The Air Force continues its efforts to optimize the effective use of taxpayer resources in the acquisition of goods and services. By focusing on asset management principles, we have built a culture that supports the warfighter by delivering the right products and services on time, within budget, and in compliance with all applicable laws, policies, and regulations. Where possible, we seek strategic sourcing opportunities to maximize the use of available dollars, pursuing ways to leverage our size as we purchase common commodities and services to be used across the enterprise. Our engineering and contracting communities continue to partner on efforts to transform the processes that support Air Force installation-related acquisition.

OTHER PROGRAMS OF NOTE

Base Realignment and Closure Actions (BRAC)

Completing Air Force BRAC actions remains a priority for the Air Force and Department of Defense. The fiscal year 2012 request includes $123.5 million for legacy BRAC actions at our 28 remaining former bases, and $1.97 million to perform program management, environmental restoration, and property disposal at locations closed in BRAC 2005. The Air Force is on track to fully implement all BRAC 2005 recommendations by the mandated September 2011 deadline.

Legacy BRAC

Real Property Transformation

The Air Force remains a Federal leader in the implementation of the management principles outlined in Presidential Executive Order 13327, Federal Real Property Asset Management. We continue to aggressively manage our real property assets to deliver maximum value for the taxpayer, improve the quality of life for our airmen and their families, and ensure the protection and sustainment of the environment to provide the highest level of support to Air Force missions. The Air Force is achieving these goals through an enterprise-wide Asset Management transformation that seeks to optimize asset value and to balance performance, risk, and cost over the full asset life cycle. Our approach is fundamentally about enhancing our built and natural asset inventories and linking these inventories to our decisionmaking processes and the appropriate property acquisition, management and disposal tools. Even though the BRAC 2005 round did not substantially reduce the Air Force's real property footprint, our current transformation efforts seek to "shrink from within" and to leverage the value of real property assets in order to meet our "20/20 by 2020" goal of offsetting a 20 percent reduction in funds available for installation support activities by achieving efficiencies and reducing by 20 percent the Air Force physical plant that requires funds by the year 2020.

BRAC Property Management

To date, the Air Force has successfully conveyed nearly 90 percent of the 88,000 acres of Air Force land directed by BRAC 1988, 1991, 1993, 1995, and 2005 with the remainder under lease for redevelopment and reuse, or pending final transfer. With the successful redevelopment of Air Force BRAC property, local communities have been able to increase the number of area jobs by over 45,000.

To complete the clean up and transfer of remaining property, the Air Force is partnering with industry leaders on innovative business practices for its "way ahead" strategy. Of the 40 BRAC bases slated for closure—including BRAC 2005—the Air Force completed 23 whole-base transfers as of September 2010. Eleven of the remaining 17 Legacy and BRAC 2005 bases are targeted for transfer by the end of fiscal year 2011, while the remaining BRAC bases (Chanute, George, McClellan, Wurtsmith, Williams and Galena) will transfer no later than the end of fiscal year 2014.

In February 2011, I issued a memo directing accelerated site completion and performance based remediation (PBR) performance objectives. For the BRAC program, 90 percent of all sites must be completed by 2015 and 95 percent under a PBR by 2014. Performance based remediation projects and contracts represent the Air Force's best tool for achieving site completion in the quickest timeframe and best value to the Air Force, while still protective of human health and environment. Also included in this directive, is an initiative to reduce overhead and management costs to below 10 percent of program costs.

Joint Basing

The Air Force remains committed to maximizing installation efficiency and warfighting capability, while saving taxpayer resources and being the best partner we can be. The Air Force has equity in 10 of the 12 Joint Bases and is the lead Service for 6 of the 12. All 12 bases achieved full operating capability on October 1, 2010. We anticipate that the benefits derived from this initiative will yield significant efficiencies and cost savings.

Energy

The Air Force energy vision is to reduce demand through conservation and efficiency, increase supply through alternative energy sources, and create a culture where all airmen make energy a consideration in everything we do. In pursuit of this vision, the Air Force continues as a Federal energy leader by advancing energy independence through coordinated efforts aimed at minimizing energy costs and leveraging proven technology in conservation measures and renewable energy development, while matching system reliability and critical asset security with Air Force mission requirements. These efforts effectively reduce dependence on commercial supply and delivery systems and enhance energy security for the Air Force. The Air Force is committed to reducing its greenhouse gas emissions and carbon footprint through the reduced use of fossil fuels consumed directly through vehicles and facilities or indirectly through consumption of fossil fuel-generated electricity from the national electric grids. In fiscal year 2012, we will continue our energy conservation efforts, which have already reduced facility energy use nearly 15 percent from 2003 levels. In fiscal year 2010, we exceeded our goals and produced or procured nearly 7 percent of our total facility energy from renewable sources, and we have led the

Department of Defense as the number one purchaser of renewable energy for the fifth year in a row.

CONCLUSION

The Air Force remains a trusted and reliable joint partner—all-in to provide air, space, and cyberspace capabilities to our combatant commanders as they face the myriad short- and long-term security challenges in their areas of responsibility. Nearly two-thirds of the men and women serving in our Air Force today are actively supporting combatant commanders in their fight across the full spectrum of military operations from installations all over the world. Our fiscal year 2012 budget request balances warfighter requirements, recapitalization efforts, new mission beddowns, and quality of life requirements.

As we have shown, it remains aligned with 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 cyberspace inventories, organizations, and training; and (5) recapture acquisition excellence. In addition to being committed to providing and maintaining effective infrastructure, efficiently right-sized to support our missions and priorities, we are also committed to ensuring that we continue to care for our Total Force airmen and their families. This includes making good on our promise to provide first-class dormitories and housing with a focused determination to eliminate inadequate housing for all by 2017. Finally, we remain committed to ensuring the judicious and responsible use of taxpayer resources with every decision we make.

In so doing, we remain focused on a continual pursuit of efficiencies that allow us to provide our trademark delivery of effective air, space, and cyber power while ensuring maximum impact from every dollar spent. Thank you for your continuing support of our Nation's Air Force.

Senator MCCASKILL. Thank you.

I want to welcome all the subcommittee members here today. I'm so pleased that we have a great turnout. I think this is terrific. I hope we keep it up, because we're going to have some great hearings in this subcommittee.

I want to start with the move from Okinawa to Guam, especially in light of the situation in Japan. Correct me if I'm wrong, but this decision was predicated on Japan being willing to spend billions and billions of dollars to make this work for our military. Don't you think it would be wise, at this moment, to do a timeout? Since we have not been able to get tangible progress on the new airfield replacement facility in Okinawa that was supposed to be part of the deal. It seems to me, as I review all the documents, that we're getting ahead of ourselves here.

Ms. PFANNENSTIEL. Thank you, Chairman McCaskill. There are—as you pointed out, and I think as both Dr. Robyn and I were saying, there are a lot of moving parts here. Certainly the Futenma replacement facility is, in fact, something we've been watching and waiting for as an indication of commitment on the part of the Japanese before we went much farther in Guam.

On the other hand, there are other signs of commitment. Right now, the U.S. Treasury has $834 million of Japanese money that they have invested, that they have given us to be used on Guam. There is another $415 million that has been proposed in their—this year's budget for utilities on Guam. So, there really has been, I think, a showing of commitment from the Government of Japan.

Clearly, the events of the past week put everything in some kind of different place, in terms of being able to come up with the money. But, what we're looking at now is not getting ahead of where the agreement was—the international agreement—but, rather, allowing the construction to begin as it starts. The amount that

we have put in the fiscal year 2012 request, the $181 million, is intended to begin to allow us to get started on some projects that, in the one case, the case of Andersen Air Force Base, will have an enduring value. Now, the value will depend on whether we end up putting the Marine air wing there, whether it's used for operations that are not now planned. It clearly gives the Air Force some flexibility if we don't use it for the Marines.

The other major project is a—water projects and water facilities that will be needed to support the workers that will come. So, we're trying to stage, gradually and without moving too fast, the investments that will need to be made.

Senator MCCASKILL. Do you think it's reasonable that this subcommittee, and the full committee, should see a master plan before we start funding?

Ms. PFANNENSTIEL. I do. In fact, we are putting that together. There have been so many moving parts that, frankly, it's moved faster than we've been able to put pen to paper on it. We will bring in a plan of expenditures and timing and projects before this goes to bed.

Senator MCCASKILL. Okay. I think we're going to be looking for that, and especially looking to see the posture of the Japanese Government in the aftermath of this disaster, whether or not this, in fact, makes sense.

Let me talk a little bit about MILCON requirements. I'm just going to do this question, and then I want to move on so everyone has a chance to question. Then I'll come back to my other questions.

Let me preface this by saying, I certainly will be the very first person to stand up and say our military deserves the best—but, we are searching everywhere in Federal spending to find ways to bring down the footprint of the Federal Government. So, when I saw that there was a $50 million fitness center, I thought, "Well, this must be in a very, very difficult part of the world. This must be a fitness center someplace where there is no other access to easy and affordable and accessible physical training activities." When I find out that it's in Coronado, in San Diego, and that it includes a $7.5 million swimming pool and a $4 million recreational center for single sailors and close to $20 million just for the gym facility. I have to say, first of all, I'm anxious to hear what we're replacing. Certainly I want our men and women to have the best. But, this is the most beautiful place in the world. Certainly, the outdoors lends itself for exercise almost every day there. So, I'm trying to figure out, in these tough budget times, how that kind of expenditure is one that we can justify to the American taxpayer.

Ms. PFANNENSTIEL. I do agree with you that San Diego is one of the most beautiful places in the world and that people do spend a lot of time outdoors. The reason that this facility is at the price that it is, is that it will have something like 80,000 patrons. That area of San Diego, the north island of San Diego, is a major hub for the Navy and the Marines. So it is expected that this will be the central facility for that entire area.

Senator MCCASKILL. I just want to let the word go out that we're going to look really carefully at all of this, and—because we want our men and women to have the best, particularly in terms of their

safety and their ability to achieve mission and a quality of life for them and their families, but we have to be really careful about the expenditures, and justifying them.

Senator Ayotte.

Senator AYOTTE. Thank you, Madam Chairman.

I wanted to ask you, as a followup to my opening statement, Secretary Robyn, in recent years, a proliferation of earmark grants have been appropriated to DOD through the Office of Economic Adjustment (OEA) for vague general requirements. In part, I think that was to technically avoid being called an earmark. An example, $300 million for medical transportation infrastructure in the National Capital Region (NCR), $45 million for reimbursement to local towns, and $250 million for repairs to local community schools. None of these amounts were included in the DOD budget requests and nor are they considered firm DOD requirements. All of them are added as a result of decreases to other DOD accounts where you might need those funds for the priorities of the military. So, it would seem logical, given the challenges that we face on a fiscal basis, where DOD is making these difficult decisions that we're going to have, to make sure we support our troops while reducing costs. This is of concern.

I guess I would ask you, should the OEA be in the business of serving as a passthrough, almost, to improve public infrastructure off military bases?

Dr. ROBYN. Two of the three examples you mentioned are issues where there are—I think Congress will resolve them. Senator Webb can speak to the transportation issues around, I will say that DOD has added enormously to the already horrible congestion in the NCR. Senator Webb, Congressman Moran, Senator Warner are understandably concerned about that.

I could speak to the school issue, but these are issues within Congress. OEA is a wonderful office. It as created by Robert McNamara in the 1960s to work with communities. Pease Air Force Base, the success of reuse at Pease, has a lot to do with OEA. It's a wonderful office. I don't know how to answer, when we are asked to carry out something like that, we do it, and we do it well.

Senator AYOTTE. I guess I would ask you, just on a big-picture basis, what do you think are the implications of doing things that way, as opposed to—for example, in transportation funding. I also have the privilege of serving on the Commerce, Science, and Transportation Committee that oversees transportation funding, and so I'm concerned that it's going to be a drain on your priorities, to feel that you have to serve this purpose, when there are other oversight committees that really should be the ones deciding, on a budgetary basis, where those funds, for example, would come from. I'm just using roads as an example.

Dr. ROBYN. We will implement that in a way that takes into account competition and creates criteria so it is not—we don't view it as "an earmark." But, we will implement it responsibly.

Senator AYOTTE. But when you're given the legal language for—or the language in the bill itself, it seems like it is a way to circumvent what has been actually a decision of Congress, right now, on earmarks. So, I guess I would ask you to consider the overall priorities of making sure—we want to make sure that the proper

committees oversee these issues, and also that the funds that you're given are used for your priorities, based on what this committee decides and what the overall Armed Services Committee decides.

Thank you for your answer.

The other question, I wanted to ask Secretary Hammack. We've talked quite a bit about the September 2011 deadline for BRAC. As you and I talked in advance of the hearing, there is an outstanding issue with regard to the Paul A. Doble Army Reserve Center in Portsmouth, NH, where we have a situation where, as I understand it, we'll probably be unlikely to meet the September 15 deadline. Could you just elaborate on where the status of that is at this moment?

Ms. HAMMACK. Certainly. In section 2712 of the 2010 NDAA, it authorized us some more latitude in selection of the site, because the original language in the BRAC law said that it had to be directly adjacent to Pease, and the NDAA language allows us to find a location in the locality of Pease. So, with that legislation in the 2010 NDAA, it removed the timeline requirement of BRAC. So, it gave us the flexibility to evaluate all alternatives and find an appropriate site that helps us do it in an economic manner.

Senator AYOTTE. In conjunction with finding that new site, is the plan to actually construct a new Reserve Center in an alternative site?

Ms. HAMMACK. Yes. The plan is to construct a Reserve Center and, if there is an increase in cost, to work with the Office of the Secretary of Defense (OSD) on reprogramming.

Senator AYOTTE. Thank you very much.

Secretary Yonkers, I know that you're in the process of coming up with the criteria for strategic basing of where the KC–46A will be stationed. I'm sure you're aware that, obviously, Pease National Guard has a KC–46A there, and certainly, in my view, is a great location. But, more importantly, I wanted to ask you where that issue was right now, in terms of criteria, and how you anticipate the Guard and Active-Duty decisionmaking to go forward, of where that refueler will be located, and what type of criteria you're looking at to come forward once you do announce the criteria.

Mr. YONKERS. Thank you for the question, Madam. You know that this award was just made in February, and it's a big program for the Air Force—billions of dollars. You also know that we have a strategic basing process in place. It's been in place about 2 years now. It was designed specifically to be open and transparent and to have a number of touchstones with the U.S. Congress as we went through it. So, we haven't veered from that. We intend to continue to have a transparent and an open process so that you can see, as we move down these strategic basing decisions, such things as the criteria, preferred locations, and the other kinds of parts to the process.

I will tell you that, as we look at this, we're going to look at every installation in the Air Force. So, all bases, everything is on the table, including the Guard and the Reserve units and bases, as well.

The first bird is expected to arrive, right now, in the 2015 timeframe. So, we don't have a lot of time. If you look at the MILCON

program that we're going to have to put into place in order to support the bed-down of these initial aircraft, that's a 2-year lead time. If you back that up another year and look at the National Environmental Policy Act requirements, that's at least 12 months, if not 18 months.

So, I would say, within the next year, year and a half or so, we're going to have to sort through the criteria. We're going to have to start making some judgment on preferred alternatives and start looking at where we're actually going to be bedding down the aircraft. So far, ma'am, Air Mobility Command (AMC) is working through those criteria, so I don't have much definition for you other than that.

Senator AYOTTE. Thank you very much. We also had the opportunity to question the Secretary this morning in the Armed Services Committee about the issue. I would just ask that this clearly become a merit-based decisionmaking that looks strategically at what makes sense and be the most cost-efficient use of taxpayer funds. Because on the merits, that would be the way to make the decision. So, I appreciate that.

My time is expired.

I want to thank all the witnesses who are here for your service to our country.

Senator MCCASKILL. Senator Shaheen.

Senator SHAHEEN. Thank you, Madam Chair.

Since Senator Ayotte and I are both from New Hampshire, we get to double-team you all on these concerns we have locally. I would just like to follow up, Secretary Hammack, on the concerns raised by Senator Ayotte, relative to the Reserve Center that's currently planned for Portsmouth. I'm aware that we have an alternate site and that the project is actually ready to go.

What we have heard is that there are some concerns that because the projected cost is going to be higher than the original amount authorized, that there has been some questioning about whether that project is going to go forward. So, can you assure us that you've looked at that and you're comfortable with what's being proposed, and that it is going to go forward?

Ms. HAMMACK. As mentioned before, we are examining all costs. We want to be prudent stewards of taxpayer resources, so we want to ensure that those incremental costs are appropriate. So, we are near the end of an analysis to determine whether—or, what the amount of the cost is that we need to ask for reprogramming on. So, we will be working with OSD on that. But, our intent is to move forward with a new Reserve Center.

Senator SHAHEEN. Thank you. That's very good to hear. I know there's a great interest in the potential for the new facility to provide training for those medical personnel that will be so needed. So, we appreciate that.

Secretary Pfannenstiel, we had the opportunity to have Secretary Mabus before us a week or so ago. One of the concerns that we raised with him at the time was the new Government Accountability Office (GAO) report that has come out that talks about the backlog in needed investments in our public shipyards. Again, Senator Ayotte and I both represent, along with the Maine Senators, the Portsmouth Naval Shipyard. The backlog there is projected to

be over $500 million. So, can you talk a little bit about what priorities the Navy is going to use as you're looking at the backlog of investments that are needed, and how you'll make those decisions?

Ms. PFANNENSTIEL. Yes, I'd be glad to. We recognize that this backlog needs to be addressed. We have been putting into the shipyards, on average in the last few years, much more than the minimum requirement—in some years, double the minimum requirement.

In terms of Portsmouth, in particular, we do have some projects right now, some $47 million underway as we speak, another $49 million in the FYDP. So, those are headed towards Portsmouth. We have a $17 million repair that is supposed to be done, but now is being held up for the—because of the continuing resolution, but it would be in 2011. Then another $100 million in an energy project.

Senator SHAHEEN. Right, we were very excited to hear about that.

Ms. PFANNENSTIEL. So, I guess what I'm saying is that we have recognized that there has been this backlog, and we're trying to address it through a number of quite ambitious projects, going forward.

Senator SHAHEEN. But, as you look at the backlog, not just at Portsmouth, but across the other three public shipyards, how do you prioritize those projects? Is it based on impact on national security? Is it based on competitiveness? How do you determine what gets moved forward in the queue?

Ms. PFANNENSTIEL. That's an excellent question, and I think it goes across the entire range of the Department budget, when we're looking across at any one of our projects that come up. As we have a minimum that we need to be addressing, and where we go above that is—it's a decision that is programmed each year.

Senator SHAHEEN. Thank you.

You've all mentioned the investment in energy to try and make each branch of the military less dependent on foreign sources of fuel and more energy efficient.

Secretary—or Dr. Robyn, can you speak to how you're integrating the various work that's being done by each branch? I was impressed to hear the Navy talking about their goal of a 50-percent reduction by 2020. This morning we had representatives from the Air Force talking about what you're planning, Secretary Yonkers. But, how is that being integrated across all of the branches of the military, and how are we sharing what we've learned?

Dr. ROBYN. Thank you. First off, we talk continually. I think, for most of us, energy is our highest priority. It's a moment when we can do a lot. So, a lot of it is informal.

My office sets policy, primarily. I will give you an example. We're currently developing guidance that will require the Services—and the Navy is already doing this—to meter a higher fraction of their buildings—for energy consumption—more of their buildings than they're currently doing.

We are very data-starved. This is an area where you need to know how much you're consuming in order to make progress. We don't know that. Most of our buildings are not metered. So, I can set guidance. So, I can, through policy, create guidance.

We are also leading the effort to create an energy information management system that cuts across the Services.

I believe, before you got here, in my opening statement, I talked about an energy test bed initiative. This is, I think, a tremendously important effort, because no individual service has the incentive to make these investments. We believe that industry is coming up with technology, that they can't get commercialized, that can radically improve our energy performance. All the Services have the same infrastructure, they have the same energy challenges. So, we've taken that on through this testbed.

We do the same in the environmental area; where there are crosscutting issues that are common across the Services, we make the investment. But, most of the execution is done through the Services.

So, it's a combination of policy and coordination. I'm sure there are areas where we're guilty of duplication, but I think our staffs and our teams work very, very closely together in the energy area, because it's such a high priority, number one, and because resources are so scarce, and we're trying to figure it out together. Using private money is a key thing, figuring out how to do that is something we're doing collectively.

Senator SHAHEEN. Thank you very much. I hope you will share with other agencies within government what you have learned.

Senator MCCASKILL. Senator Webb.

Senator WEBB. Thank you, Madam Chairman, and congratulations on your newly-assumed position, and as well as Senator Ayotte.

There are a lot of things that I would like to discuss as the year goes forward. Particularly, we just had some discussion on the BRAC implementation difficulties. We have a number of similar funding situations in Virginia, because we have so many military installations.

But, what I wanted to convey today is how strongly I believe we need to move forward in a time-sensitive way with the situation on Okinawa and Guam. This has been something of a hot potato from one administration to another. I know, Secretary Pfannenstiel, you're talking about how you're inundated with information right now, you're behind the information flow. The first agreement was made in 1996—it's 15 years ago—and we have a very tumultuous situation in Japan right now, which may impact the decision-making.

But, when we talk about the $6 billion, we have to put it in the context of how the Japanese have been such a cooperative partner since the end of World War II. This is an issue that is extremely important to our relationship with Japan, as well as to the future of our presence in the Pacific. This is sort of a full-faith issue with the Japanese. A lot of people don't realize how much they have put into our infrastructure on Okinawa, as well. They pay administrative costs. I was in Okinawa, as a marine in 1969, and there were nothing but Quonset huts out there. But, the Japanese have paid for the types of facilities where our people have lived, hosted our bases. It's just not conceivable to me, given the strength of our alliance, but, in international legal terms, they could turn around and say, "We don't want you here." So, they have stepped forward, and

the administrative costs for relocating from Okinawa to Guam are a part of that.

But, let's put that into the context of what's just happened over there. At a minimum, this is probably a $180 billion tragedy that hit Japan, with the combinations of the earthquake, the tsunami, and the situation they have in their nuclear power program.

But, the questions that I have, and the concerns that I have on Okinawa and Guam, go more to whether or not we have properly planned the relocation itself, in terms of military force structure and those sorts of things.

As I think some of you know, I worked as a military planner out there in the 1970s. I either walked or drove every square inch of Guam, Tinian, Saipan, and went up to the training bases in Okinawa. I did a facilities analysis there. Force-structure changes, the nature of our military changes, but in islands, the area of an island doesn't change. The percentage of Guam, particularly that's in military retention areas, really hasn't changed.

I went back last February, to Okinawa and to Guam. I was surprised at the plans that they were putting into place on Guam. We had some good meetings. I noticed, in your testimony, there—I think there was some good response to some of those meetings. We're going back again next month. Chairman Levin and I are planning to go back and meet with people out there again and have this discussion.

So, point number one would be, I hope we could do a—and this may go to your comment, Senator McCaskill, about a timeout. I don't think we need a timeout, but I think we need to make sure that we are moving into the right structure before we put this forward. I don't think the 2014 goal was doable, either on Okinawa or Guam. I said that last year, when I came back.

If nothing else, I think the last 2 weeks has again reinforced the importance of our military bases in Japan to the Japanese people. Our military people are up there right now assisting with the horrendous circumstances up in northern Japan.

But, I really believe that we need to sit down and take a hard look at the planning that has been done for Guam, and, potentially, to look at a different way to leave the Futenma base on Okinawa, instead of building this mammoth structure, which I went out and visited last year. So, that's not going back to square one. Hopefully, with some real energy, maybe we could sit down and make sure we're doing it the right way.

One particular point, and then I would like to hear some response. When I was doing the planning, all those years ago, no one was thinking that the marines who would be on Guam and Tinian, would, by and large, be a permanent change-of-station force. In other words, this would not have been 3-year tours. It would have been rotational tours. What's the difference in that? The difference is, we're saying we're going to put 8,000 marines on Guam. If you put 8,000 marines, rotating from Hawaii or some other place, that's 8,000 marines on short tours. But, if you put 8,000 marines under permanent change of station down there, you're talking probably 23,000 people—totally different infrastructure with schools, hospitals, roads, et cetera.

So, where are we on this? I asked Secretary Mabus, a couple of weeks ago. But, what are your thoughts here?

Ms. PFANNENSTIEL. Senator, what you said is exactly what we have been struggling with—there are changes of circumstance. The 2014 date, that was originally put out as the completion date, looks harder and harder to achieve, when we have made the commitment to the people in Guam that we will not overwhelm their infrastructure. So to try to bring in the work crews and to do the work that needs to be done by 2014, seems hard to picture. We have agreed that we will slow down the process, as necessary, to avoid overwhelming the infrastructure.

But, back to your point about, are we bringing in 8,000 permanent marines with families? That was the original agreement. You're correct, that's an enormous number of people, given the population of Guam is 170,000. So, we need to work with the people of Guam. We are doing that. So, all of this has given us a lot to think about, a lot of changes to the way we were originally thinking.

When we've been asked for a master plan, or a plan of when and where and how much and what projects, we've been putting that together. We are doing the full sum assessment of what makes sense on Guam, what makes sense in the Pacific. This is part of it. We believe that the projects that we now are looking at will work, either way, but we're still building to move the marines that we need to have on Guam. We're building the facilities for them to be there. The timing and the structure is what we are struggling with now.

Senator WEBB. Okay. I'm looking forward to going back next month. I think our trip is still going to be on.

Just a couple of things I hope you would put into the formula when you're thinking about this is, I was surprised, last year, at how little Tinian was being planned on—the use of Tinian is—29 square miles, most of it's uninhabited. There would be ways to make better use of Tinian, particularly with ranges. But, I don't want to get into details that—the marines would have much better recommendations than I would. But, there are ways to use Tinian that really weren't being thought about or considered last year.

The other is how important it is to resolve the issues on Okinawa in a timely way. To do so, I think, with a respect for what the Japanese have contributed. I don't see a lot of that up here. It kind of surprises me.

Thank you, Madam Chairman.

Ms. PFANNENSTIEL. Thank you.

Senator MCCASKILL. Thank you, Senator Webb.

There are many things I can say about Senator Webb. I'm going to miss his friendship in the Senate. But, this committee is really going to miss Senator Webb, because of his experiences and expertise, particularly in the part of the world we're talking about.

I think what we're both saying, maybe in different ways, is, there needs to be a plan. We need to make sure the plan makes sense and it's clear to everyone before we begin investing serious amounts of money, so that we know exactly what the way forward is. I'll look forward to visiting with Senator Webb when he gets

back from his trip so that, together, we can try to do the best job possible.

Certainly, I think we, especially at this time, need to remember the special relationship we have with the Japanese people and what they have done for our country over the last decades.

I want to talk about BRAC bid savings and where that money goes. There clearly is some bid savings in BRAC. Frankly, I want to know if there's bid savings other places, over the last 2 years, in the MILCON budget. Do we need to talk about whether or not that money goes back to the Treasury to reduce our deficit or whether that's found money that can be spent other places?

Dr. ROBYN. Let me say two things. One of them I was tempted to say earlier, when you were talking about the health center. I think—we can argue—I think the current issue over bid savings has to do with $20 million that we would like to reprogram from BRAC bid savings to begin to carry out some short- and medium-term transportation improvements at the Mark Center, where we are going to have a horrendous impact on transportation, not just on our own employees, but on tens of thousands of innocent commuters. We believe that falls within our discretion in implementing BRAC.

BRAC is one of those big savings things. We are going to realize $4 billion a year in savings from BRAC. That's the biggest BRAC, in terms of savings. If you take all the BRACs together, it's, I think, $11 billion. So, that's big. The money that we spend on the OEA is peanuts by comparison. The money that we spend on facilities and traffic improvements to better implement BRAC, that's small.

I agree, every project should be justified, and we believe it is. We have an internal process for doing that. There will be savings at the end of the day. But, I want to just keep our eye on the ball of the huge, multibillion-dollar savings that BRAC is going to bring about.

Senator MCCASKILL. Although it was not as large as projected.

Ms. PFANNENSTIEL. The savings?

Senator MCCASKILL. We have a $20 billion shortfall in projected savings that have not been realized over what was originally set out, in terms of BRAC savings.

Ms. PFANNENSTIEL. Correct. I think what you're referring to is that we originally said BRAC would cost $21 billion to implement. You spend money upfront in order to save it later on, with BRAC. We estimated, for purposes of internal analysis, using something called the COBRA model, that the costs would be $21 billion. At the end of the day, it will be $35 billion, which, yes, that means that your savings are fewer. I could go into the COBRA model and why that's not accurate. But, I think most of that $14 billion gap, was a result of decisions by the Department to meet needs that they felt were not being met. So, rather than do a renovation, do new constructions, do a more fundamental renovation to better serve the mission, this BRAC was not about getting rid of excess capacity, it was about better—having our facilities better suit our mission. There was a decision—and, granted, it was in a different fiscal climate—but, to spend this money in order to have our facilities be better suited to meet the mission.

Senator MCCASKILL. Let me get back to what my original question is, when we have bid savings, I think we had rescissions in the Federal Aviation Administration bill that was $340 million from the Army on BRAC bid savings, $110 million from the Navy, and $50 million from the Air Force. I know there probably have been bid savings in MILCON over the last couple of years. The question is, should bid savings be allowed to be reprogrammed, or should bid savings go back to the taxpayers to reduce the overall pricetag, since the savings belong to taxpayers?

Dr. ROBYN. Let me speak to BRAC, because I honestly don't know how it works on MILCON. The fact that you have bid savings doesn't mean you spend them.

Senator MCCASKILL. If you planned——

Dr. ROBYN. No, that's definitely not our policy.

Senator MCCASKILL. Good.

Dr. ROBYN. Keep in mind, with respect to BRAC, the construction climate—the first—up until 2008, we were experiencing unexpected increases in construction prices. To make Fort Belvoir and Bethesda world class, which is what Congress asked us to do, midway through, we took bid savings and applied to that. We had to come up with a additional money when the construction industry was bad. Now we are seeing bid savings, because—one of the silver linings.

But, no, it is not our policy to spend bid savings merely because they are there.

Senator MCCASKILL. You don't have to answer this today, because I don't mean to put you too much on the spot, especially at your first hearing—but, I think that I would like to hear back from the Secretary about whether or not we should include in the defense authorization language that bid savings are returned to the Treasury. Obviously, if you need more money, then you come back to us and ask for it. Generally speaking, I think you've been given it when there's been shortfalls. I don't think we've ever left the military hanging when a project has been more expensive than anticipated. In fact, we could have a hearing that lasted a long, long time talking about how many times we've come back and added more money when the estimates were too low.

Dr. ROBYN. Right.

[The information referred to follows:]

The Department uses bid savings to offset military construction general reductions, offset cost overruns in other projects, and fund contract modifications and options. Returning bid savings to the Treasury would negatively impact the Department's flexibility to address emergent requirements such as restoration projects necessitated by weather related damage, cost overruns on construction projects, and project cost increases due to necessary project modifications or contractor claims. Using bid savings as a source of funding prevents unnecessary delays and enables project completion on schedule to support mission requirements.

Additionally, the reprogramming of military construction funds is a formal process that requires congressional approval through the House and Senate Appropriations Committees.

Senator MCCASKILL. I just would like the taxpayers to get the benefit when the estimates are too high, as opposed to it being reprogrammed. I won't put any of you on the spot in that regard, but you should—fair warning that it's coming down the pike.

Let me also talk about data centers and high-performance computing centers at Fort Meade—$860 million. DOD is building a similar facility in Utah, at a cost of more than $1.5 billion, Secretary Hammack, in the budget request; $246 million, this year, for a facility; and next year's request is supposed to be $175 million. I think we have to have computing power and data centers. Obviously, they have to be done right, because it's a critical component of our national defense. But, are we confident that we are building these facilities at a comparable cost that they might be built in the civilian sector? Are we confident that these aren't more expensive that we need or more duplicative than we need? Have we done some lessons learned from data centers that we've built? Are those being incorporated in the new versions of those same types of facilities?

Ms. HAMMACK. A lot of questions there. Let me address, first of all, that we do have a data center consolidation plan, where we intend to reduce the number of data centers we have by over 50 percent; could be as much as 75 percent. Part of that is leveraging new technology. The new technology enables us to do more in a smaller square footage that uses less energy. That—those are the key objectives of our data center program.

[The information referred to follows:]

As mentioned earlier, the Army's Data Center Consolidation Plan focuses primarily on consolidating data centers to existing Defense Enterprise Computing Centers (DECCs) operated by the Defense Information Systems Agency (DISA). While the Army Data Center Consolidation Plan (ADCCP) does not include building more data centers, the Army did consult with industry and conduct an internal Base Realignment and Closure audit to capture lessons learned during consolidation. Key lessons incorporated in the ADCCP include centrally managing consolidation and eliminating redundant or legacy applications prior to consolidation.

The Army's decision to consolidate primarily to DECCs resulted from consultation with both industry and the DISA.

Senator MCCASKILL. Then I hope that you can provide the committee some guidance as to what the plan is in that regard. Because, I don't want to build new ones if we're getting ready to consolidate, unless we have already identified that we're consolidating existing ones into the new ones we're building.

I have one related question, if you all will bear with me. Secretary Pfannenstiel, we have a data center in Kansas City for the Marine Corps. We learned, very recently, frankly, not exactly from the Marine Corps, that there were potential plans to move that center, and that it would involve building a new building in a different location. I am trying to figure out what the rationale is for that move, if it is something that is needs-based. Because, you can't make a move—and even if another location is offering to bill the money, they're doing that with public dollars. It all comes from taxpayers somewhere.

Ms. PFANNENSTIEL. I understand. Madam Chairman, I will have to take that for the record and get back to you.

[The information referred to follows:]

The Marine Corps is reviewing a number of locations for an IT Center. A decision on whether or not to relocate the information technology organizations will be made in the spring 2012.

The Marine Corps is conducting a risk analysis on the cost of moving to a different location that includes both equipment and personnel. It is uncertain at this time whether the current building, owned by the General Services Administration,

is suitable as a permanent solution. We have learned that the building, while having good potential as a permanent facility, does have some possible environmental and safety issues. Along with selecting the best site available, it is equally important to maintain and hire a qualified information technology staff for all our programs now and into the future. Other factors we are considering are the facility cost, workforce relocation, transition costs, and suitability of a facility to meet information technology security and force protection requirements. We welcome any additional input you may have for this important decision.

We share the concerns regarding the budgetary and fiscal challenges confronting the Department and are committed to ensuring the responsible stewardship of the taxpayers' funds.

Senator MCCASKILL. Okay.

Senator Ayotte.

Senator AYOTTE. Secretary Pfannenstiel, just a brief followup to a question that Senator Shaheen had asked having to do with the Portsmouth Naval Shipyard. Secretary Mabus had testified before the Armed Services Committee about the Navy looking at moving up the P266 project to improve maintenance for critical Navy readiness. But also, he identified that we might be able to save $8 billion to do that sooner, in fiscal year 2012. Right now it's in fiscal year 2015. So, I obviously, would ask your thought on that. The Secretary seemed very open to that. I think that makes sense, if we can—assuming we move—once we move forward with the full appropriation for this fiscal year—please know that we're very concerned about that, as well—but, that you would consider moving that up.

Ms. PFANNENSTIEL. I did hear that exchange, and, as I remember, the conclusion was that he would go back and look at that and see if that makes sense. So, I'll certainly do that, Senator.

[The information referred to follows:]

The Navy will continue to assess all Military Construction (MILCON) requirements, to include the Portsmouth Naval Shipyard Structural Shop Consolidation Project (P266), in future budget requests as we balance risk across the Navy and provide the most capability within fiscal constraints.

The Navy continues to invest in the Portsmouth Naval Shipyard infrastructure within today's fiscally constrained environment through Sustainment (ST), Restoration and Modernization (RM), and MILCON. In fiscal year 2010, the Navy executed eight operation and maintenance (O&M) (ST and RM) special projects at Portsmouth Naval Shipyard (PNSY) with a total value of $40.9 million. In fiscal year 2011, the Navy planned additional special projects, valued at $17 million, to repair and enable certification of Dry Dock #1. However, these projects are currently on hold due to the Continuing Resolution. Finally, in fiscal year 2012, the Navy plans to invest $100.3 million in four Energy special projects at PNSY.

Senator AYOTTE. Thank you very much.

In the fiscal year 2012 budget, you have $100 million for MILCON in Bahrain. One of the issues I just hope you will address is, given the unrest there, whether it makes sense to invest that money right now, until we know what the outcome is going to be.

Ms. PFANNENSTIEL. Clearly, there are a lot of events in the world that we're waiting for the outcome. But, Bahrain is a very important base for us. It is the home of the 5th Fleet, and remains a place that, for the foreseeable future certainly, will be important to us. So, the dollars that we have in the fiscal year 2012 proposal, I would strongly support, still.

Senator AYOTTE. Okay. I just wanted to check on that, given the current world situation.

Thank you very much.

Senator MCCASKILL. Senator Shaheen.

Senator SHAHEEN. Yes, thank you. I just have one other question for Secretary Hammack, actually.

I understand the Army is soon going to announce its plans for Europe, whether it will leave four BCTs in Europe, as proposed by the Quadrennial Defense Review, or scaled down, or do something in between. Can you give us any insights on what that new force structure in Europe is going to look like? Obviously, the decision is going to have a large impact on installations, not only in Europe, but here in the United States.

Ms. HAMMACK. That decision has not been made yet. It is under consideration, and we expect an announcement to be made by the end of this month. At least, that is the current intent. But, our strategy—our investment strategy in Germany is one of consolidation. So, in my opening statement, I mentioned that we have closed 91 sites over the last 5 years, and returned 28,000 acres to the German Government. In the next 5 years, we plan to close another 29 sites and return 7,000 acres to the German Government. The sites in which we have MILCON dollars requested are those that we have determined to be enduring missions, regardless of the stationing decisions. They are locations where we will continue to have a presence. We desperately need the money for that infrastructure and to support our servicemen.

Senator SHAHEEN. Have we heard any concerns, either from the Germans or our other European allies, about what's being discussed?

Ms. HAMMACK. Any stationing decision, especially when we are leaving a country, we have to consider the Status of Forces Agreement (SOFA). So, we are complying with any required disclosures in the SOFA.

Senator SHAHEEN. So, have we heard any concerns, as a result of those SOFA, from any of our allies?

Ms. HAMMACK. We have heard from them that, in some of the bases or sites that we are closing, they would wish we would stay, because we are an economic engine in the local area.

In other areas, I won't say they're glad we're leaving, but they have identified alternate uses for the facilities, one of which is to use as a university campus, because it has dormitories and it has classroom buildings.

So, we are working with the local area and with the German Government to determine what is appropriate on our stationing area.

Senator SHAHEEN. To what extent will those concerns of our allies influence our decision? Or, how are they factored in?

Ms. HAMMACK. The stationing decision in Europe has been discussed at several NATO meetings. So, it is something that is being discussed with all of our allies to ensure that we are adequately participating in the NATO alliances.

Senator SHAHEEN. Thank you.

Thank you, Madam Chair.

Senator MCCASKILL. Thank you.

I have a pet peeve about temporary structures. One of my very first lessons, when I came to the Senate in the Armed Services Committee, had to do with something that was called a temporary structure, that ended up being AMC, down at Fort Belvoir. I took

a trip down to see this temporary structure. I can assure you, in Missouri, this would never be called a temporary structure. It looked like, to me, the temporary structure was used to avoid MILCON, that it was just an attempt to do an end-round around the long and difficult process of obtaining the MILCON authorization. In fact, I'm confident that's what it was—that it was an end around MILCON.

Now, my first question is, do any of you know of a relocatable structure that has been relocated?

Ms. HAMMACK. I guess I'll take that one, because I know we have a lot of relocatables. The relocatables have been used as flex space to compensate for restationing decisions when we are awaiting MILCON projects. So quite often they are called "swing space." I will venture to say that they haven't been relocated, but they have been auctioned off or disposed of, and the area in which they were located used for an alternate purpose. The fact that they did not have dense infrastructure as part of it made it easier to construct on that site.

Because of our growth by 50,000 soldiers, we have had to use relocatable buildings, because we have not had the time or the ability to put together the required documents and requests for MILCON authorization. So, MILCON quite often follows a decision to utilize a relocatable building.

Senator MCCASKILL. As an auditor, I'm pretty confident that if I had the time and the staff, I could figure out that relocatables cost our military a lot of money that we didn't need to spend. I understand your answer. But, what I'm most concerned about is fixing it and getting out of this very bad habit, that you can put up a great big building and somehow have a fantasy that it's temporary.

Even worse, the building that really got my eyes wide open as to how this could possibly work, we were leasing it, and guess what we ended up doing after we leased it for 4 or 5 years? We bought it. So, let me see if I get this straight. It wasn't temporary. We got around MILCON. We put it up. We paid a really high amount to lease it for a number of years, and then we turned around and bought it. I would have liked that deal on the other end.

The GAO report came out and said there was not a proper means to collect and maintain consistent data on the number and cost of relocatables. The year after that, they doubled. We still don't have some kind of plan that can reassure this committee and—in our oversight function, that relocatables are a good value for the taxpayers.

If we've made MILCON too hard, then let's figure out a way to make MILCON easier. But, let's don't waste a lot of money because we are going to fill in the gap until we get the MILCON money. It's almost like the bureaucracy has assured that we're going to pay twice as much, or a third more than we need to, for the space that we need to construct for our military services.

So, I will await, with interest, a report from all of you about relocatables that have been relocated and any analysis that you have ever done about what the real cost of relocatables have been and whether or not they have been leased and eventually purchased. I'm going to continue to stay on this. So, you just, like, got

to know, when you're getting ready to do one of these, "Okay. She's going to yell about this." Because, I really do think that this is an area that we've wasted a lot of money.

[The information referred to follows:]

Dr. ROBYN. The Military Services acquire relocatable facilities to meet viable needs that cannot be met in a timely fashion through military construction. Relocatable facilities are used to support reorganizing or relocating units until their permanent facilities are available, provide swing space for buildings undergoing renovation, and accommodate surge requirements.

Our challenge is to ensure that relocatable facilities are acquired only when absolutely necessary, and that they are properly disposed of when they are no longer needed to meet their original purpose. My staff is working on improving our oversight of the use of relocatable facilities through the issuance of clear guidance, and the establishment of standard reporting requirements. The Department is nearing completion of a report that will provide additional detail on the number of relocatable facilities, where they are located, and the plan to replace or eliminate them.

Ms. HAMMACK. In the Army, the authority to acquire relocatable buildings has been delegated to the Senior Commanders of HQ, Installation Management Command, Army Materiel Command, U.S. Army Corps of Engineers, Medical Command, Strategic Missile Defense Command, U.S. Army Reserve, and Army National Guard. These organizations have installation or garrison responsibilities.

Since 2004, the Army has spent over $1 billion acquiring relocatable buildings, providing about 10 million square feet of facility space. As of the fiscal year 2012 President's budget request, permanent military construction has been completed or is in progress, to replace 1,010 relocatables (approximately 33 percent of the inventory). Another 582 relocatables have replacement construction programmed in fiscal year 2012–2016. This will result in approximately 52 percent of the Army's inventory of relocatables being replaced with permanent facilities by fiscal year 2016.

The balance of relocatable space is being examined to match permanent requirements with permanent facilities. The Army is aggressively working to ensure that these replacement projects receive the highest priority and that construction is completed before the 6 year term use for relocatable facilities expires.

Additionally, relocatable facilities supporting temporary missions (i.e. transitory peak military missions, deployments, military contingency operations, disaster relief requirements, and fielding exercises) do not require replacement military construction and will be disposed of at the expiration of the approved relocatable period. The Army is improving the management of relocatable buildings through updating its regulation, increased leadership focus, and a bottoms-up review on its utilization.

Ms. PFANNENSTIEL. The Navy's policy on the procurement, lease, and use of relocatable buildings, OPNAVINST 11010.33C, states "the use of relocatable buildings is not an acceptable means of providing facilities for long-term needs."

The Navy remains committed to minimizing the use of relocatable buildings. Navy requires additional time to conduct a full analysis of the inventory, including purchase and lease costs.

Mr. YONKERS. Relocatable/Temporary Use Facility information is provided by the Air Force Major Commands on an annual basis. The report includes cost data, whether the facility is leased or owned, and the proposed future use or disposal plan for each facility.

As of the 2010 Annual Comprehensive Temporary Use Facilities Report, the Air Force is tracking 506 relocatable/temporary facilities. 62 facilities were removed or demolished in 2010. Of those, 52 were owned, 9 were leased, and 1 is a facility that has been re-leased to another customer in-place. The total costs reported in the 2010 report are $2.7 million for the owned facilities, with an average cost of $774,000; $1.3 million for the leased facilities, with an average cost of $140,000. There were no reported conversions to real property; however, 13 owned facilities that cost $13.8 million are identified for future conversion.

Information consolidated from 2006 through 2009 reveal that 126 temporary facilities have been removed or demolished. 84 were owned at cost of $2.1 million ($101,000 average), 41 were leased at a cost of $13.2 million ($306,000 average), 29 facilities that cost $4.0 million were converted to real property; all were owned, not leased prior to conversion. Although minor trends can be identified from year to year, the only overall general trend that can be inferred is an increase in the number of temporary facilities removed or demolished per year. The cost data, as collected, does not support any overall trends due to the widely varying type, size, and required length of service for each individual facility.

Dr. ROBYN. Senator?

Senator MCCASKILL. Yes.

Dr. ROBYN. Could I just add to your list of negatives about relocatables? They're real energy hogs.

Senator MCCASKILL. Yes. There's another good one. Energy hogs.

Let me, finally—the last question I have is for Secretary Yonkers about a phase IV of the dormitory complex in Qatar. It's my understanding that's rotational, and it's 4,900 rooms billeted for 6,200 folks, which means that the majority of the people will be in rooms by themselves. We have a number of airmen living in inadequate housing on a permanent basis that are unaccompanied, I need to hear from the Air Force about the policy to build housing to a 1+1 standard. Is this a change?

Mr. YONKERS. Madam Chairman, you are catching me really flat-footed on this one.

Senator MCCASKILL. Okay.

Mr. YONKERS. I'll take it for the record.

[The information referred to follows:]

The dormitory standard used in Qatar is the U.S. Central Command (CENTCOM) standard—that is, rotational forces are billeted at a 2+2 density and permanent party forces are billeted at 1+1. The total room requirement is based on enduring steady state requirements, post Operations Enduring Freedom and New Dawn. The planning factor is 2+2 configuration for 3,000 rotational personnel, 1+1 configuration for 3,000 steady state permanent party personnel, and 1+0 for commanders and chiefs. During the current contingency surge, many rooms are occupied 2+2.

It is important to note that we validate the requirements at Al Udeid in the context of the long-term global posture dictated by the Commander, CENTCOM, while noting that the Air Force has conducted continuous operations in this region since the Gulf War in 1990/1991. So while we use the term rotational above, in reflection of the nature of the Air Expeditionary Task Forces (AETFs) that deploy to Al Udeid, we build support facilities for these AETFs with as much flexibility as possible. The Air Force has been deploying to the Mideast, and to Al Udeid in particular, for a very long time, and throughout that history we have surged many times in response to regional challenges. The key flexibility inherent in the 4,900-room Blatchford-Preston Complex is the variety of room configurations pointed out in your question. The 4,900 rooms support the global long-term posture of 6,200 Air Force personnel and negate the need for costly continual recapitalization of temporary facilities. Those same 4,900 rooms also allow the Air Force to quickly surge to different room configurations handling ever larger number of personnel—very easily the Air Force could increase the number of personnel housed in a 2+2 configuration from the 3,000 above and increasing the overall occupancy in the complex significantly. This flexibility enables much more rapid response to the ever shifting strategic environment.

Bottom line—we're building long-term facilities based on the mandated global posture . . . but we are ensuring the room sizes and infrastructure provided are as flexible as they can be.

Senator MCCASKILL. That's great.

Mr. YONKERS. But one-plus-one is sort of the standard for the Air Force. I do not know how that works out over in Qatar.

Senator MCCASKILL. Okay. If you would get back to us on that, that would be terrific.

I have a lot of other questions here. We will ask them for the record. I think the staff gave me a lot of choices here, and they all looked good to me, along with some that I added myself.

I must admit that I am—the temporary-building thing had my attention very early in my career on this committee, and it has kept my attention, because I think it's symbolic of some of the issues that we have to address as we try to shrink the amount of

money we spend, but not the quality of the military that we are putting on the field.

I want to certainly give both our Senators here another opportunity to question, if you have anything else.

Senator AYOTTE. No, thank you, Madam Chairman.

I would just add that I have a whole host of questions that I'm going to submit for the record, as well.

So, I appreciate what all of you are doing, and your responses. Thank you.

Senator MCCASKILL. The final thing I will say is that, as you all probably know, I have never participated in the earmarking process. As chairman of this subcommittee, I know that the entire Congress has adopted that position, for now. I don't know how long it will last. Maybe we've turned a corner. I'm hopeful, but we might not have. There are all kinds of assumptions that are made. Sometimes there have been budgets that have been submitted, knowing that there were going to be certain earmarks that were going to be added, and therefore, there was no reason for DOD to put it in the budget. Everyone was confident that that would get marked on as a plus-up or an add-on to the military's budget. Of course, we cut things to find room for earmarks in the Defense authorization bill and other places in Congress.

So, we're going to still try to do what we've done in the past, and that is, find savings. It will be my goal that those savings go back to the Treasury. But, I did want to at least notify everyone that, as long as I have the honor of chairing this subcommittee, this subcommittee will not be turning in an earmarked document to the full committee.

Dr. ROBYN. Could I say—first of all, thank you very much. I think all of us are really excited about working with you in this new environment.

I want to say something that hasn't come up. I think we all are also sometimes surprised at how expensive it is to do things, how much we have to spend to—on this—in this part of DOD. But, this is—we're—this is the part of DOD that, in many parts of it, can run more like a business. Jackie and I are economists; we are continually surprised at DOD's lack of use of the leverage of the broader commercial economy. The single most significant thing I think we've done in this area is to privatize family housing. The service is chronically underinvested in it. We had 200,000 units of inadequate private family housing. We privatized it, immediately changed the incentives, and it's a tremendous success story—$3 billion of investment by DOD, $30 billion worth of private housing, with the owners having the incentive to maintain it.

So, with your help, we want to do more of that kind of thing. When you do competitive outsourcing, which we can no longer do, you create losers. So with your help, I think we can do this. But, I think it requires more competition, more outsourcing, more privatization. I think this is the climate in which to take advantage of that. But, it does require your help.

Thank you.

Senator MCCASKILL. I think maybe we could start with the data centers.

Thank you all for being here today. We'll look forward to working with you throughout the year.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CLAIRE MCCASKILL

LANDSTUHL REGIONAL MEDICAL CENTER REPLACEMENT

1. Senator MCCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, this year's budget request contains the first increment of funding for a hospital at Rhine Ordinance Barracks to replace Landstuhl Regional Medical Center. The project would be authorized at $1.196 billion. According to the justification documents the Department of Defense (DOD) has provided, this facility will provide direct medical services to 31,000 enrolled beneficiaries and be the contingency casualty evacuation location for U.S. European Command (EUCOM), U.S. Central Command (CENTCOM), and U.S. Africa Command (AFRICOM). I understand our desire to build our medical facilities to a world-class standard, but do we really need a $1.2 billion hospital?

Dr. ROBYN. This project consolidates Landstuhl and Ramstein medical capabilities into one convenient location 8 miles closer to Ramstein Air Base in the Kaiserslautern community. This location reduces wounded warrior casualty transit times to medical care from as much as 45 minutes across public roads to less than 5 minutes on DOD controlled roads.

The size and cost of the Kaiserslautern replacement medical facility is the minimum necessary to meet peacetime requirements while allowing the flexibility to meet contingency surge demands. In addition to the 31,000 beneficiaries supported in the immediate Kaiserslautern Military Community, this facility serves a catchment population (within a 55-mile radius) of 73,000 beneficiaries, and specialty medical referrals coming from another 172,000 beneficiaries located across EUCOM.

The facility will comply with world-class standards and evidence-based design principles. The hospital's size and cost are consistent with newly constructed peer facilities with similar patient loads and requirements. The facility will include built-in capabilities to meet its peacetime beneficiary demands and smoothly transition to address contingency operations when necessary.

The replacement project included in the fiscal year 2012 President's budget is a cost-effective solution to the challenges and risks facing our servicemembers and their families. The sizeable peacetime beneficiary population that would rely on this facility will fully utilize its capabilities and capacity.

Ms. HAMMACK. A military medical facility in the Kaiserslautern area is a strategic national asset that is precisely placed to meet the expectations of our citizens to provide the highest quality healthcare for their sons, daughters, and spouses. This recapitalized medical center will be perfectly located at the premier airbase supporting three theaters, a catchment population (within a 55-mile radius) of 73,000 beneficiaries, and specialty medical referrals coming from another 172,000 beneficiaries located in the EUCOM area.

The current facilities, created from 1950-vintage buildings, have served us well but are now in failing condition and unable to meet the demands of modern medicine. We clearly need to replace our military healthcare facilities in the Kaiserslautern Area. This project consolidates Landstuhl and Ramstein medical requirements into one location 8 miles closer to Ramstein Air Base. This location reduces wounded warrior casualty transit times to medical care from as much as 45 minutes across public roads to less than 5 minutes on DOD controlled roads. The new medical facility will continue to provide a critical, enduring platform for maintaining the ready medical force that is essential to delivering the highest possible quality of care to our military worldwide.

The size and cost of the Kaiserslautern replacement medical facility is the minimum necessary to meet peacetime requirements while allowing the flexibility to meet contingency surge demands. The facility will comply with world-class standards and evidence-based design principles. The hospital's size and cost are consistent with newly constructed peer facilities with similar patient loads and requirements. The facility will include built-in capabilities to meet its peacetime beneficiary demands and smoothly transition to address contingency operations when necessary.

The replacement project included in the fiscal year 2012 President's budget is a cost-effective solution to the challenges and risks facing our servicemembers and their families.

Ms. PFANNENSTIEL. The Department of the Navy (DON) is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. A military medical facility in the Kaiserslautern area is a strategic national asset that is precisely placed to meet the expectations of our citizens to provide the highest quality healthcare for their sons, daughters, and spouses. This recapitalized medical center will be perfectly located at the premier airbase supporting 3 theaters, a catchment population (within a 55-mile radius) of 73,000 beneficiaries, and specialty medical referrals coming from another 172,000 beneficiaries located in the EUCOM area.

The current facilities, created from 1950-vintage buildings, have served us well but are now too antiquated and inefficient to meet the demands of modern medicine. We clearly need to replace our military healthcare facilities in the Kaiserslautern Area. This project consolidates Landstuhl and Ramstein medical capabilities into one convenient location 8 miles closer to Ramstein Air Base. This location reduces wounded warrior casualty transit times to medical care from as much as 45 minutes across public roads to less than 5 minutes on DOD controlled roads. The new medical facility will continue to provide a critical, enduring platform for maintaining the ready medical force that is essential to delivering the highest possible quality of care to our military worldwide.

The size and cost of the Kaiserslautern replacement medical facility is the minimum necessary to meet peacetime requirements while allowing the flexibility to meet contingency surge demands. The facility will comply with world-class standards and evidence-based design principles. The hospital's size and cost are consistent with newly constructed peer facilities with similar patient loads and requirements. The facility will include built-in capabilities to meet its peacetime beneficiary demands and smoothly transition to address contingency operations when necessary.

The replacement project included in the fiscal year 2012 President's budget is a cost-effective solution to the challenges and risks facing our servicemembers and their families. The sizeable peacetime beneficiary population that would rely on this facility will fully utilize its capabilities and capacity.

2. Senator MCCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, is this hospital properly sized for the population it will serve with a capacity to surge during contingency operations, or is it sized to include its surge requirements as part of its base standard?

Dr. ROBYN. The hospital replacement project included in the fiscal year 2012 President's budget is sized to serve the peacetime beneficiary population with the built-in ability for a limited expansion to address surge from medium intensity conflicts similar to the current Overseas Contingency Operations.

For example, 50 of the larger medical/surgical single patient rooms incorporate additional headwalls (electrical, medical gases, plumbing) to allow these rooms to be readily converted from single to dual patient use during a contingency surge. This approach provides a cost-effective, rapid expansion capability to address emergency surge requirements without the need to build a stand-alone surge ward.

Ms. HAMMACK. The Department has right sized the Kaiserslautern replacement medical facility to ensure that it is a cost effective, flexible solution that meets both peacetime beneficiary and warfighter needs. The hospital has been sized as a result of a careful analysis of the peacetime patient workload; detailed assessment of the new facility mission, beneficiaries, and contingency demands; and consideration of clinical practice changes and world-class principals that provide the best clinical outcomes for costs incurred.

The hospital project is scoped to meet requirements of the peacetime population it will serve. The hospital will include 122 inpatient beds that will address the peacetime demand, including an increase in the number of behavioral health beds to accommodate the increased workload in this clinical area. The hospital will include 198 exam rooms to meet DOD's standard of 2 exam rooms for each full-time clinical staff equivalent that will provide outpatient care in the consolidated facility. These capacities are slightly less than the current capacities of 136 inpatient beds and 205 exams rooms.

The hospital design provides flexibility to meet surge requirements. For example, 50 of the larger medical/surgical single patient rooms incorporate additional headwalls (electrical, medical gases, plumbing) to allow these rooms to be readily converted from single to dual patient use during a contingency surge. This approach provides a cost-effective, rapid expansion capability to address emergency surge requirements without the need to build a stand-alone surge ward.

The replacement project included in the fiscal year 2012 President's budget is sized to serve the peacetime beneficiary population with the built-in ability for a limited expansion to address surge from medium intensity conflicts similar to the current Overseas Contingency Operations.

Ms. PFANNENSTIEL. DON is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. The Kaiserslautern replacement medical facility project included in the fiscal year 2012 President's budget is sized to serve the peacetime beneficiary population with the built-in ability for a limited expansion to address surge from medium intensity conflicts similar to the current Overseas Contingency Operations.

The Department has right-sized the new facility to ensure that it is a cost-effective, flexible solution that meets both peacetime beneficiary and warfighter needs. The hospital has been sized as a result of a careful analysis of the peacetime patient workload; detailed assessment of the new facility mission, beneficiaries, and contingency demands; and consideration of clinical practice changes and world-class principles that provide the best clinical outcomes for costs incurred.

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OKINAWA/GUAM—FUTENMA REPLACEMENT FACILITY

3. Senator MCCASKILL. Secretary Pfannenstiel, there has been a consistent linkage between construction of the Futenma Replacement Facility (FRF) and the marines moving from Okinawa to Guam. The marines will not begin moving until tangible progress has been made on the FRF. DOD has consistently defined tangible progress on the FRF as a signature by the Governor of Okinawa on a landfill permit needed to begin work on the runway. Does DOD still consider tangible progress to be the Governor of Okinawa's signature on the landfill permit?

Ms. PFANNENSTIEL. We see tangible progress on the FRF, not as a single specific event, but rather as a series of steps taken roughly in parallel between Japan and the United States, as spelled out in our bilateral understandings on the realignment. As the Government of Japan makes progress on the FRF, the United States will take associated steps to move forward on Guam. There are a number of different indicators of this progress, starting with the decision on the runway configuration that we expect at the upcoming two-plus-two meeting with Japan, the issuance of the landfill permit, the construction of the sea wall, and progress on the landfill itself.

An essential point of our realignment understanding with Japan is that preparations for facilities on Guam need to begin well in advance of the actual construction of the replacement facility at Camp Schwab. It is necessary to ensure that when we are satisfied with the progress Japan has made on the FRF, suitable facilities will be available on Guam to allow the phased relocation of marines from Okinawa, such that any relocation can be sequenced to maintain unit cohesion and operational readiness.

4. Senator MCCASKILL. Secretary Pfannenstiel, in a best-case scenario, what is the time line for signature on the landfill permit?

Ms. PFANNENSTIEL. It is my understanding that there may be a requirement for the Government of Japan to conduct some additional environmental analysis after a decision on the runway configuration for the FRF. We are encouraging the Government of Japan to take necessary steps to expedite the required environmental assessment work as soon as possible after the decision is made and to begin necessary political consultations so that they can gain the approval of the Okinawa governor for the landfill permit. This is a timeline that is ultimately worked out between those two parties.

BRIGADE COMBAT TEAMS IN EUROPE

5. Senator MCCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, with the end of the Cold War, we have seen a significant drawdown of U.S. forces in Europe. From a high point of approximately 331,000 in 1980 to approximately 116,200 in 1999, we now have some 79,000 troops stationed in Europe, the bulk of which are in Germany, 53,900. From fiscal years 2004 to 2009, the Army spent approximately $1.3 billion to implement its infrastructure transformation and consolidation plans in Europe, the vast majority of which consisted of military construction (MILCON), $957.0 million.

We were informed that on March 17, 2011, DOD would likely announce how many Brigade Combat Teams (BCT) it plans to base in EUCOM. DOD has informed this committee that the cumulative cost of having some of those BCTs in the United States versus keeping them in Europe is a wash over fiscal years 2012 to 2021. A September 2010 Government Accountability Office (GAO) study, however, found that the cumulative savings from redeploying two BCTs to the United States would be between $1 and $2 billion in incremental costs from fiscal years 2012 to 2021 assuming no rotational costs. Can you please explain this discrepancy?

Dr. ROBYN. Over time the Army has improved the original cost estimates by gathering more detailed information and costing data. The cost estimates reflected in the GAO Report on Defense Planning reflect return dates of fiscal year 2012 for the 170th BCT and fiscal year 2013 for the 172nd BCT. The Army cost estimates represent a more detailed analysis of the cost drivers for European Transformation than previously addressed. As stated in the analysis and the report, it is more expensive to operate outside of the United States due to increased base operations costs and increased military personnel allowances. In addition, while the GAO Report assumed no rotational costs, subsequent DOD analysis considered the cost of rotational forces that might be necessary to meet EUCOM Commander's requested theater mission requirements. Generally, rotating forces to meet overseas mission requirements off-sets savings derived from having brought those forward deployed forces back to CONUS.

The Secretary of Defense announced in January 2011 that no action will occur until fiscal year 2015; the projected cost savings will be reduced during the 2012–2021 period as a result of the shifting timeline.

Ms. HAMMACK. Over time the Army has improved the original cost estimates by gathering more detailed information and costing data. The cost estimates reflected in the GAO Report on Defense Planning reflect return dates of fiscal year 2012 for the 170th BCT and fiscal year 2013 for the 172nd BCT. The cost estimates reflected in the report represent a more detailed analysis of the cost drivers for European Transformation than previously addressed. As stated in the analysis and the report, it is more expensive to operate outside of the United States due to increased base operations costs; increased military personnel allowances; and students costs. The $2 billion cost over a 10-year period does not include the funding of rotational forces to meet EUCOM Commander's requested theater mission requirements. To date, the Army has not been able to source rotational forces. The majority stateside cost driver remains the MILCON required to house returning units.

The Secretary of Defense announced in January 2011 that no action on BCTs in Europe will occur until fiscal year 2015; the projected cost savings will be reduced during the 2012–2021 period as a result of the shifting timeline.

Ms. PFANNENSTIEL. DON is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. This is an Army focused question and the response falls outside the expertise and portfolio of Air Force directorate of installations, environment, and logistics. Recommend question be forwarded to DOD or the Army.

6. Senator MCCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, if the ultimate decision is to leave three BCTs in Europe, will the fourth BCT be eliminated or will it be restationed in the United States?

Dr. ROBYN. DOD has not yet decided whether to eliminate this BCT or restation it. The Secretary directed a reduction in the Army's end-strength of approximately 27,000 soldiers beginning in 2015, when we anticipate a reduced strain on the force from our current operations. In light of this decision and the recent Secretary of Defense announcement to retain three BCTs in Europe beginning in 2015, the Army will conduct a thorough analysis over the next year to determine the overall makeup of the force. Stationing decisions will be addressed along with other force structure actions at the conclusion of this year's Total Army Analysis.

Ms. HAMMACK. The Secretary directed a reduction in the Army's end strength of approximately 27,000 soldiers beginning in 2015, when we anticipate a reduced

strain on the force from our current operations. In light of this decision and the recent Secretary of Defense announcement to retain three BCTs in Europe beginning in 2015, the Army will conduct a thorough analysis over the next year to determine the overall makeup of the force. Stationing decisions will be addressed along with other force structure actions at the conclusion of this year's Total Army Analysis.

Ms. PFANNENSTIEL. DON is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. This is an Army focused question and the response falls outside the expertise and portfolio of Air Force directorate of installations, environment, and logistics. Recommend question be forwarded to DOD or the Army.

7. Senator MCCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, what is the change in funding levels between DOD's original decision to leave two BCTs in Europe and the final decision on the number of BCTs remaining in Europe?

Dr. ROBYN. First, DOD will incur a cost increase of ~$568 million associated with retaining four brigades in Europe through fiscal year 2015 as the 170th BCT and the 172nd BCT were scheduled to return in fiscal year 2012 and fiscal year 2013, respectively. This increase is mostly associated with military pay allowances, base operations, and schools. Second, DOD will realize long-term cost savings of ~$60 million annually associated with retaining three brigades in Europe, compared to ~$162 million in annual cost savings under the plan to leave two BCTs in Europe.

Ms. HAMMACK. In fiscal year 2012, Army is funded to retain the two BCTs in Europe. There are no MILCON dollars in the current program associated with the two BCTs. DOD will incur increased costs associated with retaining four brigades in Europe through fiscal year 2015 as the 170th BCT and the 172nd BCT were scheduled to return in fiscal year 2012 and fiscal year 2013, respectively. Increases in costs are mostly associated with military pay allowances, base operations, and schools. A decision to maintain three BCTs in Europe as a desired end-state will be less costly than the current four BCTs.

Ms. PFANNENSTIEL. DON is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. This is an Army focused question and the response falls outside the expertise and portfolio of Air Force directorate of installations, environment, and logistics. Recommend question be forwarded to DOD or the Army.

8. Senator MCCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, how much has it cost us to postpone this decision for so long?

Dr. ROBYN. DOD will incur a cost increase of ~$568 million associated with retaining four brigades in Europe through fiscal year 2015 as the 170th BCT and the 172nd BCT were scheduled to return in fiscal year 2012 and fiscal year 2013, respectively.

Ms. HAMMACK. It will cost the Department an additional ~$138 million/year for fiscal year 2014–2015 to retain the fourth brigade in Germany. This amount does not consider any required overseas or stateside MILCON and is not offset by the cost of rotating forces to Germany.

Ms. PFANNENSTIEL. DON is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. This is an Army focused question and the response falls outside the expertise and portfolio of Air Force directorate of installations, environment, and logistics. Recommend question be forwarded to DOD or the Army.

MAYPORT

9. Senator MCCASKILL. Secretary Pfannenstiel, the Navy recently announced its intention to homeport a nuclear powered aircraft carrier in Mayport. The Future Years Defense Plan (FYDP) contains $412.6 million in MILCON funds to make this move happen. The first significant project, $14.998 million for road improvements, is contained in this year's budget request. In these resource-constrained times, can you explain to me why the Navy intends to spend $412.6 million to homeport an aircraft carrier in Florida?

Ms. PFANNENSTIEL. Strategic dispersal of aircraft carriers increases our operational flexibility and mitigates the risk posed by manmade or natural disasters to these forces and our critical nuclear training and maintenance infrastructure. West Coast carriers are dispersed among three CONUS and one Forward Deployed Naval Force homeports. Carrier maintenance and repair infrastructure exists in two West

Coast locations. The East Coast carriers are not currently dispersed; all East Coast carriers and support infrastructure are consolidated within a 15-mile radius in the Hampton Roads area, placing them at strategic risk.

The decision to upgrade Naval Station Mayport's operational, maintenance, and support facilities to homeport a nuclear-powered aircraft carrier will mitigate risk and ensure the Navy can meet its national defense obligations should Navy operations in Hampton Roads be disrupted. The Navy's budget submission includes $489 million in fiscal years 2010–2016 for the projects necessary to homeport a carrier in Mayport and represents the best balance of funding amongst all the Navy's priorities.

AL UDEID AIR BASE, QATAR

10. Senator MCCASKILL. Secretary Yonkers, this year's budget request contains $37.0 million for phase four of the Blatchford-Preston dormitory complex at Al Udeid Air Base, Qatar. It is my understanding that this base is an enduring forward operating site (FOS). This means that all troops are stationed at Al Udeid on a rotational basis.

It is my understanding that the stated Air Force requirement is for 25 dormitories containing 4,900 rooms with billeting for 6,200 personnel. I assume this means that a majority of personnel will be put in rooms by themselves, a 1+1 standard. Is it the Air Force's policy to build housing to a 1+1 standard for rotational forces?

Mr. YONKERS. The dormitory standard used in Qatar is the CENTCOM standard—that is, rotational forces are billeted at a 2+2 density and permanent party forces are billeted at 1+1. The total room requirement is based on enduring steady state requirements, post Operations Enduring Freedom and New Dawn. The planning factor is 2+2 configuration for 3,000 rotational personnel, 1+1 configuration for 3,000 steady state permanent party personnel, and 1+0 for commanders and chiefs. During the current contingency surge, many rooms are occupied 2+2.

It is important to note that we validate the requirements at Al Udeid in the context of the long-term global posture dictated by the Commander, CENTCOM, while noting that the Air Force has conducted continuous operations in this region since the Gulf War in 1990/1991. So while we use the term rotational above, in reflection of the nature of the Air Expeditionary Task Forces that deploy to Al Udeid, we build support facilities for these AETFs with as much flexibility as possible. The Air Force has been deploying to the Mideast, and to Al Udeid in particular, for a very long time, and throughout that history we have surged many times in response to regional challenges. The key flexibility inherent in the 4,900-room Blatchford-Preston Complex is the variety of room configurations pointed out in your question. The 4,900 rooms support the global long-term posture of 6,200 Air Force personnel and negate the need for costly continual recapitalization of temporary facilities. Those same 4,900 rooms also allow the Air Force to quickly surge to different room configurations handling ever larger number of personnel—very easily the Air Force could increase the number of personnel housed in a 2+2 configuration from the 3,000 above and increasing the overall occupancy in the complex significantly. This flexibility enables much more rapid response to the ever shifting strategic environment.

Bottom line—we're building long-term facilities based on the mandated global posture.but we are ensuring that the rooms sizes and infrastructure provided are as flexible as they can be.

AIR FORCE NUCLEAR ENTERPRISE

11. Senator MCCASKILL. Secretary Yonkers, in your testimony on the Air Force's nuclear mission you mention that "Air Force engineers have conducted enterprise-wide facility assessments and understand that a significant portion of the existing infrastructure will require modernization or complete replacement in the years ahead." Indeed, the first tranche of money, $75.6 million, is included in the fiscal year 2012 budget request. Can you please provide a list of projects necessary to complete this significant modernization and replacement of facilities needed to support this mission?

Mr. YONKERS. As stated in my testimony, the Air Force has recently completed three enterprise-wide assessments of facilities supporting the nuclear enterprise. These included a Weapons Storage Area (WSA) Assessment, a Nuclear Related Facilities (NRF) Assessment Report (everything that is not a WSA, launch facility or missile alert facility) and also the Life Extension Assessment Program to evaluate Launch Control facilities. We are currently analyzing the issues presented in that

data to identify, plan and program the facility solutions that best meet the mission needs, i.e. is it better to repair/upgrade a certain facility or to replace it with a new facility. This analysis and resultant prioritization of projects will form the basis for a list of requirements that will be appropriately resourced in the future by the Air Force. It is important to note that many of the solutions will be SRM funded and therefore will not be identified individually in our FYDP.

To clarify, the $75.6 million in fiscal year 2012 MILCON (four projects) supports the Nuclear Enterprise, but only the fiscal year 2012 WSA Security Control facility at Whiteman AFB, MO supports the recapitalization of existing nuclear infrastructure. The remaining three fiscal year 2012 projects support the B–52 Beddown at Minot AFB, ND and the AF Nuclear Weapons Center at Kirtland AFB, NM.

12. Senator MCCASKILL. Secretary Yonkers, how many of these requirements are planned in the current FYDP?

Mr. YONKERS. None of the requirements resulting from the facility assessments are included in the current FYDP as these requirements were not indentified prior to the development of fiscal year 2012–2016 FYPD. We have just completed the first phase of the Nuclear Enterprise-wide facility assessments. This phase has identified the facilities deficiency such as condition, safety, security, reliability, etc. The next phase will provide a road map to fix these deficiencies. We are in the process of developing a prioritized list of facilities needed to upgrade the current deficiencies. This phase will identify MILCON and O&M requirements, funding, and year of execution. We plan to develop and indentify these requirements during the development of fiscal year 2013–2017 POM and will provide you the list of the MILCON projects at that time.

HIGH PERFORMANCE COMPUTING CENTER

13. Senator MCCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, the President's budget request authorization to begin building a High Performance Computing Center at Fort Meade, MD, at a total cost of $860.6 million. It is my understanding that DOD is building a similar facility in Utah at a cost of more than $1.5 billion. In fact, the budget requests $246.4 million this year for that facility and next year's request is expected to be $175.2 million. While I don't question the need for computing power or data centers, what I question is the cost. What lessons have been learned about controlling costs from the recent experience in Utah and from experience of the private sector, which builds similarly large, expensive data centers itself?

Dr. ROBYN. The Utah Data Center (UDC) and the High Performance Computing Center (HPCC) are not as similar as they first appear. The primary difference between the UDC and the HPCC is the reliability requirements of each facility. The UDC is a Tier III (concurrently maintainable) facility with full backup generation capability across the entire campus, which allows it to operate independent of commercial utility power. The HPCC will only have minimal backup generation capabilities. The HPCC will be a high power density facility that will not be comparable to the civilian sector's current building approach for data centers. In addition, this facility is not just a repository for data, but the vast majority of the equipment will be used for data processing.

The lessons learned from the UDC are minimal in nature at this time since it is still under construction. What we have learned relates mainly to the acquisition and design processes, but we have also incorporated lessons from other recent major construction projects for the National Security Agency/Central Security Service (NSA/CSS).

Lessons learned from the acquisition process include partnering immediately with the U.S. Army Corps of Engineers (USACE) (NSA/CSS's Construction Agent) to identify the key tasks where senior leadership can assist in accelerating the lengthy approval processes and allow the team to run tasks in parallel. By doing this, NSA reduced a normal 2-year acquisition effort down to 18 months. NSA and USACE also determined that by conducting a two-step acquisition process, they were able to better focus the competition to only the most qualified contractors thereby streamlining the source selection review period.

NSA was also able bring lessons learned into the design process. They found that by fully defining requirements early they could avoid scope creep during the design process. The also ensured there was quick response to contractor requests for information (RFI) and advocated for open dialogue between technical counterparts to speed up the design timeline.

Ms. HAMMACK. The Army is not the Executive Agent for these MILCON projects and holds no equity. The Army's Data Center Consolidation Plan focuses primarily on consolidating data centers to existing Defense Enterprise Computing Centers (DECCs) operated by the Defense Information Systems Agency (DISA).

Note: NSA as the Executive Agent has also provided an answer.

Ms. PFANNENSTIEL. DON is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. This question and the response falls outside the expertise and portfolio of Air Force directorate of installations, environment, and logistics. Recommend question be forwarded to DOD.

14. Senator MCCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, how have we incorporated these lessons learned into the design of these facilities?

Dr. ROBYN. The lessons learned allowed us to utilize a Design/Build fast-track process for the design of the Utah Data Center (UDC). Instead of the traditional process of obtaining complete construction drawings at the 35 percent, 65 percent, and 100 percent levels, this process breaks the design into smaller and more manageable packages allowing them to be reviewed and approved to start construction much sooner.

The Department is still in the early stages of planning for the HPCC and has not yet begun the design process, but discussions continue between the NSA and the U.S. Army Corps of Engineers to capitalize on lessons learned from previous construction projects.

Ms. HAMMACK. While the Army Data Center Consolidation Plan (ADCCP) does not include building more data centers, the Army did consult with industry and conduct an internal Base Realignment and Closure (BRAC) audit to capture lessons learned during consolidation. Key lessons incorporated in the ADCCP include centrally managing consolidation and eliminating redundant or legacy applications prior to consolidation.

Note: NSA as the Executive Agent has also provided an answer.

Ms. PFANNENSTIEL. DON is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. This question and the response falls outside the expertise and portfolio of Air Force directorate of installations, environment, and logistics. Recommend question be forwarded to DOD.

15. Senator MCCASKILL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, I know that we have some of the government's most sensitive information stored in commercial facilities, so security cannot be the sole reason for providing this capability in government-owned and -operated facilities. Have you conducted rigorous analyses to see how we could provide these services more efficiently through government-owned and -operated facilities or by relying on the private sector?

Dr. ROBYN. Yes. The NSA's unique requirement for very high power density equipment disqualified the High Performance Computing Center facilities from lease consideration under Office of Management and Budget Circular A–11. Therefore, only government-owned sites were considered as possible locations for these facilities. A comprehensive study was conducted in 2010 to determine the final government-owned location.

Ms. HAMMACK. The Army's decision to consolidate primarily to DECCs resulted from consultation with both industry and the DISA. In addition to providing the mandatory security environment, DISA DECCs enable interoperability across the DOD, efficient use of server and data storage, and built-in continuity of operations capabilities.

Note: NSA as the Executive Agent has also provided an answer.

Ms. PFANNENSTIEL. DON is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. Response falls outside the expertise and portfolio of directorate of installations, environment, and logistics. Recommend question be forwarded to DOD.

KANSAS CITY IT CENTER

16. Senator MCCASKILL. Secretary Pfannenstiel, I would like to highlight an issue of importance today for Missouri and Kansas. As you may know, the Marine Corps is considering relocating the Kansas City IT Center (KCITC) to another location out-

side of the region – and that location could require an entirely new building and potential personnel relocation. I am concerned that we could be spending our Federal dollars twice for this possible move. Further, it strikes me as an area for potential waste and duplication because even as this move is being considered, the Marine Corps continues to invest dollars in the KCITC by implementing several key IT and support programs in Kansas City and expanding the Kansas City workforce. While the Missouri and Kansas congressional delegations have expressed concerns about this issue to the Commandant of the Marine Corps in a letter on February 17, 2011, I continue to feel that we don't have adequate information from the Marine Corps to know what factors are going into this decision. How much does the Marine Corps anticipate a new building will cost?

Ms. PFANNENSTIEL. We share the concerns regarding the budgetary and fiscal challenges confronting the Department and are committed to ensuring the responsible stewardship of the taxpayers' funds. We are working to provide all the information that the Missouri and Kansas congressional delegations have requested.

The Marine Corps is reviewing a number of locations for an IT Center. A decision on whether or not to relocate the information technology organizations will be made in the spring 2012.

17. Senator MCCASKILL. Secretary Pfannenstiel, how much will it cost to move workers and equipment to a new location?

Ms. PFANNENSTIEL. The Marine Corps is conducting a risk analysis on the cost of moving to a different location that includes both equipment and personnel.

18. Senator MCCASKILL. Secretary Pfannenstiel, will you have to duplicate the new technology at the KCITC at the new location or will you be able to transfer that technology?

Ms. PFANNENSTIEL. The Marine Corps will make every effort to transfer technology or time any move to coincide with a planned technology refresh cycle in order to limit any duplicate spending.

19. Senator MCCASKILL. Secretary Pfannenstiel, if technology needs to be duplicated at a new site, what is the estimated cost?

Ms. PFANNENSTIEL. The Marine Corps is conducting a risk analysis on the cost of moving to a different location that includes both equipment and personnel.

20. Senator MCCASKILL. Secretary Pfannenstiel, are these factors in your consideration whether to move?

Ms. PFANNENSTIEL. It is uncertain at this time whether the current building, owned by the General Services Administration, is suitable as a permanent solution. We have learned that the building, while having good potential as a permanent facility, does have some potential environmental and safety issues. It is equally important to maintain a qualified information technology staff for all our programs now and into the future. Other factors we are considering are the facility cost, workforce relocation, transition costs, and suitability of a facility to meet information technology security and force protection requirements. We welcome any additional input you may have for this important decision.

21. Senator MCCASKILL. Secretary Pfannenstiel, conversely, how much will it cost you to stay in Kansas City?

Ms. PFANNENSTIEL. We are reviewing all costs and are conducting further analysis in order to support a decision from Marine Corps leadership.

22. Senator MCCASKILL. Secretary Pfannenstiel, when will the Marine Corps sit down with all stakeholders and provide baseline information about the status of this decision and key cost considerations?

Ms. PFANNENSTIEL. The Marine Corps will continue to keep all stakeholders involved in this process and provide information as necessary, including key considerations in making the final decision. Again, we welcome any additional input you may have for this important decision.

23. Senator MCCASKILL. Secretary Pfannenstiel, bottom line, can the Marine Corps ensure that this plan is not going to lead to essentially duplicative Federal funding during these economically tight times? If so, how?

Ms. PFANNENSTIEL. The Marine Corps is committed to ensuring that there is no duplicative funding associated with any potential move. The Marine Corps would phase any possible move order to mitigate any workforce, funding and capability gaps.

QUESTIONS SUBMITTED BY SENATOR MARK UDALL

DEFENSE ENVIRONMENTAL PROTECTION INITIATIVES

24. Senator UDALL. Dr. Robyn, encroachment on our military installations and ranges has been and continues to be a concern for our military and for me. Our testing and training footprint for new weapon systems continues to increase. As troops returning from Iraq and Afghanistan begin the training reset they will require more land. For the Air Force, new aircraft like the F–35 may require a wider noise abatement zone around airfields. As BRAC 2005 is fully implemented, the pressure on our bases and ranges will increase. How important are programs like the Readiness and Environmental Protection Initiative (REPI) in protecting our bases and ranges now and into the future?

Dr. ROBYN. Since its first year of funding in 2005, the REPI has been a critical part of the Department's comprehensive Sustainable Ranges Initiative to protect and sustain the military operational footprint. Under REPI, we can ensure that our ability to test and train is protected through cost-share partnerships outside of our boundaries, rather than having to shrink our operational footprint within the controlled space of our fence lines. The leveraged nature of REPI allows DOD funds to be pooled with funds from our partners to accomplish more with less. Since fiscal year 2005, REPI has protected over 174,000 acres of buffer land in 59 locations in 23 States. DOD's $202.5 million investment has attracted over $261 million in partner contributions to protect the DOD mission from encroachment.

Immediate proactive and protective REPI investments help avoid other more expensive costs, such as the need for training workarounds and higher future military expenses. The $100 million appropriated for REPI in fiscal year 2011 will allow acceleration of ongoing efforts to more effectively integrate REPI with other private, State and local government, and Federal agency programs and resources at landscape scales—the scale needed to fully address the long range protection of the DOD mission.

25. Senator UDALL. Dr. Robyn, what are your plans for establishing buffer zones around military installations to prevent further encroachment?

Dr. ROBYN. The Department is committed to protecting and sustaining the operational mission footprint required to maintain a trained and ready force. The REPI is a highly effective and cost-efficient tool to help us meet that commitment.

Today, we are using REPI to work with more than 80 partners to protect readiness at 59 key installations and ranges in 23 States. Significant opportunity now exists to maximize the benefits of REPI due to current real estate market conditions, increasing numbers of willing sellers and emerging landscape-scale conservation initiatives benefitting key DOD installations. Going forward, we will continue to support and expand these partnerships and work closely with operators and commanders to be sure that we employ the REPI program in ways that deliver the maximum readiness benefit in the most economically efficient manner.

Acquisition of these conservation buffers are often made in response to recommendations from a Joint Land Use Study. The Joint Land Use Studies (JLUS) program allows us to collaborate with communities near our installations to promote compatible zoning and development plans.

DEFENSE ENERGY INITIATIVES

26. Senator UDALL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, DOD has established ambitious goals relating to energy efficiency. Where are you now relative to achieving those goals? If you are not fully on track as of today, what is needed to get you on or ahead of that track?

Dr. ROBYN. Although the Department is steadily improving its installation energy performance, we have failed to meet the energy intensity reduction [Energy Independence and Security Act of 2007] goal for the past 2 years. (Energy intensity is a measure of energy consumption per building square footage.) DOD reduced its energy intensity by 11.2 percent from 2005 to 2010, compared to the goal of 15 percent.

To get back on track towards achieving the efficiency goals, the Department is investing more to improve the energy profile of our fixed installations. Financing for these investments has come from annually appropriated funds, including MILCON, operations and maintenance, and the Energy Conservation Investment Program (ECIP). The Department will not, however, be able to close the gap solely through use of appropriated funds. We also plan to increase our use of third-party financing of energy conservation projects. This includes use of such vehicles as Energy Sav-

ings Performance Contracts (ESPCs) and Utility Energy Services Contracts (UESCs) which allow DOD to use private funding to finance energy conservation projects and pay for them through the accrued savings.

To increase the visibility of energy investments, the Department has created budget exhibits for the fiscal year 2013 budget process which will link funding to energy impact. This will allow the Department to better predict future energy performance to further improve energy efficiency.

Ms. HAMMACK. The Energy Independence and Security Act (EISA) of 2007 requires that all Federal agencies reduce their energy intensity from the fiscal year 2003 baseline by 3 percent per year between fiscal year 2006 and fiscal year 2015 (30 percent). In fiscal year 2010 Army energy intensity was 8.7 percent below its 2003 baseline vs. a goal of a 15 percent reduction. The Army is currently working on several initiatives to achieve this goal. First and foremost there is guidance, leadership and oversight over the energy program from the highest levels of the Army with unprecedented attention and priority given to energy during the budget process. The Army's Senior Energy and Sustainability Council (SESC), co-chaired by the Under Secretary of the Army and the Vice Chief of Staff of the Army, oversees the execution of our Army Energy Security Implementation Strategy (AESIS). It tracks progress on goals, tasks, and metrics and provides senior level visibility to Army energy efforts.

The Army has recently announced several new policies to standardize energy efficiency in Army operations. These include energy efficient lighting requirements, implementation of the highest building standards in the Federal Government and an Acquisition Policy requiring energy productivity to be a consideration in all Army Acquisition Programs. The Army is also working to improve its utilization of performance contracts and leverage other private investment to accelerate energy projects. Finally, on April 19, I will be announcing the selection of 5 pilot Net Zero energy installations for environmental analysis under the National Environmental Policy Act (NEPA). These 5 installations will be working towards Net Zero energy status. Through conservation, efficiency and renewable energy measures these installations will strive towards the goal of producing as much energy on site as they consume by 2020. This initiative will help to ensure that sustainable practices are instilled and managed throughout the appropriate levels of the Army, while also maximizing operational capability, resource availability and well-being

Ms. PFANNENSTIEL. We are on track to meet most of our energy goals. Throughout 2010 we demonstrated progress through an assortment of energy programs, partnerships, and initiatives.

DON has reduced our shore energy intensity, compared to a 2003 baseline, by 15.7 percent. This progress is towards a 2007 Energy Independence and Security Act goal mandating a 30 percent reduction in energy intensity by 2015. We have programmed funds in fiscal year 2012 to continue our progress towards meeting the fiscal year 2015 requirements.

Mr. YONKERS. The Air Force has an ambitious goal in place to reduce the energy intensity of its facilities by 3 percent per year to reach 30 percent of fiscal year 2003 levels by fiscal year 2015 and then 1.5 percent per year to reach 37.5 percent by fiscal year 2020. By continuing to focus investments on proven, high-return projects since 2005, the Air Force has reduced its energy intensity by nearly 15 percent. However, due to limited budgets and the fact that much of the "low hanging fruit"-projects may have already been addressed, the Air Force is concerned about meeting its energy intensity mandate beyond fiscal year 2012. Additionally, most investments require 2 years from contract award to realize measureable energy savings due to contract and construction lag time.

Currently, there are 447 energy and water conservation projects in progress from fiscal year 2010 funding. These energy conservation projects include all categories of work to make existing installation systems more efficient. And while the Air Force continues to advance energy independence through coordinated efforts aimed at minimizing energy costs and leveraging proven technology, the most important commitment is toward the Air Force energy goal to make smarter decisions and change the culture when it comes to energy.

27. Senator UDALL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, I'd like to discuss how to improve energy security for our military installations. True energy security for U.S. bases cannot be realized as long as the supply of electricity to key systems and operations would be disrupted if the larger energy supply and transmission grid were to be disrupted. What would be required in terms of programs, technologies, and resources to allow key systems and operations on our bases to continue to operate indefinitely on a 24/7 basis in the event of a disruption or failure of the broader commercial electrical power grid?

Dr. ROBYN. Our current security strategy is three-fold: (1) reduce demand, (2) expand supply, and (3) improve our energy resiliency.

The energy resiliency aspect of the strategy mitigates risk of grid failure, and, protects critical missions on fixed installations during peacetime and contingency operations. The DOD has not identified a 24/7/365 need for power as a general requirement. For most loads, it is an unnecessary level of assurance. Even for critical loads, a 24/7 power supply may only be needed for a finite period before the mission would transfer to an alternate site until the commercial grid is restored. Instead, the Defense Critical Infrastructure Program (DCIP) is developing a prioritized list of critical missions, their vulnerabilities, and recommended mitigations. The output of this program will be a set of requirements that will compete for resources in the Defense Planning Programming Budgeting and Execution process. DCIP is important in identifying Defense Critical Assets and prioritizing those assets for protection against electric grid vulnerabilities.

There also are DOD technology initiatives which could provide increased mission assurance at our installations. These include the Environmental Security Technology Certification Program (ESTCP) and DOD's smart microgrid initiatives. The ESTCP uses DOD facilities as test beds for innovative energy technologies, and allows the development, test and evaluation of technologies on DOD installations. DOD's smart microgrid initiatives include the Smart Power Infrastructure Demonstration for Energy Reliability and Security (SPIDERS) program, the Norfolk Case Study and the Twentynine Palms microgrid effort.

Ms. HAMMACK. I agree that one of the key security concerns for our installations is their dependence on an aging and outdated electric grid. To that end the Army has announced a Net Zero initiative that is a holistic approach to addressing energy, water, and waste at Army installations. On April 19th I will announce the selection of 16 pilot Net Zero Installations for environmental analysis under the NEPA. Five installations that will strive for Net Zero energy, five for Net Zero waste, five for Net Zero water, and at least one that will strive to be Net Zero in all three categories. A Net Zero energy facility would produce as much energy as it consumes on an annual basis, thereby greatly reducing its dependence on the electric grid. Our goal is to have an additional 25 installations strive to be Net Zero by 2030.

In addition to the Net Zero initiative the Army is also working on several projects at various installations that will have a significant impact on those installations dependence on the commercial transmission grid and prove technology that could be transferred to other facilities. At Fort Irwin, CA we are evaluating the environmental impacts of developing a 500MW solar electric generating facility that would produce more than enough energy to meet Fort Irwin's energy security needs. There are also several micro-grid projects in development on our facilities that will provide a more secure electric distribution system. One such project, called SPIDERS, at Fort Carson, CO which will demonstrate bi-directional power transfer or vehicle-to-grid (V2G) capable vehicles at U.S. installations. This is intended to provide ancillary grid services from the vehicle on-board batteries in the event of a power disruption. Finally, the Army is currently working to consolidate over 75 percent of its data centers over the next 5 years, which will result in significantly lower energy demands for data center operations and improve security of Army information assets.

Army efforts to reduce demand for energy through energy efficiency and conservation efforts, increase the use of renewable energy generated on base, and development of micro-grids will help to significantly reduce the threat of disruption from the commercial grid by decreasing the amount of energy from the grid needed to run our installations and in some cases operate completely independently of the grid.

Ms. PFANNENSTIEL. Senator Udall, DON has taken a number of steps to ensure continuity of supply to our critical facilities.

- First, our Mission Assurance Division of the Naval Surface Warfare Center conducts mission assurance assessments to DON and other DOD customers. The goals of these assessments is to identify external and internal to the base vulnerabilities to our utilities and energy systems. From these assessments we take the necessary steps to mitigate the threat.
- All our key systems and operations are equipped with emergency generators to provide electrical power for short timeframes (several days to week's duration).
- To relieve the base's emergency power system we have procedures for the ships in port to disconnect from shore power and operate using their own equipment.
- For longer periods of power disruption we deploy our Mobile Utilities Support Equipment to provide generation and substation capacity to the

critical loads. The MUSE program has over 140 MW of portable generation, ranging in size from 200 KW to 2500 KW. This equipment proved valuable in supplying power to critical loads following Hurricane Katrina, as well as after other major storms.

• Our installations are developing renewable energy projects on our bases and we are studying the use of micro-grids to allow all on base generation to operate effectively during a grid outage. To make renewable power effective for extended periods energy storage technology will need to be improved.

The steps I have identified above will enable us to support critical requirements in the case of most grid outages. Providing electric power indefinitely 24/7 will be more difficult and very costly. To accomplish this, the following actions will be needed:

• Improved energy storage capability to maximize use of solar and wind renewable resources which are intermittent

• Redundant and secure sources of fuel for on base generators. Liquid fuel should be a drop in bio-fuel. Where natural gas is available, dual fuel capability of boilers and generators should be considered

• Secure on-base energy distribution systems that can survive and continue to operate after a disaster

Mr. YONKERS. The Air Force is currently developing more explicit, actionable, quantifiable planning factors that can be used to both solve energy security challenges and help with investment decisions. Advanced energy independence for the Air Force is assured through coordinated efforts aimed at minimizing energy costs and leveraging proven technology in conservation measures and renewable energy development while assuring system reliability and critical asset security for critical Air Force missions. These efforts reduce dependence on commercial utility supply and delivery systems and enhance energy surety for the Air Force.

Using the existing Defense Critical Infrastructure asset identification methodology, the Air Force identifies mission critical assets (i.e. installations, facilities, or activities). Risk assessments identify specific electric power related vulnerabilities, including those associated with the reliability of supporting commercial electric power, the availability of back-up electric power supplies, and single points of failure. The Air Force recently established a Critical Infrastructure Program (CIP) Working Group at the Headquarters Air Force level to facilitate cross-functional awareness and understanding of risk assessment findings and to coordinate Higher Headquarter functional support in programming for remediation or mitigation of risks not addressed at the installation or major command levels. The Air Force also plans to use CIP results to influence resource allocation decisions at the corporate level and will begin to track mitigation and remediation projects through completion or adoption of other risk mitigation measures to ensure closure.

Energy Surety efforts were enhanced in fiscal year 2010 by striving to meet the Air Force goals that: (1) reduce demand through conservation and efficiency; and (2) increase supply through alternative energy sources. Facility energy reduction was 14.9 percent against the 2003 baseline. Furthermore, renewable energy accounted for 6.4 percent of the total energy consumed, beating the 5 percent goal.

The Air Force has partnered with Department of Energy (DOE) on energy security initiatives. In February 2010, the Air Force Civil Engineer adopted Sandia Labs Energy Surety Microgrid (ESM) concept as the definition of "smart grid" for our bases because it incorporates energy security and energy resiliency using a risk assessment methodology to identify secure and reliable power to support critical missions for extended duration, quantifies existing energy assets, assesses outage possibilities, and critical energy demand requirements, and quantifies infrastructure improvements for energy system performance and protection goals. They are performing ESM assessments at four Air Force bases: Maxwell, Kirtland, Schriever, and Vandenberg.

In 2010, the Air Force started to analyze the effects that utilities privatization may have on installation energy security and to assess backup power requirements for mission critical functions. The results of the study will be used to evaluate gaps in back-up power requirements, redundancy, resiliency, and both utility and base power grid vulnerabilities. One of the deliverables of the study will be an Energy Security checklist assessment tool that will be used at each base to provide an initial Energy Security "score" and a means to identify and optimize actions that can be accomplished to improve the installations' Energy Security posture. During 2011 Vulnerability Assessments, the Air Force will assess installation plans to mitigate the all-hazards impact from power interruptions, written contingency plans for power outages, and coordination procedures with local utility providers.

A DOD (including Army, Air Force, Navy, and Marine Corps) and DOE joint task force is examining the potential to establish Net-Zero Energy Installation (NZEI) initiatives at military installations. The Air Force Academy is our demonstration site for the Air Force. NZEI could make installations more energy secure in the future by reducing installation dependence on the commercial power grid.

While the Air Force has a generator testing and inspection program in place at all installations, Major Accident Response Exercise (MARE) and Operational Readiness Inspection (ORI) programs do not currently evaluate generator performance. The AF will create a standardized requirements policy to address emergency generator testing for MAREs and ORIs, including how the base prioritizes, refuels and tests equipment reliability for a sustained period.

The Air Force is looking into business models to procure all-electric vehicles at a more economical price point. Part of the assessment is to right-size the battery depending on range requirements and also to assess the capability of using the vehicle batteries as on-base energy storage to shed peak load and provide power in the event of outages.

In summary, the Air Force is focusing its energy security efforts through increased inter-service and interagency collaboration, and capability improvements to reduce mission critical vulnerabilities to extended electric power outage and to enable better risk-informed decisionmaking.

28. Senator UDALL. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, will your current plans and programmed resources accomplish that? If not, are you developing plans and programming resources to accomplish that in the out-years?

Dr. ROBYN. The planning and programming of resources in the future will be important, and we are continuing to identify the technologies and DOD missions important in shaping our energy resiliency strategy.

Technologies are being identified and demonstrated through the ESTCP, the SPIDERS program, the Norfolk Case Study and the Twentynine Palms microgrid effort. These efforts are integrating secure, smart microgrid technologies and concepts such as continuity of operation planning (COOP), building design considerations, metering, smart grid systems and load management, on site generation (e.g., generators and renewables) and system islanding.

Further, specific critical missions and assets are continuing to be identified through the Critical Infrastructure Program (DCIP), which prioritizes Defense Critical Assets (DCAs). In the future, DCAs would warrant the greatest consideration in targeting resources to shape an energy security posture at our installations. These activities, both the technology demonstration efforts and the identification of critical missions under the DCIP, will provide the basis for energy resiliency requirements in the Defense PPBE process.

Ms. HAMMACK. The Army is currently implementing the highest building standards in the Federal Government by adopting ASHRAE Standard189.1, expanding our ability to install small scale renewable energy projects through the ECIP program and large utility scale renewable energy projects by leveraging third party investment authorities, implementing a Net Zero strategy, and developing micro grid technologies that will greatly reduce our installations dependence on the commercial grid. These initiatives are being backed at the highest levels of the Army through the Senior Energy and Sustainability Council. Additionally, the Secretary of the Army recently announced that energy was one of his top priorities for the year providing the program with an unprecedented level of support.

Ms. PFANNENSTIEL. DON's current budget across the FYDP does not include plans or resources to allow key systems and operations on our bases to continue to operate indefinitely on a 24/7 basis in the event of a disruption or failure of the broader commercial electrical power grid. In the unlikely event that the electric power grid is disabled indefinitely, we would operate initially using our station emergency capability, MUSE, renewable and ship generation. If the period without grid power became untenable, we would consider relocating critical missions and ships to other ports.

Mr. YONKERS. The Air Force is currently developing more explicit, actionable, quantifiable planning factors that can be used to both solve energy security challenges and help with investment decisions.

29. Senator UDALL. Secretary Pfannenstiel, in many ways, what DOD is doing in terms of energy efficiency, biofuels, and other energy-related programs is a model for the Federal Government and society as a whole. We can use this technology to increase our energy security, create jobs, and reduce our consumption of foreign oil. DOD's renewable energy development programs should remind us of how DOD-fo-

cused research and development (R&D) and technology applications in other areas have blazed a trail for broader society-wide application.

The Navy has been doing some very impressive work with regard to developing biofuels and there are some very exciting possibilities. They can deliver the energy density of traditional fuels. They can be used without any modifications to current engines or fuel systems. They have a lifecycle greenhouse gas level well below traditional fuels, and they do not depend on foreign sources of supply. As you go about developing new alternative fuel options for Navy missions, do you believe your work will create a pathway for the civilian long-haul fleet of planes, ships, trucks, and trains?

Ms. PFANNENSTIEL. The operational use of alternative fuels used by the Navy and the Marine Corps will be hastened by collaborating with Federal agencies and private industry involved in research, development, and certification of alternative fuels. This increased use of alternative fuels is part of a bold energy agenda set forth by the President of the United States as he seeks to reduce the Nation's dependence on fossil fuels. By collaborating with the Departments of Energy and Agriculture, the airlines industry, research universities, Navy laboratories, the private sector, and others, collectively we will create the pathway for the greater use of alternative fuels throughout the transportation industry.

30. Senator UDALL. Secretary Pfannenstiel, is this just a Navy strategy you are working on or do you see your work as the leading edge of a DOD-wide and ultimately broader national strategy?

Ms. PFANNENSTIEL. The President set forth a bold energy agenda and DOD, like other departments and agencies, is working aggressively to reduce its dependence on fossil fuels. Within DOD, the Secretary of the Navy has challenged the Navy and the Marine Corps to lead the DOD and the Nation in bringing about improved energy security and energy independence.

31. Senator UDALL. Secretary Pfannenstiel, if you see your work as playing a role in blazing the trail for the whole economy are you looking at the scale-up implications on land use and food supply that would result from moving your biofuel choices into the whole economy?

Ms. PFANNENSTIEL. DON is closely working with the Departments of Energy and Agriculture to identify alternative fuel sources. We are very aware of the implications on land and water use and food supply and are committed to non-food feedstock alternative fuels. Our partnership with the Department of Agriculture will closely review what non-food crops, such as camelina, can be harvested to create this new supply of biofuels. We are partnering with the Department of Energy on research and development on biofuels derived from algae and other non-food sources.

32. Senator UDALL. Secretary Pfannenstiel, how are those considerations reflected in your future plans?

Ms. PFANNENSTIEL. DON has set two priorities that illustrate the Department's role in investing in alternative sources of energy: energy security and energy independence. The Navy will achieve energy security by utilizing sustainable non-food feedstock sources that meet force sustainment functions and fulfill tactical, expeditionary and shore operational requirements. This allows the ability to protect and deliver sufficient energy to meet operational needs without impacting the food industry. Second, energy independence is achieved when naval forces rely only on energy resources that are not subject to intentional or accidental supply disruptions. As a priority, energy independence increases operational effectiveness by making naval forces more energy self-sufficient and less dependent on vulnerable energy production and supply lines.

Additionally, advanced biofuels represent the best option for meeting military needs while reducing greenhouse gas emissions. The EPA has evaluated the life cycle greenhouse gas emissions from a number of advanced biofuel platforms to ensure that they do reduce emissions compared to petroleum.

The Secretary of the Navy has set forth five energy goals to reduce DON's overall consumption of energy, decrease its reliance on petroleum, and significantly increase its use of alternative energy. DON is committed to improving our role in investing in alternative sources of energy for the future.

The Secretary of the Navy's Energy Goals:

1. Increase Alternative Energy Use DON-Wide: By 2020, 50 percent of total DON energy consumption will come from alternative sources

2. Increase Alternative Energy Ashore: By 2020, at least 50 percent of shore-based energy requirements will come from alternative sources; 50 percent of DON installations will be net-zero
3. Reduce Non-Tactical Petroleum Use: By 2015, DON will reduce petroleum use in the commercial fleet by 50 percent
4. Sail the "Great Green Fleet": DON will demonstrate a Green Strike Group in local operations by 2012 and sail it by 2016
5. Energy Efficient Acquisition: Evaluation of energy factors will be mandatory when awarding contracts for systems and buildings

PINON CANYON ENVIRONMENTAL ASSESSMENT

33. Senator UDALL. Secretary Hammack, please provide an update on the status of the environmental assessment for the Pinon Canyon Training Site in Colorado.

Ms. HAMMACK. Fort Carson will meet their obligation to conduct National Historic Preservation Act consultations (section 106) on the Pinon Canyon Maneuver Site Transformation Environmental Assessment (EA) prior to making any potential Finding of No Significant Impact on the proposed action. The EA was completed in January 2011, and included public meetings and input. A copy of the EA can be accessed at: http://www.carson.army.mil/pcms/documents/2011—Final—EA.pdf

34. Senator UDALL. Secretary Hammack, would the addition of a combat aviation brigade at Fort Carson—which I fully support—require the Army to purchase additional training land?

Ms. HAMMACK. No. Stationing of a Combat Aviation Brigade at Fort Carson does not require the purchase of additional land.

QUESTIONS SUBMITTED BY SENATOR JOE MANCHIN

BAHRAIN

35. Senator MANCHIN. Secretary Pfannenstiel, as you know, the Fifth Fleet is stationed in Bahrain, a country that is undergoing a great deal of turmoil right now. The National Defense Authorization Act (NDAA) for Fiscal Year 2011 authorized three projects in Bahrain: Ammunition Magazines, $89.2 million; Operations and Support Facilities, $60.0 million; and Waterfront Development, Phase 3, $63.8 million. The budget request this year contains two projects: Bachelor Enlisted Quarters, $55.0 million; and Waterfront Development, Phase 4, $45.1 million.

I recently visited Jordan and after speaking to the King, I realize the concerns about the stability of the governments in the region and also the strategic value of Bahrain as a very good ally to the United States. In tight fiscal times, is now the time to be investing over $300.0 million there?

Ms. PFANNENSTIEL. Bahrain remains the location for our Naval Forces CENTCOM/U.S. Fifth Fleet headquarters, so it is vital to have facilities to enable our Navy's forward maritime presence and enable rapid crisis response.

The Waterfront Development Phase IV at Naval Support Activity Bahrain ($45.2 million) constructs a combat vehicle warehouse, water storage tank, and fleet recreation facility. This project will enable the Navy to meet CENTCOM anti-terrorism/force protection standards as well as properly execute assigned missions with sufficient power, space and communications capability.

The Bachelor Enlisted Quarters at Naval Support Activity Bahrain ($55 million) constructs secure on-base permanent party bachelor quarters for unaccompanied sailors.

36. Senator MANCHIN. Secretary Pfannenstiel, has the Navy done any analysis on what would happen if the Fifth Fleet were no longer welcome in Bahrain?

Ms. PFANNENSTIEL. There has been no change in the status of the relationship between COMUSNAVCENT/C5F and the Government of Bahrain. The Government of Bahrain continues to fully support hosting Naval Support Activity-Bahrain (NSA–Bahrain) and its tenant commands. The King and Crown Prince have stated their continuing support to the U.S. Navy presence in the Kingdom of Bahrain. We do not expect a change in the Bahraini government's attitude toward hosting NSA–Bahrain.

37. Senator MANCHIN. Secretary Pfannenstiel, are plans to evacuate dependents and support staff up-to-date and executable?

Ms. PFANNENSTIEL. DOD dependents have not been evacuated from Bahrain. On 15 March, DOD authorized voluntary departure from Bahrain of DOD dependents and non-emergency civilian personnel at government expense. Additionally, a 'Stop Movement' order was given. This order prohibits dependents of military personnel executing Permanent Change of Station orders from traveling to Bahrain. The Authorized Departure (AD) of Dependents and Stop Movement order was extended to 13 May in accordance with Department of State actions. At the conclusion of that period, the overall situation in Bahrain will be reassessed to determine if the policy should be extended, modified or removed. As of 01 May, of Bahrain's 710 command sponsored dependents, 82 have departed under AD. NSA Bahrain's Joint Reception Center (JRC) continues to receive questions and process applications for alternation Safe Havens in the United States.

LANDSTUHL MEDICAL FACILITIES

38. Senator MANCHIN. Dr. Robyn and Secretary Hammack, I was at Landstuhl Regional Medical Center a few weeks ago and visited with wounded servicemembers, some from international forces. I toured the medical center and was impressed with the level of care and level of services available at the hospital. However, I understand that the floor structure in certain areas is deteriorating and failing, in fact a portion fell through the ceiling in the pediatric unit on the level below. Can you tell me about the Army's fiscal year 2012 plans to invest in the Landstuhl Medical facilities?

Dr. ROBYN. The Army has addressed the immediate concerns with the floor structure. The fiscal year 2012 plan for major repair (<$500,000) includes a project to repair roof insulation and a project to brace flooring due to settling in a crawl space.

The Department's long-term plan for the hospital includes an fiscal year 2012 budget request for the first increment ($70.6 million) of funding for a replacement hospital at Rhine Ordinance Barracks in the Kaiserslautern Military Community. This project (total cost of $1.2 billion) consolidates the Landstuhl Regional Medical Center and the Ramstein Air Base clinic at one convenient location 8 miles closer to Ramstein Air Base than the existing hospital. This location reduces wounded warrior casualty transit times to medical care from as much as 45 minutes across public roads to less than 5 minutes on DOD controlled roads. The facility will provide direct medical services to 31,000 enrolled beneficiaries and be the contingency casualty evacuation location for EUCOM, CENTCOM, and AFRICOM.

Ms. HAMMACK. The Army's fiscal year 2012 budget plans to invest in Landstuhl Medical facilities include only two major repairs (<$500,000): (1) a project to repair roof insulation; and (2) a project to brace flooring due to settling in a crawl space.

39. Senator MANCHIN. Dr. Robyn and Secretary Hammack, how would a year-long continuing resolution make a difference in the completion of this project?

Dr. ROBYN. We are requesting authorization and funds to begin this project in fiscal year 2012. A year-long fiscal year 2011 continuing resolution will not impact this project as long as the fiscal year 2012 President's budget request is acted upon in a timely manner.

Ms. HAMMACK. A year-long continuing resolution for fiscal year 2011 has no impact on the completion of the project. The first increment is requested for fiscal year 2012 as part of the OSD Defense-wide MILCON request.

ALTERNATIVE ENERGY PROGRAMS

40. Senator MANCHIN. Dr. Robyn and Secretary Yonkers, in recent testimony by the Commandant of the Marine Corps, General Amos spoke highly of their efforts to reduce the environmental footprint of the Marine Corps bases by saving energy and using alternative fuels including solar power for batteries. At this morning's Senate Armed Services Committee hearing, General Schwartz said the Air Force is ready to certify plane engines for alternative fuel blends but the challenge for the Air Force will be who will produce alternative fuels and where will they be able to buy it. Are there any DOD alternative energy projects that use coal-to-liquid fuels? If so, would you buy it if we could produce it?

Dr. ROBYN. The Office of the Under Secretary for Acquisition, Technology and Logistics is actively providing oversight on alternative fuels and is particularly interested in the progress of qualifying such fuels for use, and in their long term availability. For the answer to this specific question, I defer to the Air Force.

Mr. YONKERS. For the DOD, the Defense Logistics Agency (DLA) is the mandated agency for purchase of bulk liquid fuels. The Air Force is feedstock agnostic-what

the fuel is made from is not important so long as it has the desired performance, environmental and safety specifications. By going through the test and certification process, the Air Force is positioning itself to integrate cost competitive, environmentally friendly, domestically produced alternative fuel blends by 2016. Generally, the Air Force will not be a producer of fuel, but will use what the market cost competitively provides.

Currently, over 99 percent of the Air Force fleet is certified for unrestricted operational use of a 50/50 synthetic fuel blend, where the synthetic component is produced via the Fischer-Tropsch (FT) process. FT synthetic fuel can be produced from coal, natural gas or biomass.

The alternative aviation fuel certification process increases the types of fuel Air Force aircraft can use. Once the commercial market is ready, the Air Force will be position to use those fuels, as long as they meet the technical, environmental and economic requirements, including the provisions outlined in Section 526 of the Energy Independence and Security Act. Having the ability to use non-traditional aviation fuels provides the Air Force with an improved energy security posture and increased protection from price fluctuations.

41. Senator MANCHIN. Dr. Robyn and Secretary Yonkers, for the projects that use bio-fuels, what are your concerns about your ability to readily buy these types of fuels and have a steady supply?

Dr. ROBYN. Again, the Office of the Under Secretary for Acquisition, Technology and Logistics is actively providing oversight on alternative fuels and is particularly interested in the progress of qualifying such fuels for use, and in their long term availability. For the answer to this specific question, I defer to the Air Force.

Mr. YONKERS. To date, the Air Force has certified the C–17 and the F–16 for unrestricted operations using 50/50 blend of traditional jet fuel and hydrotreated renewable jet (HRJ) fuel. Certification activities are on-track for 2012 completion. To date, no performance or safety-of-flight anomalies have been determined.

The Air Force is looking at alternative aviation fuels that are cost competitive, environmentally friendly and act as a "drop-in" fuel with traditional JP–8. The Air Force is feedstock agnostic-what the fuel is made from is not important so long as it has the desired performance, environmental and safety specifications.

The Air Force will not be a producer of fuel, but will use what the market cost competitively provides. If sufficient amounts of the fuel are available and meet the Air Force's technical, environmental and cost requirements, the Air Force will use them. The Air Force needs industry to start making it in a cost competitive and environmentally friendly manner, so it can provide the best value for the taxpayer and the environment.

Additionally, producers of alternative aviation fuels have indicated they need long-term contracts in place to raise the capital to build the first plants. Air Force does not have nor need long-term contracting authority for fuels, as the DLA is the mandated agency for purchase of bulk liquid fuels for DOD. However, industry believes if DLA had long-term contracting authority and producers were able to negotiate long-term contracts, their ability to obtain favorable financing terms for arranging capital to build production facilities would improve.

MILITARY CONSTRUCTION PROJECTS

42. Senator MANCHIN. Dr. Robyn, the National Guard and Reserves have been heavily dependent on earmarks for MILCON projects—in fiscal year 2010, $235 million in earmarks went to projects for the Air National Guard and $93 million to the Air Force Reserve. MILCON projects not only help our Guard and Reserves but also support local economies. What is your assessment about how our Guard and Reserve facilities will meet operational needs without additional support in the President's budget and by Members of Congress?

Dr. ROBYN. I believe that the Military Departments have appropriate processes in place to prioritize their MILCON requirements to meet operational needs across the force and incorporate changes to defense strategies, policies, and fiscal challenges. Further, the inclusion of the Reserve components within the Military Department processes ensures that they have a voice in setting these priorities.

QUESTIONS SUBMITTED BY SENATOR KELLY AYOTTE

SHIPYARD FACILITY MODERNIZATION PLAN

43. Senator AYOTTE. Secretary Pfannenstiel, I want to note that the Navy has not requested any MILCON modernization funds for the Portsmouth Naval Shipyard in the last 10 years. It's not that the Navy doesn't care about shipyards, but it seems like the ones in Virginia and Hawaii have been getting a lot more attention in budget requests. I also want to note that the congressional delegations in Maine and New Hampshire have responded to this omission by adding a succession of critical projects intended to improve efficiencies and capabilities at the shipyard. But this is not the proper way to address critical shipyard needs.

GAO released a report in November 2010, titled: "Defense Infrastructure: Actions Needed to Improve the Navy's Processes for Managing Public Shipyards' Restoration and Modernization Needs," that cited numerous concerns with the processes used by the Navy to capture, assess, and prioritize facility modernization requirements for shipyards. This report found that the Navy's modernization requirements at the Nation's four public shipyards were underestimated, even though the Navy has stated that the backlog of facility improvements at Portsmouth Naval Shipyard is $513 million. GAO recommended that the Navy develop guidance to standardize shipyard strategic planning requirements, improve its process for developing shipyard restoration and modernization needs, and document resolution of identified quality-of-life issues.

I couldn't agree more. I believe it should be a core efficiency initiative of the Navy to develop a long-term and consistent funding plan for our Nation's four public shipyards—including Portsmouth Naval Shipyard, and then implement projects to improve their efficiency and effectiveness. For example, the current FYDP for the Navy includes a project to consolidate structural workshops at Portsmouth. (P–266). This project would ultimately save the taxpayers' money by improving efficiency of shipyard operations and reducing the cost and duration of submarine maintenance. This project is currently planned for the budget in fiscal year 2015. Why wait so long to carry out a project that will save money?

Ms. PFANNENSTIEL. The Navy's fiscal year 2012 budget request deliberately targets our shore infrastructure investments to deliver the greatest impact on achieving our strategic and operational objectives. These investments will increase our warfighting capability, enhance nuclear weapons security, support energy initiatives, and improve sailor quality of life. The Navy is continuing to invest in the Portsmouth Naval Shipyard infrastructure within today's fiscally constrained environment through Sustainment (ST), Restoration and Modernization (RM), and MILCON. The Navy will continue to assess all MILCON requirements, to include the Structural Shop Consolidation Project (P266), in order to balance risk across the Navy and provide the most capability within fiscal constraints.

The Navy continues to invest in all four Naval Shipyards. In fiscal year 2010, the Navy executed eight O&M (ST and RM) special projects at Portsmouth Naval Shipyard (PNSY) with a total value of $40.9 million. In fiscal year 2011, the Navy planned additional special projects, valued at $17 million, to repair and enable certification of Dry Dock #1. Finally, in fiscal year 2012, the Navy plans to invest $100.3 million in four Energy special projects at PNSY.

44. Senator AYOTTE. Secretary Pfannenstiel, why is this not part of the Navy's efficiencies initiatives and included in the budget request for 2012?

Ms. PFANNENSTIEL. The Navy's fiscal year 2012 budget request deliberately targets our shore infrastructure investments to deliver the greatest impact on achieving our strategic and operational objectives. These investments will increase our warfighting capability, enhance nuclear weapons security, support energy initiatives, and improve sailor quality of life.

The Navy will continue to assess all MILCON requirements, to include the Portsmouth Naval Shipyard Structural Shop Consolidation Project (P266), in future budget submissions in order to balance risk across the Navy and provide the most capability within fiscal constraints.

45. Senator AYOTTE. Secretary Pfannenstiel, would you agree that the Navy's four public shipyards are critical in maintaining fleet readiness and supporting ongoing operations worldwide?

Ms. PFANNENSTIEL. Yes, the Navy's four public shipyards, along with other elements of the Navy's shore infrastructure, are all critical in maintaining fleet readiness and supporting ongoing worldwide operations.

46. Senator AYOTTE. Secretary Pfannenstiel, please describe what actions the Navy has taken to implement the recommendations of the GAO report.

Ms. PFANNENSTIEL.

Recommendation A:

Develop guidance that lays out the requirement for the shipyard to develop strategic plans that address their future restoration and modernization needs and that reflect the seven essential elements of a comprehensive strategic planning framework.

Response A:

The Ship and Submarine Global Shore Infrastructure Plan (GSIP), which serves as a higher order strategic document that provides the context for the individual shipyard plans, is being finalized. Once the GSIP is finalized, NAVSEA will develop guidance to align the individual shipyard plans and the Depot Maintenance Infrastructure Plan (DMIP) with the GSIP and the 2011 Naval Shipyard Business Plan. The guidance will reflect the seven essential elements of a comprehensive strategic planning framework as laid out by the GAO report.

Recommendation B:

Develop and document a method for systematically collecting and updating the Navy's configuration and condition information, including establishing measurable goals and timeframes, for updating its processes so that the data are complete and accurate.

Response B:

The Infrastructure Condition Assessment Program (ICAP) is in place to ensure assessment of the condition of all shipyard buildings and waterfront structures (piers, wharfs, etc). Additionally, waterfront structures receive a structural inspection on a 6-year cycle. The Navy will add conduct a "pilot program" assessment of dry docks to evaluate the associated costs for inclusion into the ICAP process. Finally, the shipyard utility infrastructure is being evaluated for potential assessment in the next few years. Updated condition ratings from these inspections will be uploaded into the internet Navy Facilities Asset Data Store (iNFADS) annually. The Navy currently plans to have all waterfront infrastructure (to include dry docks) evaluated and relevant data systems updated by fiscal year 2013. Additionally, a majority of configuration (functionality) ratings are currently available in iNFADS, which will be updated as necessary via the ongoing asset evaluation program.

Recommendation C:

Submit documentation to the Office of the Deputy Under Secretary of Defense for Installations and Environment to update the replacement unit cost factor for dry docks, so that plant replacement value calculations for dry docks, and subsequent restoration and modernization cost calculations, more accurately reflect the shipyards' unique infrastructure needs.

Response C:

The Navy is committed to accurately reflecting the magnitude of the dry-dock backlog. Navy is pursuing a re-assessment of the Replacement Unit Cost factors, and will provide this information to DUSD(I&E).

Recommendation D:

Develop guidance for the shipyards to systematically collect information on and document corrective actions to prioritize and address identified quality of life issues.

Response D:

With workforce safety, health, and quality of life as top priorities, the Navy develops comprehensive restoration and modernization (RM) projects, based primarily upon the Infrastructure Condition Assessment Program (ICAP) and Asset Evaluation (AE) program data. These assessments and subsequent projects specifically address improvements for people and processes in support of the Shipyard mission.

The Navy cannot address every shortfall in the desired time-frame, due to fiscal constraints, so Shipyard projects are evaluated and prioritized with all Navy RM projects in accordance with the Navy's shore investment strategy. Our shore investment strategy provides shore infrastructure that is properly sized and aligned to enable warfighting and Joint capabilities, minimizes the decline of critical mission-essential and quality of life infrastructure, and optimizes warfare enterprise outputs and quality of service.

The Navy is exploring methods to collect additional information on shipyard Quality-of-Life and Quality-of-Service issues.

47. Senator AYOTTE. Secretary Pfannenstiel, has the Navy issued guidance detailing the need for shipyard strategic plans or what to include in them? If so, please provide a copy of that guidance.

Ms. PFANNENSTIEL. This guidance has not yet been issued. The Ship and Submarine Maintenance GSIP will serve as a higher order strategic document to provide the context for individual shipyard plans and is being finalized. The estimated completion date is summer 2011. Once the GSIP is finalized, NAVSEA will complete guidance to align the facility and infrastructure portion of individual shipyard plans with the GSIP. The estimated completion date for this guidance is one month after completion of the GSIP. The guidance will reflect the seven essential elements of a comprehensive strategic planning framework.

AIR FORCE BASING DECISIONS FOR THE TANKER

48. Senator AYOTTE. Secretary Yonkers, noting the recent announcement by the Air Force concerning the award of a contract to build a new air refueling tanker, I am aware that the Air Force is now in the early stages of the Strategic Basing Process (SBP) that will determine where the KC–46A will be stationed. As I am sure you are aware, Pease Air National Guard Base in New Hampshire would be an ideal location for the stationing of the new tanker. Since so many of the Air Force air refueling tanker missions are carried out by Air National Guard and Air Reserve units, when will the Air Force make a decision about the apportionment of the new aircraft between Active and Reserve components?

Mr. YONKERS. The Strategic Basing process uses criteria-based analysis and the application of military judgment, linking mission and combatant commander requirements to installation attributes to identify locations that are best suited to support any given mission. The results of this analysis will be used to inform the basing decisions made by the Secretary and Chief of Staff of the Air Force.

In support of KC–46A basing decisions, Air Mobility Command (AMC), is developing basing criteria in a way that best quantifies both operational and support requirements related to KC–46A basing. Based on these requirements and any Total Force Enterprise Strategic Force mix vector, the criteria may reflect the Active Duty/Air Reserve component mix, as applicable. After the criteria are finalized and approved by the Secretary, a briefing will be made available to interested members of Congress and their staffs near the end of this calendar year. AMC will then evaluate all Air Force installations against the criteria in an Enterprise-Wide Look, to identify candidate bases.

After the release of the candidate bases list, Air Force site survey teams will conduct detailed, on-the-ground, evaluations at each candidate location covering a range of operational and facility issues. The results of the site surveys will be briefed to the Secretary and Chief of Staff who will then select the preferred and reasonable alternatives for beddown locations.

Once the preferred and reasonable alternatives are identified, environmental analysis will be conducted in accordance with the NEPA. The Secretary and Chief of Staff site selection decision will become final after the Environmental Impact Analysis Process is completed.

49. Senator AYOTTE. Secretary Yonkers, will you keep this committee informed of any and all developments with this important basing process?

Mr. YONKERS. The Air Force strategic basing process includes Congressional engagement opportunities throughout the process. In the case of the KC–46A, Congress will be briefed after the basing criteria are approved by the SecAF and CSAF, the base candidate list is approved, and the preferred alternative (or alternatives) is/are designated.

FORT BRAGG HOUSING

50. Senator AYOTTE. Secretary Hammack, I am so concerned about the situation at Fort Bragg, NC, concerning the tragic, sudden deaths of 12 infants in military housing with no apparent cause in the last few years. With everything else our military members and their families have to contend with, they should not have to worry about the safety and security of their kids in homes provided by the military. I realize that an ongoing Army Criminal Investigation Command's (ACIC) probe is underway of the unexplained infant deaths at Fort Bragg, so there is limited information available to the public.

I do know that the Consumer Product Safety Commission (CPSC) conducted testing to determine whether Chinese drywall or other environmentally unsafe building

materials might have been a cause for the deaths. In February 2011, CPSC determined that there was no evidence of toxic drywall or other environmental factors contributing to the infants' deaths.

I am also aware that a team of medical, epidemiology, industrial hygiene, and risk communication subject matter experts assigned to the U.S. Army Public Health Command was deployed to Fort Bragg in December 2010 to initiate an epidemiological consultation regarding the infants' deaths among residents of on-post housing. Do you expect to receive a report from this team?

Ms. HAMMACK. Yes. The team from the U.S. Army Public Health Command is in the process of concluding their investigation and will issue a report of their findings and recommendations. The team anticipates completion of their report by the end of April.

51. Senator AYOTTE. Secretary Hammack, when will the results of the team's consultation and investigation be released publicly?

Ms. HAMMACK. The U.S. Army Public Health Command's team will provide a final report to the Fort Bragg leadership. Given the current timeline for completion of the report, we anticipate information will be available to the public sometime in May.

52. Senator AYOTTE. Secretary Hammack, do you believe the testing conducted on the environmental conditions in the homes has been adequate and comprehensive?

Ms. HAMMACK. Yes. The homes have been tested extensively by multiple outside experts for an extremely comprehensive list of potential toxins, pollutants, and other chemicals. The results of the thousands of tests performed on these homes indicate that there are no known environmental factors that contributed to or caused the unfortunate deaths of these infants.

53. Senator AYOTTE. Secretary Hammack, do you believe additional testing, such as chamber tests, would be beneficial to comfort those families who live with infants in Fort Bragg housing?

Ms. HAMMACK. Chamber tests were, in fact, conducted. In addition to the extensive testing done by the Consumer Product Safety Commission, Ft Bragg also had a contractor analyze drywall samples from 144 Groesbeek St and 4 Darden St using the closed-chamber off-gassing method discussed in recent media reports. Closed-chamber off gassing analyses were completed in August 2009 (144 Groesbeek St) and May 2010 (4 Darden St). Results from these tests were negative. Both the chamber testing and elemental sulfur testing completed by the Consumer Products Safety Commission of the Bragg drywall samples did not identify the presence of corrosive drywall. It is clear from repeated testing of all homes being evaluated in the current investigation that none contain corrosive drywall. No additional testing is required.

LEASES FOR MILITARY CONSTRUCTION ACTIVITIES

54. Senator AYOTTE. Dr. Robyn, on January 16, 2007, the DOD Inspector General (IG) reported that the Counter Intelligence Field Activity (CIFA) had failed to follow the required procedures before spending almost $100 million to lease office space in the National Capital Region (NCR). The IG reported that CIFA violated "a myriad of statutes," including the Anti-Deficiency Act and congressional notification and approval requirements in entering into the lease and using the lease to fund capital improvements to the leased space, including work that would be classified as MILCON.

Does DOD have guidance or regulations in place that ensure leases that include capital improvements are properly reviewed and funded, and that the required notifications are submitted to Congress?

Dr. ROBYN. Yes. DOD guidance and regulations that address the acquisition of leased facilities and space include:

(1) In response to CIFA services contract irregularities, the Office of the Under Secretary of Defense (Acquisitions, Technology and Logistics) issued two policy memorandums in March 2007 to prevent a similar problem from occurring in the future. These policy memorandums covered contracts for services and leasing office space.
(2) DOD Instruction 5305.5 Space Management Procedures, National Capital Region provides specific guidance on the requirements and approval process and congressional reporting requirements for acquisition of lease space in the NCR.

(3) The Services and WHS adhere to the reporting requirements of title 10, United States Code 2662. Additionally, each service has real property instructions that govern the Acquisition, Management, and Disposal of Real Property and Real Property Interests. These service specific instructions and regulations provide detailed guidance for complying with all applicable statutes dealing with DOD real property.

55. Senator AYOTTE. Dr. Robyn, can you provide a description of any leases entered into by a military service or defense agency in the last 3 years that included a cost for capital improvements carried out by the lessor as a requirement of DOD?

Dr. ROBYN. In the last 3 years, the Air Force has entered into three leases—one from U.S. Air Forces Europe (Izmir Air Station, Turkey) and two from Air Mobility Command (Fairchild AFB), which fit this category.

USAFE

Izmir Air Station, Lease Nr. TUIZ–1680
Lease Cost: $100,000.00 annually
Capital Improvement cost: $400,000
Term of the Lease: 1-year, Dec 15, 2010 thru Dec 14, 2011.
Purpose of the Lease: Provides approximately 25,000 SF of space for the Izmir Air Station Exchange and Commissary. The building they are moving from can no longer be leased due to Anti-terrorism/ Force Protection requirements. The lessor was asked to make the space ready and to amortize the cost over a 5-year term. The project will be ready for occupancy by August 31, 2011.
Location (where): Izmir Air Station, Turkey

AMC

Port of Moses Lake, DACA67–5–11–6
Lease Cost: $94,670.00 per month
Capital Improvement cost: Approximately $15,000
Term of Lease: 1-year, January 1, 2011 thru December 31, 2011
Purpose of Lease: This lease is in effect to support installation total runway renovation for aircraft, vehicles, and support equipment necessary to conduct the 92d Air Refueling Wing flying operations. This includes temporary use of the multiuse ramp located on the Southeast side of Taxiway Alpha and North of Hangar #2203, located at the Grant County International Airport. The project should be completed by the end of lease.
Location (where): Moses Lake, WA
Measurement Use and Occupancy: Approximately 74 Acres and 159,908 Bldgs SF

Spokane International Airport, DACA67–5-11–5

Lease Cost: $16,767.00 per month
Capital Improvement cost: Approximately $48,000
Term of Lease: 1-year, January 1, 2011 thru December 31, 2011
Purpose of Lease: This lease is necessary to support installation total runway renovation for aircraft parking and aircraft operation for 92d Air Refueling Wing flying during runway close. The project should be completed by the end of the lease.
Location (where): Spokane, WA
Measurement Use and Occupancy: Approximately 25.8 Acres

The Army, Navy and Washington Headquarters Service report that during the last 3 years they have not entered into a lease that included a cost for capital improvements carried out by the lessor as a requirement of DOD.

ANTI-TERRORISM/FORCE PROTECTION STANDARDS

56. Senator AYOTTE. Dr. Robyn, in the aftermath of September 11, DOD revised and strengthened facility standards for anti-terrorism and force protection (AT/FP). Part of the revisions to Unified Facilities Criteria (UFC) 4–010–01 was to establish minimum AT/FP standards for leased space in the NCR that support DOD personnel. Since then, DOD has worked diligently to invest in new facilities and leases to ensure that DOD personnel were protected in facilities meeting the new standards.

In 2009, DOD granted temporary relief to the specific requirement that all lease renewals executed after September 30, 2009, must comply with the enhanced DOD minimum AT/FP criteria for buildings that house DOD employees. Further, you

were directed to develop, in coordination with GSA, a detailed plan of action to acquire UFC AT/FP compliant leased-facility space that will enable all DOD employees occupying leased facilities in the NCR to be located in AT/FP compliant space. What is the status of that plan?

Dr. ROBYN. The temporary relief from full compliance with DOD antiterrorism (AT) standards for buildings applied only to leases in the National Capital Region (NCR) that were affected by BRAC 2005 recommendations. Other leases were unaffected.

The Washington Headquarters Services (WHS), as the leasing agent within the NCR, developed a plan in cooperation with the General Services Administration (GSA) to have all DOD tenants in the NCR in AT compliant space between 2011 and 2016 by utilizing the following strategy:

- Retain approximately 2.8 million square feet of space in 54 locations that are compliant.
- Retain approximately 2.4 million square feet of space in 22 locations that are not currently compliant, but by reducing DOD's footprint in each building to below 25 percent of the usable square feet, they would become AT compliant.
- Return approximately 4.5 million square feet of non-compliant space in 47 buildings to GSA and vacate approximately 350 thousand square feet of space leased by the Army Corps of Engineers
- Acquire approximately 2.5 million square feet of space of new, AT compliant space through GSA.

WHS has held off implementing the lease acquisition part of the plan pending the outcome of a comparative assessment of AT standards for leased space. An outcome of this assessment could alter the Department's process for conducting AT risk assessments. The assessment is ongoing, with a completion targeted for late summer.

57. Senator AYOTTE. Dr. Robyn, can you provide an estimate of the approximate square footage and number of DOD personnel in leased space in the NCR that do not comply with current AT/FP standards?

Dr. ROBYN. DOD occupies approximately 8,979,279 square feet of leased space in the NCR. We estimate that approximately 6,224,217 square feet square feet out of the total leased space is not UFC ATFP compliant space. We further estimate that 31,121 DOD personnel are housed in the non-compliant space.

58. Senator AYOTTE. Dr. Robyn, are you in the process of reassessing AT/FP standards for leased space? If so, what is the goal of the assessment?

Dr. ROBYN. Yes, DOD is now undertaking a comparative assessment of AT standards for leased space, with the goal of determining whether DOD will continue to use its own AT building standards, or will adopt the AT criteria established for the Federal Government at large developed by the Interagency Security Committee. The assessment is ongoing, with a decision targeted for late summer 2011.

59. Senator AYOTTE. Dr. Robyn, is DOD committed to ensuring a consistent standard of protection for its personnel working in leased space in the NCR?

Dr. ROBYN. Yes, DOD is committed to ensuring a consistent standard of protection for all of its personnel. However, a consistent standard of protection does not necessarily equate to a uniform level of protection across the board. The existing DOD standard recognizes differences in mission sensitivity and threat for different DOD tenant organizations that could result in varying levels of protection, all within a consistent standard. This is also the case with the security criteria developed by the Interagency Security Committee (ISC) for the rest of the Federal Government.

NATIONAL GUARD READINESS CENTERS REPORT

60. Senator AYOTTE. Secretary Hammack, the Senate Armed Services Committee last year directed the Secretary of the Army to report to this committee no later than February 1, 2011, on the results and recommendations of an independent study to review the conditions of 3,000 readiness/reserve centers (formerly known as armories) for the Army National Guard over all 54 States/territories. These readiness centers in local communities serve as the primary facilities to support unit training as well as State operations. The committee is aware that 40 percent of the Army National Guard (ARNG) facilities are over 50 years old and about 40 percent of readiness centers do not adequately meet requirements for the support of training for the full range of mission essential tasks. Can you provide an update on the status of this report?

Ms. HAMMACK. The office of the Assistant Secretary of the Army (Installations, Energy, and Environment) provided a written response to the chairman and ranking member on 18 March 2011. In summary, The Army National Guard reviewed the requirement and estimated a national study of this scope and scale will require resources beyond those available under a Continuing Resolution (P.L. 111–242).

61. Senator AYOTTE. Secretary Hammack, do you have any issues or concerns with the reporting requirement that this committee should be aware of?

Ms. HAMMACK. The only concern is that an assessment of the cost of the study shows that is requires funding that is not currently in the budget.

62. Senator AYOTTE. Secretary Hammack, when will the report be provided to this committee?

Ms. HAMMACK. The Army National Guard is eager to begin work on this study once funds become available and expects it will take a year to complete.

COSTS OF U.S. MILITARY FORCE POSTURE IN EUROPE

63. Senator AYOTTE. Dr. Robyn, on the issue of our U.S. force posture in Europe, the pending announcement of a change in the number of Army BCTs to be stationed in Europe for the time being raises questions about the certainty of our numbers of our forces over the long-term and which bases will endure in Europe. The Secretary of Defense announced as part of the budget release for 2012 that the Army plans to reduce 15,000 to 20,000 personnel starting in 2015, which is consistent with many of our NATO partners, who are also making drastic cuts to their military budgets and size of their forces to respond to tough fiscal times.

With this as a backdrop, the President's budget for 2012 includes a request for authorization of $1.2 billion to construct a new medical center in Germany near Ramstein Air Force Base to replace the aging Landstuhl medical center. I know how important Landstuhl is to our military, serving as the first stop for extensive care for our severely wounded personnel evacuated from Afghanistan. As such, I support the construction of a world-class medical center to ensure the best care possible.

This committee's staff has raised concerns with DOD on the size of the facility given the dynamic state of force structure in Europe and the hope at some point, we will no longer be fighting in the Middle East. Are you confident that the size and cost of the facility has been reviewed to ensure we are spending over a billion in taxpayers' funds in an efficient and effective manner?

Dr. ROBYN. Yes, the size and cost of the Kaiserslautern replacement medical facility is the minimum necessary to meet peacetime requirements while allowing the flexibility to meet contingency surge demands. In addition to the 31,000 beneficiaries supported in the immediate Kaiserslautern Military Community, this facility serves a catchment population (within a 55-mile radius) of 73,000 beneficiaries, and specialty medical referrals coming from another 172,000 beneficiaries located across EUCOM.

The facility will comply with world-class standards and evidence-based design principles. The hospital's size and cost are consistent with newly constructed peer facilities with similar patient loads and requirements. The facility will include built-in capabilities to meet its peacetime beneficiary demands and smoothly transition to address contingency operations when necessary. This project is a cost-effective solution to the challenges and risks facing our servicmembers and their families. The sizeable peacetime beneficiary population that would rely on this facility will fully utilize its capabilities and capacity.

64. Senator AYOTTE. Dr. Robyn, can you provide the analysis and modeling that was conducted by DOD to develop the scope and cost for this medical center?

Dr. ROBYN. I defer to the Tricare Management Activity, Office of the Assistant Secretary of Defense for Health Affairs to respond to this question as they are responsible for program and project development for the initiative.

65. Senator AYOTTE. Dr. Robyn, on the issue of costs for maintaining forces in Europe, do you have an estimate of the costs incurred by DOD to carry out the announcement today on maintaining Army brigades in Europe?

Dr. ROBYN. It will cost the Department ~$138 million/year for fiscal year 2014–2015 to retain four brigades in Europe as the 170th BCT and the 172nd BCT were scheduled to return in fiscal year 2012 and fiscal year 2013, respectively. Increases in costs are mostly associated with military pay allowances, base operations, and schools. However, DOD will still realize long-term cost savings associated with re-

taining only three brigades in Europe while maintaining our commitment to NATO and our allies.

66. Senator AYOTTE. Dr. Robyn, please provide an estimate of the costs to keep installations open and to bring all the facilities at that installation up to an adequate standard.

Dr. ROBYN. When two Brigades were programmed for return from Europe, the Army planned to close both Bamberg and Schweinfurt, Germany. Since a third Brigade will now remain, if one or both of these communities must be kept open facilities investments will be required. The requirements for MILCON and other Operations and Maintenance facilities investments will be considered during the stationing analysis and decision processes.

NAVAL OPERATIONS IN BAHRAIN

67. Senator AYOTTE. Secretary Pfannenstiel, I realize that the events in Bahrain are extremely fluid at this point and the future of our critical naval presence at Manama is more a question for the Department of State (DOS) and General Mattis at CENTCOM. But the budget request for fiscal year 2012 for the Navy includes an authorization of $100 million for MILCON at Manama in addition to $252 million provided over the past 2 years. I've been told that these funds are not intended to support new missions at Manama, but to replace and relocate existing facilities. What is the Navy's plan for the use of these funds?

Ms. PFANNENSTIEL. The PB12 budget includes six MILCON projects in Bahrain over the FYDP to ensure Fleet operational capability. For 2012, the budget request includes two projects: Bachelor Quarters/Phase 2 ($55 million) and Waterfront Development/Phase 4 ($45.2 million). These projects do not replace or relocate existing facilities. These projects support new operational requirements.

68. Senator AYOTTE. Secretary Pfannenstiel, given the uncertainty in that country, wouldn't it be prudent to defer these MILCON investments until we have a better understanding of the future of our forces and their families stationed in Bahrain?

Ms. PFANNENSTIEL. Bahrain remains the location for our Naval Forces CENTCOM/U.S. Fifth Fleet headquarters, so it is vital to have facilities to enable our Navy's forward maritime presence and enable rapid crisis response. The PB12 budget includes six MILCON projects in Bahrain over the FYDP to ensure Fleet operational capability. The Navy will adjust future budget requests if operational conditions change.

FEDERAL FACILITIES AGREEMENT AT TYNDALL AIR FORCE BASE

69. Senator AYOTTE. Dr. Robyn and Secretary Yonkers, cleanup at DOD Superfund sites is routinely conducted under the terms of a Federal Facilities Agreement with the Environmental Protection Agency (EPA). I understand that DOD has concluded such agreements for all but a handful of its Superfund sites. That said, I was concerned to learn that DOD's negotiations with EPA over cleanup at Tyndall Air Force Base, Florida, which had been ongoing for more than a year have reached a stalemate and that EPA has now withdrawn from negotiations and is threatening enforcement action against DOD. What is the status of negotiations with EPA at Tyndall Air Force Base?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to the Department of the Air Force for this QFR response because the Air Force exercises active oversight of this issue.

Mr. YONKERS. In March 2011, EPA responded to a December 2010 Air Force proposal by stating that it considered negotiations closed on the Federal Facility Agreement (FFA) for Tyndall and is considering "other options." The Air Force is not aware of what options EPA is considering but is willing to continue discussions at any time.

In the interim and in order to take whatever action is necessary to protect human health and the environment, consistent with applicable authorities and requirements, the Air Force decided to press ahead expeditiously with cleanup of known releases following the provisions of the FFA template agreed to by DOD and EPA in February 2009. The FFA template also includes actions to provide for suitable public involvement, which the Air Force will implement, and the Air Force will continue to request EPA review and approval on various documents as provided in the template.

70. Senator AYOTTE. Dr. Robyn and Secretary Yonkers, could an enforcement action by EPA at Tyndall impact the ability to conduct military training there and over the Gulf of Mexico?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to the Department of the Air Force for this QFR response because the Air Force exercises active oversight of this issue.

Mr. YONKERS. Yes. For example, an enforcement action that mandated specific actions (e.g., a study to determine if there is a release) for a specific area on a range (e.g., an area that included targets) be completed by a specific date could limit or conflict with training schedules.

71. Senator AYOTTE. Dr. Robyn and Secretary Yonkers, what sort of training and how many units use Tyndall's facilities?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to the Department of the Air Force for this QFR response because the Air Force exercises active oversight of this issue.

Mr. YONKERS. There are many units throughout DOD and foreign forces that use the ranges at Tyndall Air Force Base, an Air Education and Training Command (AETC) facility. The primary mission activity at Tyndall AFB (TAFB) is the training and evaluation of personnel and weapons. The 325th Fighter Wing (FW) conducts academic and hands-on training for F–15 Eagle pilots to fly in air superiority roles. Training is directed to pilots who have never flown a fighter aircraft, experienced pilots converting to, or requalifying in, the F–15 and those who will become instructors in the F–15. Currently, the 1st, 2nd, and 95th Fighter Squadrons perform the flying training operations of the wing. The 43rd Fighter Squadron was recently stood up and now trains pilots for the F/A–22 Raptor. Additionally, the 325th Air Control Squadron trains air battle managers in the U.S. Air Force.

The 53rd Weapons Evaluation Group (WEG) conducts air-to-air Weapon Systems Evaluations Programs, overseeing flight operations and recovery of full-scale (QF–4) and subscale (BQM–34 and MQM–107) drone targets. The Air Force, Air National Guard, Navy, Canadian Air Defense Force units, and other foreign military forces come to Tyndall to fire their missiles at realistic targets over the Gulf of Mexico. It also supports Weapons Instructor Course air-to-air formal training syllabi and conducts William Tell, the tri-annual worldwide air-to-air weapons meet, at Tyndall. The 53rd WEG includes four squadrons; three of these squadrons are located at TAFB. They include the 81st Test Support Squadron (TSS), the 82nd Aerial Targets Squadron (ATRS), and the 83rd Fighter Weapons Squadron (FWS).

Detachment 1, 823rd Red Horse Squadron (RHS), mission is to provide agile combat support training to Active Duty, Air National Guard, and Air Force Reserve civil engineer, services, and personnel teams so that they can construct, operate, and maintain forward operating bases for deployed forces.

The 372nd Training Squadron, Detachment 4 provides worldwide and local training on F–15 aircraft systems and support equipment. Customers include all active duty, Air National Guard, and Reserve units operating F–15 Eagle aircraft.

The Noncommissioned Officer (NCO) Academy is a part of Air University with the establishment of the College for Enlisted Professional Military Education. The Academy has graduated more than 24,110 students since its origin in March 1957.

72. Senator AYOTTE. Dr. Robyn and Secretary Yonkers, is it limited to just those units stationed at Tyndall, or could this possibly impact a wider number of DOD units?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to the Department of the Air Force for this QFR response because the Air Force exercises active oversight of this issue.

Mr. YONKERS. Any unit, whether stationed at Tyndall or not, that uses the operational ranges at Tyndall could be impacted. For example, units from the Air National Guard, Navy, Canadian Air Defense Force units, and other foreign military forces come to Tyndall to fire their missiles at realistic targets over the Gulf of Mexico.

The inclusion of operational ranges, in their entirety, in an agreement that would subject the range's total acreage to cleanup processes and regulatory enforcement is unprecedented for the DOD. Installations on the National Priorities List (NPL) with Federal Facility Agreements (FFA) could be approached to add any operational ranges to the agreement. In addition, those installations on the NPL that have FFA negotiations ongoing could be expected to include them. Thus all units that are on and/or use ranges on NPL installations could be affected.

73. Senator AYOTTE. Dr. Robyn and Secretary Yonkers, what are DOD and the Air Force doing to try to resolve the issue?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to the Department of the Air Force for this QFR response because the Air Force exercises active oversight of this issue.

Mr. YONKERS. After multiple discussions through 2010 and several OSD/AF proposals that matched the template agreed upon by OSD and EPA in 2009, on March 1, 2011 EPA stated that it considered negotiations on the Federal Facility Agreement closed. The Air Force is willing to continue negotiations at any time to complete the interagency agreement required by the Comprehensive Environmental Response, Compensation and Liability Act. The Air Force's first priority is to ensure the protection of the communities on and surrounding Tyndall AFB by continuing with the cleanup of known releases in an efficient and effective manner. We will continue frequent and transparent communication with EPA Region 4 in every aspect of the cleanup process.

INSTALLATIONS RESTORATION PROGRAM

74. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, I understand that cleanup of hazardous substances other than munitions at active installations is conducted under the Installations Restoration Program and that DOD's goal is to have a remedy in place or response complete at all its active installation cleanup sites by 2014. Are you on track for meeting the 2014 goal?

Dr. ROBYN. As of the end of fiscal year 2010, the Department is on track to achieve its remedy in place or response complete goal at 99.6 percent of its 19,865 Installation Restoration Program sites on active installations by the end of fiscal year 2014.

Ms. HAMMACK. The Army will achieve the fiscal year 2014 Remedy in Place (RIP) or Response Complete (RC) goal for more than 99.5 percent of its 10,894 Installation Restoration Program sites on active installations.

Ms. PFANNENSTIEL. As of the end of fiscal year 2010, the Department has completed cleanup or has remedies in place at 86 percent of the 3,834 contaminated sites on active installations. The DOD goal to have remedies in place or responses completed by the year 2014 was established in 1996 when the department had 3,256 known contaminated sites. The Department has identified 578 additional sites requiring cleanup over the past 15 years. We have been working aggressively to achieve remedy in place or response for all sites by 2014, but have reached the limits of possibility. As of the end of fiscal year 2010, we are projecting 46 sites will not meet this DOD goal, but will by 2017. We consider this a huge success that we have accomplished site cleanup at both our original inventory of site as well as 532 additional sites in this time period.

Mr. YONKERS. Air Force will have a remedy in place or response complete at 99.5 percent of its 6651 active installation cleanup sites by 2014. Approximately 32 sites are projected to miss the 2014 goal.

75. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, is your budget for environmental restoration in the fiscal year 2012 request sufficient to meet this goal?

Dr. ROBYN. Yes. The budget for environmental restoration in the fiscal year 2012 request is sufficient to achieve the goal of remedy in place or response complete at all active Installation Restoration Program sites by fiscal year 2014. Funding is not the issue for the few sites that will not achieve the fiscal year 2014 goal. The sites that will not meet the fiscal year 2014 goal are sites with complex cleanup requirements.

Ms. HAMMACK. Yes. The fiscal year 2012 budget is sufficient for meeting the Army's environmental restoration requirements, and funding is not the source of the complications that have prevented a few sites from meeting the fiscal year 2014 Remedy in Place/Response Complete goal.

Ms. PFANNENSTIEL. The DON fiscal year 2012 budget for the Environmental Restoration, Navy account is sufficient to meet the projections described in question 74. Additional funds would have limited impact on the 46 site projected to extend past 2014. The extended schedules for these sites is driven by the date of site discovery and time required to complete regulatory processes and community engagement, not lack of funding.

Mr. YONKERS. Yes, the budget is sufficient. The AF is projecting to have remedy in place or response complete at 99.5 percent of its site by fiscal year 2014. The 32

sites that may miss the goal are due to complex site conditions and a funding increase will not expedite the cleanup.

76. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, if you have sites that will lag behind, describe why the goal cannot be achieved on time.

Dr. ROBYN. The Department projects that 80 active Installation Restoration Program sites will not achieve the goal to have a remedy in place or response complete by fiscal year 2014. There are two primary reasons these sites will miss the goal. First, some of these sites have complex cleanup requirements that will take several years to complete. Second, over the past 2 years DOD discovered 67 new sites. It will take time to move these sites through the cleanup phases and achieve the goal.

Ms. HAMMACK. There are various challenges which we expect to cause 48 of 10,894 sites to miss the fiscal year 2014 Remedy in Place/Response Complete goal. At several of these sites, the releases to the environment were discovered more recently and response actions are still under way. It takes time for the Army to complete the investigations, remedy selection, and remedy implementation steps, while still including regulatory and public consultation requirements. Additionally, technical challenges are being experienced at some sites with contaminants that pose particular treatment complications and difficult geologic settings. The feasibility studies to confirm the effectiveness of remedial approaches are more extensive, and it is time consuming to implement these more complex remedies.

Ms. PFANNENSTIEL. As described above, the extended schedules for these sites is driven by the date of site discovery and time required to complete regulatory processes and community engagement, not lack of funding. DON is going to far exceed the goal based on the initial site inventory from 1996 when the 2014 goal was established.

Mr. YONKERS. The Air Force projects that 32 sites will miss the DOD fiscal year 2014 goal. These are complex sites where investigations are taking longer than the AF had expected. We are working closely with the regulatory agencies to expedite the investigations and to put remedies in place. This is critical, as in some cases regulators are slow or decline to coordinate/approve cleanup documents which in turn may slow cleanup or if the AF proceeds without regulator participation, the AF becomes vulnerable to objections from regulators after cleanup is underway or complete. For example, negotiations between the AF and EPA over the governing Federal Facilities Agreement at Tyndall AFB are stalled. As a result, the AF, while inviting EPA participation, anticipates cleanup will proceed without EPA support.

77. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, I understand that cleanup of all of DOD's military munitions and their components at both its active and inactive sites is a huge undertaking and that cleanup is a long-term undertaking and liability that may take decades and cost billions. What is your estimate of the extent of the cleanup required under the Military Munitions Response Program (MMRP) and how long do you estimate it will take to complete the cleanup?

Dr. ROBYN. The Department has nearly 4,500 MMRP sites in its inventory, with an estimated cost to complete cleanup, including long-term management (LTM), of $15.2 billion. The Department projects that it will complete cleanup, with the exception of LTM, at:

- 95 percent of MMRP sites on active installations by the end of fiscal year 2021.
- 95 percent of MMRP sites on Legacy BRAC installations by the end of fiscal year 2018.
- 95 percent of MMRP sites on BRAC 2005 installations by the end of fiscal year 2016.

The Department is in the process of completing site inspections (SI) at MMRP sites on Formerly Used Defense Site properties. Once the Department completes the remaining SIs, it will have a better understanding of the cleanup requirements associated with these sites.

Ms. HAMMACK. DOD established goals for the active Sites, Legacy BRAC and BRAC 2005 MMRP. The Army has 1,528 of these MMRP sites with an estimated cost to complete of $13.8B.

- The Army will achieve approximately 99.7 percent of the fiscal year 2020 Response Complete (RC) goal for Active MMRP sites.
- Legacy BRAC MMRP completed 58 percent of its fiscal year 2009 RC goal. The Legacy BRAC MMRP is projected to achieve RC by 2030, however, any installation that had sites that presented an imminent and sub-

stantial endangerment to human health or safety or the environment have been addressed.

• The BRAC 2005 MMRP is projected to meet its RC goal of fiscal year 2017.

• The DOD has not established an MMRP RC goal for the Formerly Used Defense Site (FUDS) Program for which the Army is the Executive Agent. Munitions response actions at FUDS are more complex, given that DOD no longer controls the property and often there are other responsible parties involved in the property's restoration. The Army expects to achieve RC for all MMRP sites in the FUDS inventory in about 50 years.

Ms. PFANNENSTIEL. DON has identified a total of 330 munitions response sites to date. We currently have achieved remedies in place or response complete at of these sites (37 percent). We are on track to achieve 100 percent remedies in place or response complete by 2021.

Mr. YONKERS. Given the known parameters and setting the goal as site completion, our planned estimated cost at this time is $1.2 billion; however, this estimate does not include water ranges and operational ranges. The Air Force expects to complete the preliminary site assessments by 2011, to complete 90 percent of our responses by 2018, and to complete 95 percent of our responses by 2021. If the EPA sets cleanup standards for additional munitions constituents, or tightens standards for the cleanup of constituents that are already regulated, the cost will increase and the scheduled cleanup will be delayed.

78. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, DOD has planned for years to shift resources to the MMRP when cleanup of other hazardous substances at active installations is complete. Now, however, there are enormous fiscal pressures on the budget. Is such a shift of funding priority going to survive budgetary pressures?

Dr. ROBYN. Yes. Despite budgetary pressures, the Department expects that funding will be sufficient to switch resources to the Military Munitions Response Program when cleanup of other hazardous substances at active installations is complete.

Ms. HAMMACK. The Army expects that there will be sufficient funds appropriated for necessary response actions at MMRP sites that pose an unacceptable risk or hazard to human health or safety or the environment. The Army will continue to seek funding to address these requirements.

Ms. PFANNENSTIEL. All programs are experiencing budgetary pressures. However, DON is still planning to shift resources to the MMRP when cleanup of other hazardous substances at active installations is complete.

Mr. YONKERS. My goal is to achieve clean up of all contamination (hazardous substance and Military Munitions) and bring the Air Force land back to full mission use. I feel confident that we will maintain sufficient funding to carry on the cleanup in an expeditious manner even under the severe budgetary pressure. We continue to create efficiencies and opportunities in our Defense Environmental Restoration Account (DERA) and BRAC program. AF policy signed Feb 2011 refocuses the AF's DERA and BRAC cleanup program from meeting intermediary cleanup milestones to accelerating site completion. Using a performance-based restoration approach to address this new focus is just one example of the AF's use of efficiencies to maximize the use of available funding.

79. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, I understand that DOD has been pursuing technology that could vastly decrease the cost of unexploded ordnance (UXO) cleanup and much more rapidly result in turning land back over to States and communities for productive use. What can you tell me about this technology and your efforts to gain its acceptance by regulators and the contractor community which does cleanup work?

Dr. ROBYN. The Department is supporting the Unexploded Ordnance (UXO) Live Site Demonstration Project, which uses a classification technology that assists in discriminating UXO from scrap. The Department is working to demonstrate that the technology is effective at actual munitions response sites of varying degrees of complexity. This technology is particularly important because the Department wastes an extraordinary amount of time and money unearthing harmless scrap. With this new technology, we will be able to focus on removing only those items we deem to be harmful. The Defense Science Board has indicated this could reduce our UXO cleanup costs by 75 percent. We are working with EPA's Federal Facilities Restoration and Reuse Office, the Environmental Council of States, and the Association of State and Territorial Solid Waste Management Officials to ensure environmental regulators are familiar with the technology and can give it their support at future

munitions response site cleanups. We are also working with the National Association of Ordnance Contractors and the U.S. Army Corps of Engineers to identify and resolve contracting disincentives to the use of innovative technologies as a whole in DOD's environmental cleanup program.

Ms. HAMMACK. The DOD has invested $89 Million in developing munitions response technologies over the last several years. Although these technologies are advancing significantly, the next generation technologies are not yet fully mature. DOD, its contractors, and most regulators, understand that there is no single technology that will support the varying conditions (e.g., geology, different munitions-related activities that occurred, the variety of munitions used, the physical differences and varying land uses) found within a given munitions response site (MRS) and across all MRS. Metal detection and characterization technologies that are better able to discriminate between scrap metal and munitions related items have gone through the demonstration and ESTCP validation process. Although this technology is commercially available, its use has been limited and has received varying levels of regulatory acceptance.

Ms. PFANNENSTIEL. DON is not directly responsible for this issue, and therefore DON does not have an opinion or response relating to this issue.

Mr. YONKERS. OSD is the lead for Un-exploded Ordnance (UXO) cleanup technology development, and I must refer you to them for the answer on cost savings should UXO discrimination techniques prove promising.

Although OSD is the lead for UXO technology development, we support their effort and have provided funding to OSD to help their development effort. We will be working closely to implement these technologies on the AF installations to reduce our cleanup cost. In addition I would like to point out that we are also investing in a number of technologies that promote good stewardship of active bombing and gunnery ranges. Good stewardship is a top priority within the AF and responsible management of range lands will enable future efforts should DOD decide to close and transfer these lands for commercial use. Many of our AF Research Labs work closely with the U.S. Army Corps of Engineers, Strategic Environmental Research and Development Program (SERDP), and the ESTCP to test and validate UXO and range clearance processes. This includes UXO discrimination techniques and use of robotics for the safety of UXO personnel. DOD has been pursuing such technology for over a decade; partnering with industry through the SERDP/ESTCP venues. The primary issue with UXO clearance technology always comes down to safety of DOD or UXO contract personnel.

Another organization the AF works closely with is the UXO Center of Excellence (UXOCOE) who is responsible for centrally coordinating DODs UXO research and engineering detection and neutralization technology efforts to ensure that required technology needs are met, while at the same time avoiding duplication and ensuring efficiencies within DOD.

BRAC SITES

80. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, where does DOD stand on cleanup of its legacy BRAC sites, those that were closed under BRAC rounds before 2005?

Dr. ROBYN. The Department is working aggressively to complete the cleanup of legacy BRAC sites. By the end of 2010, the Department, in cooperation with State agencies and the U.S. EPA, had completed cleanup activities on 81 percent of the Installation Restoration Program sites, and it is now monitoring the results. For the Military Munitions Response Sites, the comparable figure is 67 percent.

Using existing authorities, the Department is able to transfer the remaining sites to a redevelopment authority while cleanup continues, if the community is interested.

Ms. HAMMACK. The Army legacy BRAC program has completed cleanup at 1,847 (91 percent) of 2,035 environmental sites at 118 installations that closed during BRAC rounds in 1988, 1991, 1993, and 1995. The estimated cost to complete cleanup (including compliance costs) at the remaining 188 sites is $1,008 million. This includes long-term management with a target completion date of 2030.

Ms. PFANNENSTIEL. DON has now spent about $4.5 billion on environmental cleanup, environmental compliance, and program management costs at prior BRAC locations through fiscal year 2010. Our remaining environmental cost to complete fiscal year 2011 and beyond is approximately $1.3 billion. At the end of fiscal year 2010, DON has disposed of 93 percent of Prior BRAC properties and has 12,353 acres remaining for disposal.

Mr. YONKERS. Of 1,950 legacy BRAC environmental sites, the Air Force has achieved site completion at 1,092 (56 percent). The Air Force goal is to complete 75 percent of all BRAC environmental sites by the end of 2012, and 90 percent by the end of 2015.

Of the original 87,000 acres excessed in legacy BRAC, 78,000 acres (90 percent) have been transferred. Final legacy BRAC whole base property transfer is scheduled for fiscal year 2014. The Air Force has supported expeditious community reuse and redevelopment of property that is not available for immediate conveyance with long-term leases in furtherance of conveyance. These leases allow the communities to begin redevelopment efforts in advance of receipt of the property by deed, further enhancing economic recovery.

81. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, where do we stand on cleanup of the 2005 BRAC sites?

Dr. ROBYN. The Department is working aggressively to complete the cleanup of BRAC 2005 sites. By the end of 2010, the Department, in cooperation with State agencies and the EPA, had completed cleanup activities on 40 percent of the Installation Restoration Program sites, and it is now monitoring the results. For the Military Munitions Response Sites, the comparable figure is 39 percent.

Using existing authorities, the Department is able to transfer the remaining sites to a redevelopment authority while cleanup continues, if the community is interested.

Ms. HAMMACK. The Army has completed cleanup at 71 (54 percent) of 155 environmental sites at 18 installations closing under BRAC 2005 that have cleanup requirements. The cost to complete cleanup (including compliance costs) at the remaining 71 sites is $398 million. This includes long-term management with a target completion date of 2017.

Ms. PFANNENSTIEL. DON has spent about $170 million on environmental cleanup, environmental compliance, and program management costs at BRAC 2005 locations through fiscal year 2010. Our cost to complete remaining environmental cleanup for fiscal year 2011 and beyond is $117 million. At the end of fiscal year 2010, DON has disposed of 45 percent of BRAC 2005 properties and has 10,131 acres remaining for disposal.

Mr. YONKERS. Of 81 BRAC 05 environmental sites, the Air Force has achieved site completion at 56 (69 percent). The Air Force goal is to complete 75 percent of all BRAC environmental sites by the end of 2012, and 90 percent by the end of 2015. Six of our eight BRAC 05 installations will have all environmental sites completed before 15 September 2011. The remaining 2 installations have 23 sites including groundwater cleanup that will continue beyond September 2011.

To date, 164 (23 percent) of the original 700 BRAC 05 acres have been transferred, which includes the whole base transfer of the former General Mitchell Air Reserve Station (ARS), WI. Final BRAC 05 whole base transfer is scheduled for fiscal year 2013.

82. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, when do you think all BRAC sites will be cleaned up and turned over—when are we done?

Dr. ROBYN. Using existing authorities, the Department is able to transfer the remaining sites to a redevelopment authority while cleanup continues, if the community is interested. Therefore, when all of the BRAC sites will be turned over will depend on the communities' interest and ability to redevelop the properties.

The Department projects that it will complete cleanup at 95 percent of the hazardous waste sites on Legacy BRAC installations by the end of fiscal year 2018; at all Military Munitions Response Program (MMRP) sites on Legacy BRAC installations by the end of fiscal year 2042; at all hazardous waste sites on BRAC 2005 installations by the end of fiscal year 2041; and at all MMRP sites on BRAC 2005 installations by the end of fiscal year 2017.

Ms. HAMMACK. The Army BRAC Environmental Program projects that RIP/RC will be achieved at Army installations closing under the BRAC 2005 by fiscal year 2017. Legacy BRAC installations are projected to achieve RIP/RC by 2030.

Ms. PFANNENSTIEL. The majority of sites are scheduled to have an environmental remedy in place by fiscal year 2015. Long term monitoring, however, will continue to fiscal year 2040 and beyond for sites such as groundwater plumes, landfills, and sites with restricted use.

Most sites are also scheduled to be transferred by fiscal year 2015 with the last installations scheduled to be transferred in fiscal year 2020.

Mr. YONKERS. The Air Force goal is to complete 90 percent of all legacy BRAC environmental sites by the end of 2015. We are unable to provide of a definitive

time when the last of the cleanups will be completed. For example, groundwater cleanup is complex and completion could take decades.

Final legacy BRAC whole base transfer is scheduled for fiscal year 2014. Of the original 87,000 acres excessed in legacy BRAC, 78,000 acres (90 percent) have been transferred. The Air Force retains responsibility to complete environmental remediation on any open sites at the time of transfer.

83. Senator AYOTTE. Dr. Robyn, on the issue of the 2005 round of BRAC, as you may know, DOD is required by law to complete all actions resulting from the 2005 BRAC round by September 15, 2011. As of this date only 6 months away from the statutory deadline, DOD has accumulated hundreds of millions of dollars in savings due to the economic downturn, and as opposed to returning those funds to the General Treasury, is now considering spending those funds on additional projects that do not directly support the BRAC moves. From a fiscal responsibility perspective, has DOD established a policy to determine which additional projects can be funded from the BRAC account?

Dr. ROBYN. It is not the Department's policy to fund additional support facilities simply because bid savings are available. As you are aware, however, the BRAC statute gives the Department the authority and flexibility to reprogram funds within the BRAC account in furtherance of implementation, and we have used this flexibility to ensure that BRAC recommendations are implemented efficiently and effectively. For example, the Department increased funding for construction projects to address the unfavorable market conditions that existed earlier in the implementation period. We also used this authority to apply savings to offset cost growth due to unexpected site conditions and to address the concerns of Congress regarding the quality of facilities being built at the new Walter Reed National Military Medical Center at Bethesda.

84. Senator AYOTTE. Dr. Robyn, will every support facility on a military installation that may have an impact from a BRAC move supporting incoming personnel be eligible for improvements or replacement using BRAC funds?

Dr. ROBYN. Throughout the six-year implementation process, the DOD Components have made decisions to fund projects that they felt were necessary to support BRAC implementation. My office has reviewed these decisions regularly and found them to be both prudent and fully within the authority provided by the BRAC statute.

85. Senator AYOTTE. Dr. Robyn, according to current policy, can the Services continue to identify and award new MILCON projects indirectly supporting functions right up to the BRAC statutory completion date?

Dr. ROBYN. There are some direct and indirect infrastructure projects where some elements of construction will continue after September 15, 2011. The Department is working diligently to ensure we satisfy our BRAC legal obligations, even if some construction continues past the deadline.

86. Senator AYOTTE. Dr. Robyn, does the Office of the Secretary of Defense (OSD) have an estimate of the impact of funding projects from the BRAC account that are not directly supporting the relocating function will have on total 2005 BRAC expenditures and projected savings?

Dr. ROBYN. The costs and savings associated with the projects are imbedded within the $35B implementation cost and $4 billion annual savings generated by BRAC 2005. This represents the combined effort of the 222 recommendations that the Department is executing. We do not have an explicit break out of projects deemed "direct" or indirect" within each recommendation.

87. Senator AYOTTE. Secretary Hammack, in April 2010, the Army notified Congress of its intent to use BRAC bid savings to award a MILCON project to construct an eating establishment that would be run by a contracted vendor in support of Army Material Command (AMC) Headquarters at Redstone Arsenal, Alabama. Both the Senate Armed Services Committee and the Senate Appropriations Committee expressed concerns with using BRAC MILCON funds for this purpose and asked the Army to consider the use of proceeds from a non-appropriated fund contract for the operation of other eating establishments at Redstone Arsenal to fund the construction of the AMC eatery. Please provide an update on the status of this project.

Ms. HAMMACK. The Army issued a conditional award to Aramark, the only offeror for a combined Missile Defense Agency (MDA)/AMC project, in late January and we have been in negotiations with them since that time. Our approach bundled the operation of the MDA cafeteria and a small coffee shop with a Public Private Venture

(PPV) to fund, design, construct and operate the AMC Cafeteria without executing the MILCON project. When negotiations are complete and the required Congressional approval is received for the PPV project, we expect construction to be complete in 10 months.

88. Senator AYOTTE. Secretary Hammack, can you provide the justification, a collective bargaining agreement in this case, that was used to justify the need to build a dedicated cafeteria next to the new AMC headquarters building?

Ms. HAMMACK. The current bargaining agreement requires us to negotiate if we change any work conditions of the bargaining employees; food service would be included in that category. Thus, since we are able to provide hot lunch options on site today at Belvoir, we would have to negotiate with the union if we were not able to provide that option at Redstone Arsenal. The following is a quote from the Federal Labor Relations Authority (FLRA).

"FLRA precedent states that bargaining proposals related to food services and prices concern conditions of employment. The FLRA concluded that the precedent applied to these proposals, so they were within the duty to bargain."

While there are other food service facilities in operation on Redstone Arsenal, they are not in close proximity, they currently operate near capacity, and some are located in secure facilities that preclude access to AMC employees. There are also food service facilities off of the installation, but delays getting on and off post make their use an unattractive option that would reduce worker and organizational productivity.

CAMP LEJEUNE WATER CONTAMINATION

89. Senator AYOTTE. Dr. Robyn and Secretary Pfannenstiel, there is a long history of mistrust between people who believe they were exposed to harmful chemicals that resulted in adverse health impacts due to the drinking water contamination at Camp Lejeune, NC, and the U.S. Government. As required by the Superfund law, the Agency for Toxic Substances Disease Registry (ATSDR), which falls under the Department of Health and Human Services, has been studying the possible adverse health impacts at Camp Lejeune since 1993.

What is the Navy doing to work with the ATSDR to complete their studies of the contamination of the water system at Camp Lejeune and any possible adverse health impacts that resulted from it?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to DON for this QFR response because the DON staff exercises active oversight of the issue.

DON response: The DON remains committed to taking care of marines, sailors, their families, and civilian workers. At Camp Lejeune, that means seeking answers to the many questions surrounding the historic water quality issue.

Since 1991 the DON has provided more than $27 million in funding to support scientific research and health initiatives on this issue to investigate whether diseases and disorders experienced by former residents and workers are or are not associated with their exposure to contaminants in the water at Camp Lejeune. Of this funding, more than $26 million has been provided to ATSDR.

In addition, the DON has spent thousands of hours and more than $2 million collecting information for past and ongoing health and research initiatives. Our information collection and sharing initiatives, which included a base-wide document search of Camp Lejeune, are unique in their breadth and scope. In 2010, the DON and ATSDR formed the Camp Lejeune Data Mining Technical Work Group (CLDMTWG) in a joint effort to complete the ongoing data discovery and collection process and ensure ATSDR possesses all relevant data and information needed for their health activities. In a March 2011 status update DON and ATSDR leads for the CLDMTWG agreed that: Pursuant to the Charge and the goals of the Workgroup, the two agency leads are confident that the Workgroup has successfully created an accurate and complete inventory. Further, the continued efforts of the Workgroup members have ensured that ATSDR representatives have received full access to all relevant information identified in the inventory.

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90. Senator AYOTTE. Dr. Robyn and Secretary Pfannenstiel, what is the Navy and the Marine Corps doing to ensure former marines, Navy personnel, and civilian employees and their families that they are committed to finding out the truth and doing what is right on this issue?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to DON for this QFR response because the DON staff exercises active oversight of the issue.

DON response: The welfare of our marines, sailors, and their families has been, and always will be a top priority for DON. We continue to work diligently to identify and notify individuals who may have been exposed to the past water contamination. The Marine Corps operates a comprehensive outreach and notification program, which includes a call center and online registry, direct notification by letter, and supplemental notification through the media. To date the Marine Corps has collected more than 168,000 names and sent out well over 200,000 direct notifications.

DON also continues to seek answers to the many questions surrounding the historic water quality issue at Camp Lejeune. Since 1991 the DON has provided more than $27 million in funding to support scientific research and health initiatives on this issue. These health initiatives include work by the ATSDR and the National Academies, National Research Council.

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DON also continues to seek answers to the many questions surrounding the historic water quality issue at Camp Lejeune. Since 1991 the DON has provided more than $27 million in funding to support scientific research and health initiatives on this issue. These health initiatives include work by the ATSDR and the National Academies, National Research Council.

91. Senator AYOTTE. Dr. Robyn and Secretary Pfannenstiel, how long do you think it will take to complete all the studies that ATSDR has ongoing?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to DON for this QFR response because the DON staff exercises active oversight of the issue.

DON response: ATSDR currently has four research initiatives planned or underway (water modeling, a birth defects and childhood cancer study, a health survey, and a mortality study). ATSDR has projected that these studies will be completed by 2013. Additionally, ATSDR is considering a cancer incidence study contingent upon the results of the health survey.

Ms. PFANNENSTIEL. ATSDR currently has four research initiatives planned or underway (water modeling, a birth defects and childhood cancer study, a health survey, and a mortality study). ATSDR has projected that these studies will be completed by 2013. Additionally, ATSDR is considering a cancer incidence study contingent upon the results of the health survey.

92. Senator AYOTTE. Dr. Robyn and Secretary Pfannenstiel, I understand there have been some disputes in the past on ATSDR. Has the Navy agreed to fund all of ATSDR's requested studies?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to DON for this QFR response because the DON staff exercises active oversight of the issue.

DON response: ATSDR is funded by DON through a negotiated annual plan of work (APOW). ATSDR has been fully funded ($3.921 million) by DON for fiscal year 2011. The APOW for fiscal year 2012 will be negotiated later this fiscal year.

Ms. PFANNENSTIEL. ATSDR is funded by DON through a negotiated APOW. ATSDR has been fully funded ($3.921 million) by DON for fiscal year 2011. The APOW for fiscal year 2012 will be negotiated later this fiscal year.

93. Senator AYOTTE. Dr. Robyn and Secretary Pfannenstiel, has the Navy and the Marine Corps turned over to ATSDR all the necessary historical materials about the water system and testing of the water to inform ATSDR's studies?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to DON for this QFR response because the DON staff exercises active oversight of the issue.

Ms. PFANNENSTIEL. ATSDR has had access to information under DON control since their Public Health Assessment began in 1991. Since 1991, DON has assisted ATSDR's work by searching for, collecting, and providing pertinent documents. By 2000, DON shifted its focus to consolidating and archiving these documents, and in 2005 DON provided a database of such documents to ATSDR. In 2005, DON also contracted with Booz Allen Hamilton to provide comprehensive, transparent document search and collection covering all Camp Lejeune areas and facilities in an effort to fully identify the universe of information potentially related to the historic drinking water issue. ATSDR provided input on search parameters and has always had access to these documents as well. In a joint effort to complete the ongoing data discovery and collection process and ensure ATSDR possesses all relevant data and information needed for their health activities, the DON and ATSDR formed a CLDMTWG. In a joint March 2011 memo, DON and ATSDR leads for the CLDMTWG agreed that: Pursuant to the Charge and the goals of the Workgroup, the two agency leads are confident that the Workgroup has successfully created an accurate and complete inventory. Further, the continued efforts of the Workgroup members have ensured that ATSDR representatives have received full access to all relevant information identified in the inventory.

94. Senator AYOTTE. Dr. Robyn and Secretary Pfannenstiel, why has it taken so long to ensure ATSDR had all the data that was available?

Dr. ROBYN. The Office of the Deputy Under Secretary of Defense (Installations & Environment) defers to DON for this QFR response because the DoN staff exercises active oversight of the issue.

Ms. PFANNENSTIEL. DON has always been committed to assisting ATSDR by providing information necessary for their health initiatives at Camp Lejeune. ATSDR has had access to information under DON control since their Public Health Assessment began in 1991. Since 1991, DON has assisted ATSDR's work by searching for, collecting, and providing pertinent documents. By 2000, DON shifted its focus to consolidating and archiving these documents, and in 2005 DON provided a database of such documents to ATSDR. In 2005, DON also contracted with Booz Allen Hamilton to provide comprehensive, transparent document search and collection covering all Camp Lejeune areas and facilities in an effort to fully identify the universe of information potentially related to the historic drinking water issue. ATSDR provided input on search parameters and has always had access to these documents as well. This has included numerous ATSDR site visits, interviews, meetings, and document requests. As ATSDR's information needs have evolved over the years, the DON's data management efforts have evolved to meet those needs. The DON has spent thousands of hours and more than $2 million collecting information for past and ongoing health and research initiatives. Our information collection and sharing initiatives, to include a base-wide document search of Camp Lejeune, are unique in their breadth and scope. In 2010, DON and ATSDR recognized that it was important to make an additional final effort to ensure ATSDR had all of the data and information needed for their health initiatives at Camp Lejeune. This led to the establishment of the CLDMTWG, a joint effort between DON and ATSDR to complete the ongoing data discovery and collection process and ensure ATSDR possesses all relevant data and information needed for their health activities. In a March 2011 status update DON and ATSDR leads for the CLDMTWG agreed that: Pursuant to the Charge and the goals of the Workgroup, the two agency leads are confident that the Workgroup has successfully created an accurate and complete inventory. Further, the continued efforts of the Workgroup members have ensured that ATSDR rep-

resentatives have received full access to all relevant information identified in the inventory.

SERVICE SUPPORT FOR SCHOOL CONSTRUCTION

95. Senator AYOTTE. Dr. Robyn, the budget request for 2012 and the FYDP includes over $3 billion to modernize aging elementary, middle, and high schools operated by DOD Education Activity (DODEA). I wholeheartedly support the Secretary's priority to ensure that the schools owned by DOD meet world-class standards for the benefit of our military families.

This committee directed in last year's defense bill by requiring the Secretary of Defense "to establish a formal process whereby the best practices and design innovations in public and private school construction can be incorporated into the design of DODEA schools. The Secretary shall ensure that the process encourages the use of sustainable designs, green building systems, acoustics management, student safety/security, and interactive technology to create a positive learning environment for children and an efficient teaching environment for faculty." How is DOD complying with this requirement?

Dr. ROBYN. In April of this year, DODEA established a formal process whereby the best practices and design innovations in public and private school construction can be incorporated into the design of DODEA schools. In addition to the emphasis on sustainability and energy conservation, the process will also focus on advances in education, curriculum delivery, and innovative uses of technology. Final facility specifications will result in schools that are flexible and adaptable, allowing DODEA to adjust to new and innovative ways to deliver instruction in a positive learning environment for children and an efficient teaching environment for faculty.

96. Senator AYOTTE. Dr. Robyn, is DOD committed to the establishment of standards for DODEA schools that will result in world-class education facilities for the children of military personnel?

Dr. ROBYN. DODEA is committed to production of new school facility design standards. In April of this year, a symposium, including participation by public and DODEA school educators, university faculty, and private sector architects and engineers, established a formal process whereby the best practices and design innovations in public and private school construction can be incorporated into the design of DODEA schools. This process will take into consideration innovations in education, curriculum delivery, use of technology, and requirements for sustainability and energy conservation. Final facility specifications will result in design standards for world-class education facilities to support the children of our military personnel.

97. Senator AYOTTE. Dr. Robyn, will the best practices and design innovations identified in the process be incorporated into the plans for new schools authorized by Congress in the 2011 defense bill?

Dr. ROBYN. DODEA is in the process of identifying best practices and design innovations that can be incorporated in fiscal year 2011. The fiscal year 2011 construction contract solicitations will be revised, to the extent possible and within budgets, to allow the maximum inclusion in fiscal year 2011 school construction.

98. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, DODEA will be carrying out a $3 billion construction and renovation effort over the next 4 years that will require the cooperation of effort and resources from each Service to assist with the selection and improvement of sites for each school. As you may know, DODEA will only be responsible for the construction of the school, playgrounds, and athletic fields. Any roads or utilities needed at the site are a funding responsibility of the base. Are the Services offering adequate land and resources to support DOD's construction efforts?

Dr. ROBYN. With any large, complex program, it is not unexpected to encounter challenges. When DOD committed to the aggressive recapitalization of over 130 schools valued at more than $3.8 billion, many of the replacement projects did not have specific sites identified. As DODEA and the Military Departments worked out the location options for the replacement schools, consistent with installation master plans, new requirements (e.g., roads, utilities) emerged necessitating additional funding. Where funds were available, the Military Departments provided the resources needed to keep the school projects on schedule. In a few cases, projects were moved back in the queue to allow the Department to program resources needed to make a complete and usable project.

Ms. HAMMACK. Yes. With the exception of one planned school at USAG Stuttgart, there are no infrastructure issues with DODEA planned construction on Army installations. DOD Dependents Schools-Europe (DODDS–E), USAREUR, IMCOM-Europe, and EUCOM decided to include infrastructure costs in the project scope for the school at Boeblingen Training Area, USAG Stuttgart, to ensure project synchronization.

Ms. PFANNENSTIEL. Yes. DON is supporting DODEA in its construction program. In addition to the provision of a site, several of our military housing privatization projects have included construction of schools for DODEA operation.

Mr. YONKERS. The Air Force is offering adequate land and resources to support DODEA construction efforts.

99. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, do any of the projects planned for construction in fiscal year 2011 or fiscal year 2012 have problems with siting or utilities? If so, can you describe the problems and remedies?

Dr. ROBYN. I am not aware of any projects in fiscal year 2011 or fiscal year 2012 that have siting or utilities issues; however there is one fiscal year 2010 project, the elementary school at Boeblingen Training Area, which encountered some infrastructure challenges on the building site. The Army is working the DODDS–E to resolve the issue.

Ms. HAMMACK. The Army is not aware of any problems for projects in those fiscal years. However, we are working cooperatively with DODDS and EUCOM to resolve an issue for a fiscal year 2010 project for an elementary school at the Boeblingen Training Area, USAG Stuttgart.

Ms. PFANNENSTIEL. There are no problems associated with the siting or utilities at Navy/Marine Corps installations in the fiscal year 2011/2012 DODEA construction program (Camp Lejeune, New River, Quantico, and Dahlgren).

Mr. YONKERS. There are no siting or utility issues associated with fiscal year 2011/12 DODEA construction projects.

EARMARKS FOR NON-DEFENSE REQUIREMENTS

100. Senator AYOTTE. Dr. Robyn, in recent years, a proliferation of earmarked grants have been appropriated to DOD through the Office of Economic Adjustment for vague requirements (to preclude technically being called an earmark) like $300 million for medical transportation infrastructure in the NCR, $45 million for reimbursements to local towns, and $250 million for repairs to local community schools. None of these amounts are included in DOD budget requests nor are they considered firm DOD requirements. All of them are added as a result of decreases to other DOD accounts. So, it would seem logical that in these times of fiscal austerity where DOD is making hard decisions about savings and efficiencies, there would be strong opposition to congressional efforts to fund them from DOD accounts. But there isn't, and it's very troubling. Should DOD assume funding responsibility for improvements to public facilities and infrastructure that historically have been funded by other agencies?

Dr. ROBYN. The Department understands that neither the $300 million for medical transportation infrastructure nor the $250 million for schools located on military installations (both funded through fiscal year 2011 appropriations) are earmarks, as defined by Congress. While these programs (local roads and schools) are local responsibilities, they do have significant effects on the quality of life of military personnel and their families. DOD will execute them as directed.

101. Senator AYOTTE. Dr. Robyn, in the case of funds to improve schools not owned by DOD, it is true that in some cases, local school districts specifically voted to steer funds away from schools on bases supporting military children with the expectation that Federal funds would eventually be provided? If true, why would DOD want to reward that type of behavior?

Dr. ROBYN. The Department is unaware of any Local Education Agency purposefully allowing the education environment for these students to deteriorate in anticipation of Federal funding. We know there are a number of public schools located on military installations that service mostly military children. Our recent assessment of these schools indicates some have significant condition and capacity deficiencies and Local Education Agencies have not been able to generate the revenue required to recapitalize these facilities in spite of fair efforts to do so.

102. Senator AYOTTE. Dr. Robyn, could DOD's support for Federal funding to improve these schools invite in additional requests for billions to support the other hundreds of schools?

Dr. ROBYN. While anything is possible, we prefer not to speculate what Local Education Agencies would do. Our recent inventory indicates there are approximately 160 public schools located on military installations. The majority are well maintained and recapitalized with only a fraction lacking the resources to invest beyond general operations and maintenance to remedy serious condition and/or capacity problems. Since these schools service mostly military children, the Department is a stakeholder in ensuring the most serious problems are remedied. However, over the long term, states and Local Education Agencies must remain in the lead to find innovative solutions.

103. Senator AYOTTE. Dr. Robyn, why wouldn't every school district in the country then stop funding school improvements supporting military children, knowing that DOD would eventually step in?

Dr. ROBYN. The Department is unaware of a situation where a Local Education Agency has made a conscious decision to ignore its responsibility to operate and maintain its public schools, regardless of school location.

ECONOMIC DEVELOPMENT CONVEYANCES

104. Senator AYOTTE. Dr. Robyn, DOD recently issued a proposed regulation implementing its revised Economic Development Conveyance (EDC) authority for BRAC properties. I believe the Services are meeting with you this week to discuss implementation of the revised policy. As you know, EDCs are intended to facilitate the disposal of property to a local redevelopment agency (LRA) with some sort of consideration received by the Government as compensation. How much compensation has historically been the focus of negotiations between DOD and the LRA, just like a purchase of a house for you and me. The buyer has an idea of what the property is worth and so does the seller, both based on county or bank appraisals. But the revised policy you have issued would delete the requirement to establish estimated fair market through a government appraisal, which is a consistent requirement for other property disposal actions of the Federal Government. Why would DOD no longer require a fair market appraisal in order to inform government representatives?

Dr. ROBYN. The proposed regulation deletes the requirement to conduct—but does not prevent—an appraisal. In fact, the proposed regulation directs the Military Departments to gather any information they need to conduct an informed negotiation such as an appraisal, market analysis, construction estimate, or real estate pro forma. An appraisal may not be an appropriate tool to use in all circumstances because other information may better help the parties understand the potential value of a property. Elimination of the requirement to determine Fair Market Value and related appraisal requirements should expedite the conveyance process and remove a common source of conflict and delay between the community and Department.

105. Senator AYOTTE. Dr. Robyn, how will DOD know what the property is worth?

Dr. ROBYN. The proposed regulation specifically allows the Military Departments to obtain and use any information deemed appropriate to conduct an informed property disposal negotiation to include a market analysis, construction estimates, real estate pro forma, and appraisal. It is difficult to identify the exact value of property at closing installations due to redevelopment uncertainties and differences in 20–30 year projected costs and revenues. The proposed regulation offers the Department the flexibility to gather information it needs to conduct a negotiation—the same type of information a private landowner would use for similar transactions.

106. Senator AYOTTE. Dr. Robyn, is it DOD's intent to dispose of more BRAC property for no cost or less than fair market value? If so,why?

Dr. ROBYN. No. The Department's intent is to dispose of property as quickly as possible to support local economic development and job creation. Some urban properties may have current or future value potential, while others, particularly in rural or isolated areas, may not. The Department and communities should share in that value as well as support local economic development and job creation.

107. Senator AYOTTE. Dr. Robyn, part of the costs ($30 billion as of 2011) associated with implementing the 2005 BRAC round was to be offset with proceeds gained from the conveyance or sale of DOD land. These funds were required by law to be

applied to environmental remediation actions to clean up BRAC sites. Doesn't the adoption of back-end financing deals undercut your source of front-end land revenue needed to clean up sites for disposal?

Dr. ROBYN. No. The Department does not assume any revenue from the sale of BRAC property because a projection would be very speculative. Clean-up budgets are independent from revenue and sale proceeds. Any money derived from sales should expedite the clean up, but not be the primary source of funds to meet remediation obligations.

108. Senator AYOTTE. Dr. Robyn, what is the estimate in lost revenue to the Services from the changes in policy?

Dr. ROBYN. The Department does not anticipate revenue loss. In many communities, the current real estate market is depressed and suffers from low demand and inadequate financing, which makes it difficult to determine current property value. The Department may achieve more return by taking a share of future revenue rather than a sale at current market conditions. This approach assists local economic development and job creation, and if successful, may increase the total revenue to the taxpayer over time.

109. Senator AYOTTE. Dr. Robyn, how will DOD compensate for this lost revenue?

Dr. ROBYN. The Department does not anticipate revenue loss.

OKINAWA AND GUAM

110. Senator AYOTTE. Secretary Pfannenstiel, regarding U.S. MILCON on Guam to support the relocation of 8,000 marines and their families from Okinawa, I notice that the Navy scaled back the request for funds in 2012 by almost $300 million for Guam construction from what was planned last year for 2012. This is in addition to the $320 million we deferred in fiscal year 2011.

One of the projects planned last year for 2012 that is not in the current budget request is $148 million to purchase private land on Guam for training ranges for the marines. We have heard testimony in other hearings that consistent access to adequate training ranges on Guam is considered a show-stopper by the Marine Corps.

Considering that "the goal is to have an agreement in principle with the Governor by the fall of 2011, allowing formal land negotiations to commence once appropriate congressional approval for land acquisition has been received," why was this project for land acquisition stricken from the 2012 budget request if you need the authorization starting in the fall of 2011?

Ms. PFANNENSTIEL. Based on the lack of a Programmatic Agreement under the National Historic Preservation Act (NHPA), the lack of a Record of Decision (ROD) selecting the final site for the live fire training range complex, and other factors, the budget request for fiscal year 2012 was re-evaluated and it was determined that budgeting for land acquisition to support a live fire training range complex would be premature.

111. Senator AYOTTE. Secretary Pfannenstiel, considering your commitment to conduct training activities in a manner which will allow unfettered access to the Pagat Village and Pagat Cave historical sites, what is the plan to meet the training range requirements for the Marine Corps on Guam?

Ms. PFANNENSTIEL. Developing an achievable plan for delivering required training capabilities on Guam to support the realignment of Marine Corps forces from Okinawa is a priority. Option A at the Route 15 area remains the preferred alternative for the location of a live fire training range complex. Should Option A be selected in the Record of Decision for training, the Department has committed to conduct training activities in a manner which will allow unfettered access to the Pagat Village and Pagat Cave historical sites. This commitment, which was made in the Programmatic Agreement, can be kept without compromising Individual Training Standards (ITS) for Marines on Guam. Regarding the timing for land acquisition, our focus is on ensuring training ranges are in place by the time relocating units will need them.

112. Senator AYOTTE. Secretary Pfannenstiel, when will you be sure that the Marine Corps has adequate land for their ranges?

Ms. PFANNENSTIEL. The preferred alternative site for a live-fire training complex, which is along Route 15 on the eastern side of Guam, is non-DOD property. Should the Department select this alternative in a supplemental Record of Decision, which

is slated for mid-summer at the earliest, it would involve the acquisition of approximately 1,090 acres of non-DOD lands.

Our focus is on ensuring that the training range complex is in place to support the relocation of Marine Corps forces. Accordingly, we are currently developing an updated notional timeline to support potential acquisition of lands along Route 15 that adequately considers necessary property studies and surveys, informal discussions with Guam concerning possible acquisition, and submission of required MILCON budget submissions for land acquisition.

If the Record of Decision selects the preferred alternative, then the Department believes that the area will fulfill the Marine Corps' mission. At that time, informal land discussions will begin with Guam, and the Department will have a more complete understanding of the feasibility of land acquisition.

113. Senator AYOTTE. Secretary Pfannenstiel, do you agree that we should resolve this issue before awarding construction contracts for the site work on the Marine Corps base?

Ms. PFANNENSTIEL. The projects appropriated in fiscal year 2010, those authorized for appropriation in fiscal year 2011, and those requested in fiscal year 2012 are necessary to enable subsequent vertical construction and to support Marine Corps operations. Waiting to begin MILCON projects until after training range land acquisition issues are resolved would create a significant bottleneck in Guam's limited construction capacity by delaying a large volume of site preparation and other preliminary development necessary to support follow-on vertical construction of the new Marine Corps base. The force flow of Marines to Guam will be based upon the availability of requisite facilities and infrastructure. Therefore, a delay in the early horizontal construction stage of the program will potentially delay the Marines' ability to relocate from Okinawa in fulfillment of our international agreement.

114. Senator AYOTTE. Secretary Pfannenstiel, why are we commencing work without resolving significant issues with the Government of Japan over the relocation of MCAS Futenma?

Ms. PFANNENSTIEL. An essential point of our realignment agreement with Japan is that relocation of Marine Corps forces from Okinawa to Guam is dependent upon tangible progress in the construction of the FRF. To support this realignment effort, construction of facilities on Guam must begin well in advance of the actual construction on the FRF. Japan has shown commitment to the realignment by moving forward with significant upland construction at Camp Schwab to support the FRF, design plans for the FRF, and by transferring money to the U.S. Treasury to support construction of utilities and infrastructure on Guam for the relocating Marine Corps forces. Likewise, the United States must now reciprocate by moving forward with construction on Guam.

The projects appropriated in fiscal year 2010, those requested in fiscal year 2011, and those requested in fiscal year 2012 are necessary to enable subsequent vertical construction and to support Marine Corps operations. Waiting to begin MILCON projects until completion of the FRF would create a significant bottleneck in Guam's limited construction capacity by delaying a large volume of site preparation and other preliminary development necessary to support follow-on vertical construction of the new Marine Corps base. Therefore, a delay in the early horizontal construction stage of the program will potentially delay the Marines' ability to relocate from Okinawa in fulfillment of the international agreement.

115. Senator AYOTTE. Secretary Pfannenstiel, do we run the risk of never finishing or using the construction we have started, resulting in another congressional scandal of running utilities to nowhere?

Ms. PFANNENSTIEL. The projects appropriated in fiscal year 2010, those authorized for appropriation in fiscal year 2011, and those requested in fiscal year 2012 are necessary to enable subsequent vertical construction and to support Marine Corps operations. The execution plan is designed to avoid creating a significant bottleneck in Guam's limited construction capacity by delaying a large volume of site preparation and other preliminary development necessary to support follow-on vertical construction of the new Marine Corps base. The force flow of Marines to Guam will be based upon the availability of requisite facilities and infrastructure. Therefore, a delay in the early horizontal construction stage of the program will potentially delay the Marines' ability to relocate from Okinawa in fulfillment of our international agreement with Japan.

The marines relocating to Guam will utilize capabilities being developed at Apra Harbor and Andersen Air Force Base and, should the Marine Corps relocation not move forward, this capability would provide the Air Force with some flexibility as

it could be used for operations that are not currently planned. However, the U.S. and Government of Japan remain committed to the realignment and are thus taking the steps necessary to begin execution.

116. Senator AYOTTE. Secretary Pfannenstiel, in your written testimony you stated, "the Department will also consider recent input to issue a record of decision (ROD) for the live-fire training range complex on Guam." When will that ROD be issued?

Ms. PFANNENSTIEL. The Department is currently reviewing all materials related to the siting of a live-fire training range complex and completing the necessary due diligence and consideration before issuing a Record of Decision. It is anticipated that the Record of Decision for live-fire training will be available mid-summer at the earliest.

117. Senator AYOTTE. Secretary Pfannenstiel, noting your commitment to a "net negative" growth in the amount of property controlled by DOD on Guam, approximately how many acres of land not owned by DOD will have to be acquired? Can you describe what existing DOD lands DOD has identified as available for disposal to result in a smaller footprint?

Ms. PFANNENSTIEL. The Record of Decision (ROD) issued in September selected the Former FAA property, currently not in DOD's inventory, for family housing. However, the ROD made no decision regarding the location for a live-fire training range complex. The preferred alternative site for a live-fire training complex, which is along Route 15 on the eastern side of Guam, is also non-DOD property. Real estate studies are ongoing; however, the approximate acreage required to execute the selected site for housing and the preferred alternative site for training ranges is about 1,800 acres.

Should the Record of Decision for training select the preferred alternative site at Route 15, successful acquisition of the Route 15 property is a priority so that Marine Corps training requirements can be met on Guam. The Net Negative concept is currently in the early stages of development and specific parcels available for disposal have not yet been identified. The Department is also assessing the feasibility of utilizing existing DOD property to limit the need for additional land. As part of these assessments, we will look to identify mission that could be relocated to free up land to meet the Net Negative commitment.

118. Senator AYOTTE. Secretary Pfannenstiel, your testimony notes that studies will be conducted to determine if missions can be relocated in order to free up land for disposal. Shouldn't Congress defer any construction on Guam until the studies are complete?

Ms. PFANNENSTIEL. The projects appropriated in fiscal year 2010, those requested fiscal year 2011, and those requested in fiscal year 2012 are necessary to enable subsequent vertical construction and to support Marine Corps operations. Waiting to begin MILCON projects until land acquisition issues are resolved would create a significant bottleneck in Guam's limited construction capacity by delaying a large volume of site preparation and other preliminary development necessary to support follow-on vertical construction of the new Marine Corps base. The force flow of Marines to Guam will be based upon the availability of requisite facilities and infrastructure. Therefore, a delay in the early horizontal construction stage of the program will potentially delay the Marines' ability to relocate from Okinawa in fulfillment of our international agreement.

HOUSING FOR U.S. FORCES STATIONED IN KOREA

119. Senator AYOTTE. Secretary Hammack, I have a question about the plan to support the stationing of military families in Korea to accompany 28,000 military forces assigned there under the new policy for up to 3 years. On September 23, 2010, the Secretary of Defense directed United States Forces Korea and the Services to proceed with full tour normalization for Korea, as affordable, but not according to any specific timeline. I understand that DOD is still in the process of developing a plan and cost estimate by March 31, 2011, for the construction of facilities and infrastructure to support the families. Along those lines, the Army has been working for 3 years on a plan for housing at Camp Humphreys to support the families that are already stationed in Korea.

Two years ago at a similar hearing, the Army representative testified that the first phase of a public/private partnership for the construction and operation of housing was scheduled to begin construction of a total of 2,427 units in the fall of

2009 and begin occupancy in the fiscal year 2011 and fiscal year 2012 timeframe to coincide with unit moves under the Yongsan Relocation Plan. The second phase was planned to begin construction in the fall of fiscal year 2011 with occupancy and lease up in fiscal year 2013 to fiscal year 2014. The total development budget was estimated to be approximately $1.3 billion. Please provide an update on the progress of this housing initiative.

Ms. HAMMACK. The Humphreys Housing Opportunity Program (HHOP) Phase 1 (1,400 homes) was approved by the Secretary of Defense on September 23, 2010. The private partner Humphreys Family Communities (HFC) began final consultations with bond rating agencies, Korean developers and Republic of Korea government officials in December 2010. HFC anticipates completion with the rating agencies and a financial closing in the summer 2011.

120. Senator AYOTTE. Secretary Hammack, what is the current plan and cost estimate for the construction of 2,427 housing units?

Ms. HAMMACK. On September 23, 2010, the Secretary of Defense approved a two-phase plan to provide family housing in support of the Yongsan Relocation Plan (YRP). Phase 1 will provide 1,400 homes thru a private partnership referred to as HHOP with an estimated development budget of $770 million. Phase 2 will provide 1027 homes using MILCON or an extension of HHOP. Phase 2 construction cost is estimated at $625 million.

121. Senator AYOTTE. Secretary Hammack, which DOD account will the costs of housing construction be funded from?

Ms. HAMMACK. Phase 1 housing construction is financed by the Republic of Korea and a private developer. Phase 2 construction will be thru MILCON or private finance.

TREASURE ISLAND

122. Senator AYOTTE. Secretary Pfannenstiel, the former Naval Station Treasure Island was closed in 1993. Of the total 535 acres of the island in the middle of the San Francisco Bay, 247 acres were determined suitable for transfer in 2006. Currently, the Local Redevelopment Agency operates the island under a cooperative agreement with the Navy bringing in $7 to $10 million in annual lease revenue.

Starting in 2007, the Navy negotiated with the City of San Francisco to transfer the island under an economic development conveyance. The Navy estimated the fair market value of the property to range from $185 million to $275 million depending on the economic conditions. The city estimated the worth of the island at about $22 million. Both sides were at an impasse, resulting in efforts by Congress to force a resolution through directive legislation.

Last year, the Navy announced a deal with the city that would set aside a fair market value, relying instead on a series of payments to the Navy over time based on certain financial benchmarks. As you stated in your testimony, the Navy would receive $55 million with interest paid over 10 years. The Navy would then be eligible for subsequent payments of net cash flow up to $50 million after a private developer had achieved an 18 percent cumulative unleveraged internal rate of return (IRR) and 35 percent of net cash flow after the developer has achieved a cumulative 22.5 percent return. If the developer does not achieve these financial returns, the Navy will not receive the payments. Under this arrangement, how confident are you that the Navy will receive any additional compensation beyond the $55 million?

Ms. PFANNENSTIEL. DON is confident that the Economic Development Conveyance terms for Naval Station Treasure Island will return a fair value to the Navy. As you noted, DON and the City of San Francisco were at an impasse on the determination of fair market value. This was primarily due to the inherent difficulty in cost and revenue projections over a 20 year development timeline in an uncertain housing market. Legislation in the National Defense Authorization Act for fiscal year 2009 allowed for a share of project revenues as consideration for Economic Development Conveyances. This legislation provided the impetus to construct consideration that guaranteed a payment to DON and allowed for unlimited participation in project profits. This structure ensures that if the project is successful as projected in the DON appraisal, the Navy will receive its fair market value.

123. Senator AYOTTE. Secretary Pfannenstiel, when do you expect that the Navy will start receiving payments above and beyond the $55 million over 10 years?

Ms. PFANNENSTIEL. Consideration above and beyond the guaranteed payment will be determined by project performance. DON will receive the first $50 million after

the project reaches an Internal Rate of Return (IRR) of 18 percent. Once the project reaches this IRR threshold, DON receives all net cash flow until the $50 million is paid. At that point, the project must reach an additional 4.5 percent return for a total of 22.5 percent and DON would receive 35 percent of all net cash flow. Utilizing the current Pro Forma and development schedule, 18 percent IRR and additional payments to DON occur in year 10 or about the same time as the last guaranteed payment.

124. Senator AYOTTE. Secretary Pfannenstiel, how will the Navy verify the financial returns of the developer?

Ms. PFANNENSTIEL. The Economic Development Conveyance terms contain a number of controls to ensure that all project costs and revenues are transparent and all aspects of the project are subject to audit and reporting requirements. There are four aspects of the deal where DON will verify project accounting. First, the City is required to submit an annual accounting specific to calculations of the Internal Rate of Return (IRR) and determination of DON payments. Second, the City is required to submit annual audited financial statements for the entire project. Third, DON has the right to conduct our own audit of project financials. Under this scenario, any discrepancy must be corrected and a discrepancy greater than 5 percent would require the City to pay all costs of the DON audit. Finally, DON will receive copies of any audit conducted by the City under the terms of the City's development agreement with Lennar.

125. Senator AYOTTE. Secretary Pfannenstiel, shouldn't the Navy insist on an independent accounting firm and audits to validate the cash flows and to protect the Navy's interests?

Ms. PFANNENSTIEL. DON believes that the process established in the Economic Development Conveyance protects DON interests. DON has the right to hire its own independent firm to validate cash flow and audit books. We feel that this direct relationship of a firm hired by DON is in the best interest of DON and provides the best opportunity to validate cash flows and protect Navy interests.

126. Senator AYOTTE. Dr. Robyn, is this agreement consistent with the policy being established by DOD for economic development conveyances?

Dr. ROBYN. Yes.

127. Senator AYOTTE. Dr. Robyn, are you comfortable with the Navy risking payments to the U.S. Treasury based on the performance and bookkeeping of a developer years after turning over the deed to the property?

Dr. ROBYN. The Department views the Navy's agreement as an opportunity to share in future development profits while benefiting the taxpayer. The Navy is a partner in the development and has the opportunity for unlimited revenue if the project is successful. In the current real estate and finance environment, projected value of property is extremely speculative and inherently risky. The Navy has crafted an agreement that aligns incentives and interests of all parties creating a win-win scenario for the City, the developer, and the U.S. Treasury.

128. Senator AYOTTE. Dr. Robyn, knowing that the funds received by DOD for disposed properties are used to fund environmental clean-up actions at other BRAC sites, why would you be willing to delay by many years receipt of those proceeds?

Dr. ROBYN. The Department does not assume any revenue from property sales when creating clean-up budgets. The Department only uses funds from the sale of BRAC property to accelerate existing cleanup operations. Additionally, these revenue-sharing agreements were specifically authorized by the National Defense Authorization Act for fiscal year 2010 as a way of quickly transferring BRAC property to the communities for job-creation purposes. These authorized revenue sharing agreements have several benefits besides providing funds to supplement clean-up budgets. Not only do they reduce operations and maintenance costs, they also support quicker reuse and assist community economic recovery and job creation.

DEFENSE ACCESS ROADS

129. Senator AYOTTE. Dr. Robyn, the Defense Access Roads (DAR) Program allows DOD to collaborate with the Department of Transportation for the use of MILCON funds to construct or improve roads in local communities that have been impacted by a military basing decision. The criteria used by DOD to assess the validity of projects have been the subject of much scrutiny and criticism over the years. You

mention in your written statement that you plan to revise the DAR funding criteria. When will you issue the revisions?

Dr. ROBYN. The Military Service and DLA Transportation Engineering Program regulations contain the DAR criteria. Revising the criteria will require coordination within the Department as well as with the Federal Highway Administration. Our intention is revise the criteria by the end of summer.

130. Senator AYOTTE. Dr. Robyn, can you describe what changes you propose for the criteria?

Dr. ROBYN. Our intention is to revise the criteria to address impacts in urban areas in a manner similar to that suggested by the National Academy of Sciences report. The final form and details of the change will result from coordination within DOD and with the Federal Highway Administration.

131. Senator AYOTTE. Dr. Robyn, the budget request for fiscal year 2012 includes a project for $4 million to improve an intersection in and around Marine Corps Base Quantico. Does this project meet the DAR criteria currently in use by DOD? If so, how?

Dr. ROBYN. The fiscal year 2012 President's budget request includes a certified DAR Program project at the intersection of Telegraph Road and Route 1. The project was certified under the existing doubling of traffic eligibility criterion. The consolidation of multiple intelligence, security and investigative organizations will relocate personnel to the west side of Marine Corps Base, Quantico, VA. The personnel increases will double traffic volumes and the number of vehicles making turns leading to and from Route 1 at Telegraph Road since it is a primary access from the public road system to the Quantico facilities.

INVESTMENT LEVELS FOR MILITARY CONSTRUCTION

132. Senator AYOTTE. Dr Robyn, noting that DOD still uses a goal of 90 percent to budget operations and maintenance (O&M) funding to sustain our facilities, does DOD currently have any guidance issued to the Military Services that would establish benchmarks or minimum goals for the levels of investment needed annually to recapitalize aging facilities and infrastructure? If not, how can we know whether the President's budget request for MILCON in 2012 is funded at a level that adequately addresses the needs of DOD to replace or modernize deteriorated facilities?

Dr. ROBYN. While the DOD continues to explore an affordable and quantitative method for determining benchmarks for recapitalizing our large facility inventory, currently the DOD has not established a goal associated with facility recapitalization. The Department's Planning, Programming, Budgeting, and Execution (PPBE) process provides the basis for fiscal decisionmaking that is predicated on priorities derived from strategic objectives. The PPBE process revisits these priorities annually, which includes what facilities require construction or repair to correct known deficiencies. The resulting decisions by the Secretary and Deputy Secretary on investment levels for all programs are based on an informed decision process.

133. Senator AYOTTE. Dr. Robyn, are you concerned that the decreases in Services' budgets for MILCON projects to replace current facilities over the past 3 years is leading to a strain on O&M accounts that are used to maintain these deteriorated facilities?

Dr. ROBYN. The decrease in MILCON funding over the past 3 years is largely the result of BRAC, Global Defense Posture, and Grow-the-Force programs coming to a close. The DOD Components continue to recapitalize their facilities using both MILCON and operations and maintenance funds.

GUARD AND RESERVE REQUIREMENTS

134. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, do you believe the President's budget request for 2012 for each of the Services adequately funds the construction needs of Guard and Reserve Forces?

Dr. ROBYN. I believe that the President's fiscal year 2012 budget request adequately funds the most pressing balance of Active and Reserve component construction needs.

Ms. HAMMACK. Yes. The President's budget request provides an equitable distribution of resources within the established priorities of the Army and provides the Army Reserve and the Army National Guard with $1.1 billion (MCAR program is

$281 million and the MCNG program is $774 million). However, as with the Active component funding, the Reserve component funding is currently sufficient to address only the most critical requirements needed to continue the momentum required to meet readiness goals; it makes only a slight dent in the significant backlog of construction/modernization projects for readiness centers.

Ms. PFANNENSTIEL. Yes, we remain committed to supporting the infrastructure needs of our Navy Reserve as we balance risk across the Navy to provide the most capability within fiscal constraints. The Navy's fiscal year 2012 budget request includes $26.0 million to construct an Armed Forces Reserve Center at Pittsburgh, PA, and a Marine Corps Reserve Training Facility at Memphis, Tennessee. Additionally, $18 million has been realigned to the Department of the Army to construct a Joint Navy, Marine Corps, and Army Reserve Complex at Indianapolis, IN.

Mr. YONKERS. Yes. The Air Force utilizes a scoring model for its projects, which scores new mission and current mission projects. This scoring model prioritizes the MILCON program, with the most critical and urgent requirements ranking at the top. We follow that initial prioritization with a specific evaluation for ANG and AFRC support and make specific adjustment as necessary to ensure adequate component support. The ANG and AFRC have competed fairly and scored well in this process in 2012. In effect, the most pressing MILCON requirements, for both the active Duty and the Air Reserve components, were included in the fiscal year 2012 President's budget request.

135. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, how are Guard and Reserve requirements addressed in the prioritization process of MILCON projects for each of the Services?

Dr. ROBYN. The Military Departments use separate processes for prioritizing their MILCON requirements. Each of the Military Departments' processes includes consideration of the Guard and Reserve requirements when prioritizing their MILCON projects. I will defer to the Military Departments to provide specific information on how the Guard and Reserves are incorporated in their respective MILCON prioritization processes.

Ms. HAMMACK. The Reserve components fully participate in the Army MILCON prioritization process. MILCON projects are reviewed in detail and prioritized using the overall priorities of the Army, i.e., Grow the Army (GTA), Global Defense Posture Realignment Army Modular Force (AMF), Modernization of Legacy Facilities, Training Support, and Strategic Readiness.

Ms. PFANNENSTIEL. DON assesses all requirements in order to balance risk across the Navy and Marine Corps, and provide the most capability within fiscal constraints. We remain committed to supporting our Naval Reserve. DON's fiscal year 2012 budget request includes $26.0 million to construct an Armed Forces Reserve Center in Pittsburgh, PA, and a Marine Corps Reserve Training Facility in Memphis, TN. Additionally, $18 million has been realigned to the Department of the Army to construct a Joint Navy, Marine Corps, and Army Reserve Complex in Indianapolis, IN.

Mr. YONKERS. The Air Force utilizes a scoring model for its projects, which scores new mission and current mission projects. New mission requirements are primarily driven by the beddown location and acquisition timing of the new weapon system-these factors are determined through the Air Force's strategic basing process. So for new mission requirements, should a Air National Guard (ANG) or Air Force Reserve Command (AFRC) base be selected as a beddown location, their MILCON requirements would be funded as part of the beddown process (as funding within a given year permits). For current mission projects, our scoring model prioritizes the MILCON program, with the most critical and urgent requirements ranking at the top. We follow that initial prioritization with a specific evaluation for ANG and AFRC support and make specific adjustment as necessary to ensure adequate component support. The ANG and AFRC have competed fairly and scored well in this process in 2012. In effect, the most pressing MILCON requirements, for both the Active Duty and the Air Reserve components, were included in the fiscal year 2012 President's budget request.

136. Senator AYOTTE. Dr. Robyn, Secretary Hammack, Secretary Pfannenstiel, and Secretary Yonkers, are you concerned that the prioritization process may result in a disadvantage for Guard and Reserve projects?

Dr. ROBYN. The military departments reassess their prioritization processes annually to ensure operational requirements across the force incorporate recent changes to defense strategies, policies, and fiscal challenges. Further, the inclusion of the Reserve components within the Military Department processes ensures they are not disadvantaged.

Ms. HAMMACK. We are always reviewing our business rules to ensure the Department makes the best use of our limited resources. The current MILCON prioritization process does not disadvantage the Guard or Army Reserve. We are vigilant that any future changes to the current process also support equity across the components.

Ms. PFANNENSTIEL. No, DON remains committed to supporting our Naval Reserve. DON assesses all requirements in order to balance risk across the Navy and Marine Corps, and provide the most capability within fiscal constraints. DON's fiscal year 2012 budget request includes $26.0 million to construct an Armed Forces Reserve Center in Pittsburgh, PA, and a Marine Corps Reserve Training Facility in Memphis, TN. Additionally, $18 million has been realigned to the Department of the Army to construct a Joint Navy, Marine Corps, and Army Reserve Complex in Indianapolis, IN.

Mr. YONKERS. No, our process ensures that the Guard and Reserves projects are at no disadvantage when compared to the Active Air Force requirements.

ENCROACHMENT ON AIR FORCE RANGES

137. Senator AYOTTE. Secretary Yonkers, I am concerned that the proliferation of energy production initiatives as a result of national efforts to expand the use of renewable energy sources must be compatible with other national priorities, such as providing our military forces with safe and adequate training ranges free from encroachment or obstruction. We passed legislation last year that would establish a clearing house in DOD to assess permit requests from private entities in an expedited manner for their potential impact on national security and military training. How prevalent is this concern of encroachment on Air Force training ranges?

Mr. YONKERS. OSD has developed a clearing house process based on legislation and is actively employing that clearing house process.

We are becoming increasingly aware of the potential impacts renewable energy projects have upon our training and test and evaluation ranges. For example, wind turbines can impact the performance of radar through shadowing, creation of false targets and loss of real targets. The Air Force continues to study the potential operational impacts of development and the potential mitigation strategies to overcome the impacts. We currently have efforts underway to assess impacts to air-traffic-control radar and our ability to improve performance through optimization and/or upgrade.

The Department must carry out its national security missions effectively with careful attention to the safety of the general public and Department personnel. The presence of wind turbines and other energy infrastructure in the vicinity where these military missions occur has the potential to impact the effectiveness of such missions and thus military readiness.

As operational requirements at different locations vary, the particular characteristic of a wind farm may present a challenge in one location but not others. Consequently, potential impacts on readiness due to any particular proposed wind farm development need to be evaluated on a case-by-case basis. Where possible impacts to readiness could occur it is important to ensure that appropriate measures to mitigate risk are identified and implemented.

Also, many of the potential impacts are similar to those that can be posed by other tall objects such as radio antennas, cell phone towers, and buildings proposed for construction in the vicinity of Department sites and facilities. The Air Force has developed and employed, for many years, strategies and mitigation techniques to effectively address those possible impacts.

The potential impacts to readiness are generally categorized into the following areas: (1) Overflight and Obstruction, (2) Security, (3) Electromagnetic Signature, and (4) Environment. Potential impacts to flying safety are considered in the area of over-flight where obstructions may be introduced. Potential security issues during and after development are addressed near installations or where the Department conducts operations. Potential impacts related to the electromagnetic signature associated with wind turbines must be evaluated. Finally, possible impacts related to the responsibilities of the Air Force with regard to environmental stewardship should be considered.

138. Senator AYOTTE. Secretary Yonkers, what is at stake for the Air Force?

Mr. YONKERS. The Air Force conducts its operations in shared space throughout the United States. Much of the operating space used to test and train our people and equipment was established over 60 years ago. As population and other types of development occur in these once-remote areas, we must ensure that impacts to

mission are considered in any development decisions. The Air Force's ability to conduct timely training and testing to support mission requirements could potentially be at risk. The Air Force attempts to engage developers early to identify mutually acceptable outcomes and avoid undesirable impacts to our missions associated with ranges, installations and airspace. Working with the DOD Energy Siting Clearinghouse, the AF established processes for addressing projects already submitted to the Federal Aviation Administration and Bureau of Land Management (BLM). Throughout the process, the AF attempts to communicate with developers, local, State, and governmental agencies on potential encroachment impacts on the mission and mitigate when possible.

139. Senator AYOTTE. Secretary Yonkers, much of the land used for Air Force training ranges is under the control of the BLM. What can be done to improve coordination with BLM on the assessment of the impact on military training as a result of private initiatives that propose to use BLM land?

Mr. YONKERS. The Air Force and BLM over the course of many years have fostered a long standing working relationship acting as Cooperating Agencies on NEPA actions. This relationship is based upon Council on Environmental Quality regulations to invite agencies to act as a Cooperating Agency if the agency has jurisdiction by law or special expertise with respect to the proposal.

In order to improve the coordination between the Air Force and BLM on assessments of private initiatives that propose to use BLM land that could impact Air Force training ranges, the Air Force believes that being brought into the process at the initial planning stages, as a Cooperating Agency, would foster better communication. Early engagement between the Air Force, BLM and the private third parties, that are proposing these initiatives, would help in the identification of potential issues that could hinder the planning efforts as the proposal moves through the planning and implementation stages.

140. Senator AYOTTE. Secretary Yonkers, what other measures can Congress undertake to provide you the tools needed to work with developers of private lands whose initiatives may result in a detrimental impact to military training?

Mr. YONKERS. In conjunction with the Department of Homeland Security and the Federal Aviation Administration, DOD will continue to work through the National Security Staff's sub-Interagency Policy Committee on the Air Domain to identify other measures that may become necessary. We expect the establishment of both an early voluntary consultation process for wind developers and a longer notification requirement for the FAA's Obstruction Evaluation/Airport Airspace Analysis will be effective. The Department of Energy, the Department of Commerce, and the Department of the Interior are also participating in the process.

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

MILITARY ARTIFACTS

141. Senator CHAMBLISS. Secretary Hammack, the 2005 BRAC round directed transfer of three U.S. Army Training and Doctrine Command schools to Forts Benning, Lee, and Sill. There are significant collections of military artifacts that represent the technological and tactical evolution of tanks, artillery, and air defense. These collections support the training missions that are relocating due to BRAC. The Army requested MILCON to construct storage facilities for these artifacts at Forts Benning, Lee, and Sill in the fiscal year 2011 budget request but no funding was authorized.

I understand there are several options for moving forward on these projects, the most feasible of which are: (1) lease off-post facilities to allow for storage of the artifacts, Army training, and public access; (2) fund the original MILCON projects as planned; and (3) modify the original MILCON projects to allow for public access. Of the issues at stake here—providing for Army training, preserving Army artifacts, and educating the public about Army history—how does the Army prioritize these issues?

Ms. HAMMACK. The Army's first priority is the preservation of its historical artifacts in accordance with Federal statute (American Antiquities Act of 1906, 16 U.S.C. 431–433, National Historic Preservation Act of 1966, 16 U.S.C. 470). Failure to preserve the artifacts will lead to failure of all other artifact-supported Museum missions. The second priority is Soldier Training in Military History and Heritage and practical instruction to develop skills such as critical thinking and foreign materiel identification. The third priority is educating the public about the Army's rich

heritage of service and its role in national development, which is closely related to the Soldier Training mission and esprit de corps.

142. Senator CHAMBLISS. Secretary Hammack, equipment is being moved to support the relocation of Army schools. Approximately what percentage of the artifacts moved or to be moved is being moved from public museums?

Ms. HAMMACK. The Air Defense Artillery Museum, the Armor Museum, and the Ordnance Museum were all open to public visitation at their former locations at Fort Bliss, Fort Knox, and Aberdeen Proving Ground respectively. The educational exhibits were open to the public during operating hours. Researchers could make appointments to see artifacts that were in storage or to study the archival and library holdings.

Of the total collection of the U.S. Army Air Defense Artillery Museum, about 95 percent is moving from Fort Bliss, TX to Fort Sill, OK. Of the macro artifacts in the original collection, over three quarters are moving from Fort Bliss, TX to Fort Sill, OK. 100 percent of the museum's library and archival holdings are moving from Fort Bliss, TX to Fort Sill, OK.

Of the total collection of the National Armor and Cavalry Museum, over three quarters is moving from Fort Knox, KY to Fort Benning, GA. Of the macro artifacts in the original collection, over two thirds are moving from Fort Knox, KY to Fort Benning, GA. About 98 percent of the museum's library and archival holdings are moving from Fort Knox, KY to Fort Benning, GA.

Of the total collection of the U.S. Army Ordnance Museum, about 90 percent is moving from Aberdeen Proving Ground, MD to Fort Lee, VA. Of the macro artifacts in the original collection, over three quarters are moving from Aberdeen Proving Ground, MD to Fort Lee, VA. Approximately 95–98 percent of the museum's library and archival holdings are moving from Aberdeen Proving Ground, MD to Fort Lee, VA.

143. Senator CHAMBLISS. Secretary Hammack, will the museums from which the artifacts are being moved remain open?

Ms. HAMMACK. Organizations that replaced the Ordnance, Armor, and ADA schools have existing museum programs and these replaced the three school museums. They are in the process of standing up at all three losing locations:

The Aberdeen Proving Ground Museum will focus on the history of APG and Communications Electronics Command.

The George S. Patton Museum of Leadership at Fort Knox will focus on Army Accessions Command to include the history of commands or units associated with Fort Knox from 1918 to the present, Army leadership, Army recruiting history, and the history of the Reserve Officers Training Corps. The ADA Museum at Fort Bliss is being replaced by the 1st Armored Division Museum, which combined with the Fort Bliss Museum will focus on the history of Fort Bliss from 1848 to the present and on the history of the 1st Armored Division.

144. Senator CHAMBLISS. Secretary Hammack, is it correct that one of the advantages of the leasing option would be that the public could access the artifacts?

Ms. HAMMACK. Yes, however, where the leasing option is available, it will lead to split operations for the museum staff at locations that could be miles apart. Requests for access to portions of the artifact collections that are not located in the leased facilities will meet with stricter scrutiny than is currently practiced, due to constraints on staff operations across multiple artifact repositories.

The leasing option is not available to the Air Defense Artillery Museum at Fort Sill, so that course of action does not ensure public access to any Air Defense Artillery artifacts. Available commercial properties in Lawton, OK were unsatisfactory. They either did not meet the minimum square footage requirements, or they were in poor condition and located in unsafe districts not conducive to public visitation. Currently, about 50 percent of the macro artifacts are in on-post warehouses that can be modified for public access with funding.

The leasing option currently considered for the Ordnance Museum at Fort Lee will enable public access to most of the tanks, artillery, and vehicles in the collection, however, the small arms collection and other micro artifacts will be stored on Fort Lee warehouses and not accessible. 90 percent of the Ordnance Museum's inert munitions and small arms collections will be restricted to on-post by appointment research requests only, due to the nature of the security regulations governing the management of these types of collections.

The leasing option currently considered for the Armor Museum at Fort Benning will enable the balance of the museum's tanks, vehicles, and archives to be available to the public however, the storage of the micro artifact collection in the basement

of the National Infantry Museum makes that portion of the collection inaccessible to the public.

145. Senator CHAMBLISS. Secretary Hammack, the locations receiving the artifacts—Forts Benning, Lee, and Sill—have never had public access to these artifacts. How do you judge the public expectation for their ability to access these artifacts?

Ms. HAMMACK. There have been many newspaper articles and television news programs in the communities surrounding Forts Benning, Lee, and Sill anticipating the arrival of the respective museum collections. Army staff have emphasized to the press that the soldier training mission is paramount to the three museums, but the public expectation has been that the local communities would benefit from the museums' arrival. Columbus, GA, has shown great interest in the educational opportunities that the Armor Museum offers. These include science, physics, history and math applications for elementary through high school curricular, and internship programs at the college level. Along with the National Infantry Museum and the Civil War Naval Museum, the addition of the Armor Museum collection would create the largest museum venue in the South. The Lawton, Oklahoma media expect the Air Defense Artillery collection to be co-located in the vicinity of the Field Artillery Museum and Fort Sill Museum and see the complex to be the largest of its kind in that region of the country. The Petersburg and Richmond, Virginia media have portrayed the arrival of the Ordnance Museum as an enhanced cultural attraction to the area. The U.S. Army Ordnance Collection joined with the current U.S. Army Quartermaster Museum, Woman's Army Museum and the Petersburg National Parks Service Unit would provide the second largest cultural venue on the east coast for American Military History outside of the Mall in Washington, DC.

Interest in the three museums extends well beyond the local community to national and international audiences. Recent media, email, and telephone inquiries to the museums show a widespread concern among researchers and the general public over the fate of the artifacts, future access to the collections, and exhibits for tours and research.

DOD activities have also expressed concern over the inability to continue joint educational programs and research within the collections if they are divided between off-post leased spaces and on-post deep storage facilities. If the individual collections are subdivided between on-post and off-post leased facilities, the logistics of research trips will be greatly complicated. The three museums' contributions to educational and research programs of the U.S. Navy EOD In-Country Exploitation Team, CIA, DIA, Army Research Laboratory, as well as organizations of our allies such as the joint Anglo-American Armor Board, are in jeopardy while the collections' long-term preservation arrangements remain in limbo.

146. Senator CHAMBLISS. Secretary Hammack, can you explain how the leasing option might facilitate fundraising by private foundations and how the Army could legally support that?

Ms. HAMMACK. I cannot predict how the leasing option might affect fundraising by private foundations. Private organizations must, however, conduct their fundraising operations in Army leased facilities in the same manner as they do in Army owned museum facilities. To date, fundraising that supports a state-of-the-art museum facility and exhibit gallery has been the result of key drivers—determined and talented private organization leadership, accessibility to the collection, the subject matter of the museum, and location near a metropolitan center.

147. Senator CHAMBLISS. Secretary Hammack, is it possible that the lease option could hurt private fundraising?

Ms. HAMMACK. As previously stated, I cannot predict the effect of the leasing on fundraising by private foundations.

148. Senator CHAMBLISS. Secretary Hammack, can you explain why these MILCON projects were not requested in BRAC MILCON accounts, and did the Army General Counsel concur with this decision and judge it to be in compliance with the BRAC law?

Ms. HAMMACK. The Army deliberately included these projects, categorized as BRAC enablers, in the MILCON, Army (MCA) request. While BRAC is funding the move of the artifacts, indoor and outdoor storage mitigations were available at gaining locations to house the artifacts until such time as MILCON could be programmed to consolidate the collections at a single location accessible to the trainees. The Army General Counsel posed no objection with the decision to fund these projects with MCA.

149. Senator CHAMBLISS. Secretary Hammack, as the Army addresses this issue, I encourage you to explore all viable options and perform your due diligence. However, before you irretrievably commit to one or more of these options, can I get your assurances that the Army will first brief me and the committee's stakeholders?

Ms. HAMMACK. The Army remains committed to open and transparent dialogue with Congress. We will continue to apprise you and the committee stakeholders of our progress and intentions related to this issue.

150. Senator CHAMBLISS. Secretary Hammack, I believe our goal here should not simply be to reach a solution that is feasible, but to achieve the right solution for the Army and the Nation. For that reason, I want to make sure the alternatives have a solid business case analysis and take into consideration all the various stakeholders—the Army, the public, and the foundations seeking to build private museums, and of course the taxpayers. If your due diligence shows that a MILCON-funded solution is the most appropriate route, will the Army take this into consideration in a possible future budget request?

Ms. HAMMACK. The Army will consider including storage facilities in future requests as required and if there is an adequate level of Congressional support for such projects.

151. Senator CHAMBLISS. Secretary Hammack, will you engage the non-Army stakeholders— particularly the local communities and the private foundations seeking to build museums—to make sure you properly understand their interests, concerns, and desires before recommending a final course of action?

Ms. HAMMACK. The staffs of the Army museums have engaged their respective private foundations on the challenges facing the Museum Operations Support Facilities. The appropriate Army organizations will engage with the local communities to gauge their interests, concerns and desires in regards to public access to the historical artifacts of the Air Defense Artillery, Armor, and Ordnance Museums.

DOD FORCE STRUCTURE IN EUROPE

152. Senator CHAMBLISS. Secretary Hammack, Secretary Gates mentioned several months ago that he believes we have excess force structure in Europe and stated that DOD would work with our allies to determine the precise force structure and timing. Do you have an update on where that process stands?

Ms. HAMMACK. As of the March 17, 2011, hearing date, the answer is: The Army has and continues to reduce its footprint in Europe while consolidating remaining forces and infrastructure. U.S. military posture in Europe is important to our National security and global strategic interests, and it allows the United States to maintain critical relationships with our allies and partners, and promotes continued stability throughout the region. As part of the Secretary of Defense's announcement on excess force structure in Europe, U.S. Army Europe has been reduced to a three-star level command. This streamlining of the command is commensurate with the current and future level of Army forces in Europe, and is consistent with Army Service Component Command structure worldwide. The Army is currently awaiting the final OSD decision on the future disposition of forces in Europe.

Update: However, since that date, DOD announced that the Army would retain three BCTs in Europe beginning in 2015. In light of this recent decision and the previous Secretary of Defense announcement to reduce the Active component Army end strength by 27,000 Soldiers, the Army will conduct a thorough analysis over the next year to determine the overall makeup of the force. Stationing decisions will be addressed along with other force structure actions at the conclusion of this year's Total Army Analysis.

FORT STEWART

153. Senator CHAMBLISS. Secretary Hammack, Fort Stewart was one of the bases slated to receive an additional brigade as part of the Grow the Army plan. That decision was later reversed but not before the community invested tens of millions of dollars preparing to receive the additional brigade and soldiers. As you look to make a basing decision on any future brigades, my hope is you would heavily weigh three criteria in strategic priority: power projection; training capacity; and available infrastructure. I believe Fort Stewart excels in all these criteria and I know that the community would welcome any additional force structure the Army wishes to place there. In these times of geopolitical uncertainty and fiscal crisis, if we get this basing decision wrong, it could prove costly not only monetarily but most importantly

in our soldiers' lives. I have also heard that the Army may be standing up or growing a new field artillery brigade. Is that correct, and if so, can you provide the status of that force structure action?

Ms. HAMMACK. As of the March 17, 2011 hearing date, the answer is: I understand and appreciate that communities surrounding Fort Stewart have spent considerable time, effort, and money in anticipation of the activation and stationing of the 46th BCT at Fort Stewart. To support a possible decision by the Secretary of Defense on force structure in Europe, the Army is updating the 2007 Grow the Army Military Value Analysis (MVA). The MVA assesses installations on growth capacity, ability to support power projection, ability to support training, and the well-being of soldiers and their families, and provides the Army's leadership a rank-ordered assessment of installations that would best support the stationing of Army units. Fort Stewart will be given every consideration in any stationing action as the Army continues to review and analyze possible future force structure and operational adjustments to develop a versatile and balanced force. This analysis will be in the context of potential impacts as a result of the Secretary of Defense announcement to reduce the Active component Army end strength by 27,000 soldiers beginning in 2015. Any basing decisions on field artillery units and BCTs will be addressed along with other Force Structure decisions as part of this year's Total Army Analysis results which will be integrated into the Army fiscal year 2014 budget submission.

Update: However, since that date, DOD announced at the Army would retain three BCTs in Europe beginning in 2015. In light of this recent decision, a stationing decision for BCTs, to include the disposition of the heavy brigade, will be addressed along with the 27,000 end strength reduction, and other force structure actions at the conclusion of this year's Total Army Analysis.

ASSESSMENT AT THE AIR LOGISTICS CENTERS

154. Senator CHAMBLISS. Secretary Yonkers, I realize the focus of this hearing is not on depots, but one depot-related environmental issue that I wanted to bring up which we discussed in my office a few weeks ago is in regards to Occupational Safety and Health Administration (OSHA) and the inspections they have performed recently at the Air Logistics Centers (ALC). I am concerned and I know you are also concerned about OSHA's approach and their flagging the ALCs for violations that do not seem to be based on a clear standard and that do not have any apparent negative effect on the workforce. I would appreciate your thoughts on this issue, the approach you recommend for engaging OSHA, and your recommendation for holding the ALCs to a reasonable standard of safety and health without hampering their ability to carry out their mission, which is to deliver combat ready aircraft to the warfighter.

Mr. YONKERS. OSHA identified some shortfalls in execution of our processes which we have aggressively addressed at all our ALC. Eighteen of the 39 OSHA citations regarded compliance with hexavalent chromium, lead or cadmium standards—many specifically addressed surface contamination. Except for "eating surfaces" in the cadmium standard, there are no promulgated analytical standards for surface contamination based on adverse employee health effects. The current stand is "as free as practicable" from contamination.

OSHA inspectors are currently citing our units based on contamination presence as evidence of not meeting the "as free as practicable" standard. This interpretation is causing our units to make costly process changes which adversely affect our production cycle times.

We have a duty to protect our workers. We have provided interim guidance to the ALC regarding housekeeping and industrial hygiene to address the contamination issues. The USAF School of Aerospace Medicine, Wright Patterson Air Force Base, OH, has studied the contamination levels noted by OSHA and cannot substantiate an ingestion health hazard. We are finalizing formal guidance to our ALCs on housekeeping/industrial hygiene and verification processes. In the interim, we will contest citations issued based on contamination presence without a substantiated health risk.

This OSHA action is a policy issue which must be worked by the OSD, not each of the Services or defense agencies. Preliminary interaction with OSHA is complete. OSD will meet with OSHA Compliance Directorate in the near future to discuss the way forward.

[Whereupon, at 4:36 p.m., the subcommittee adjourned.]

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

WEDNESDAY, MAY 18, 2011

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

THE CURRENT MATERIEL READINESS OF U.S. FORCES

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, Udall, Shaheen, Inhofe, Chambliss, and Ayotte.

Committee staff members present: Leah C. Brewer, nominations and hearings clerk; and Jennifer L. Stoker, security clerk.

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

Minority staff member present: Lucian L. Niemeyer, professional staff member.

Staff assistants present: Hannah I. Lloyd and Breon N. Wells.

Committee members' assistants present: Tressa Guenov, assistant to Senator McCaskill; Christopher Kofinis, assistant to Senator Manchin; Patrick Day, assistant to Senator Shaheen; Anthony Lazarski, assistant to Senator Inhofe; Clyde Taylor IV, assistant to Senator Chambliss; and Brad Bowman, assistant to Senator Ayotte.

OPENING STATEMENT OF SENATOR CLAIRE MCCASKILL, CHAIRMAN

Senator MCCASKILL. Good morning, everyone. I will begin with an opening statement, and then turn to my colleague Senator Ayotte for her opening statement, and then we will take your testimony. I appreciate you all being here today.

The Subcommittee on Readiness and Management Support meets this morning to hear testimony on the materiel readiness of our military. Today, we'll hear from Lieutenant General Mitchell Stevenson, Deputy Chief of Staff, Logistics, for the Army; Vice Admiral William Burke, Deputy Chief of Naval Operations for Fleet

Readiness and Logistics; Lieutenant General Loren Reno, Deputy Chief of Staff for Logistics, Installations, and Mission Support for the Air Force; and Lieutenant General Frank Panter, Deputy Commandant for Installations and Logistics for the Marine Corps. I welcome you all and thank you, not only for your testimony, but for your contributions and service to our Nation.

After almost a decade of combat operations, we have significant gaps in our materiel readiness accounts. While I want to support the Services with every possible resource, I also want to ensure that we do a better job at matching up funding to requirements. For this reason, I continue to be concerned by the longstanding failure of the military departments to fully fund our maintenance requirements. At a time when we already have significant equipment backlogs, the continuing lack of full funding can only increase the scope of the problem. It's a classic case of pay now or pay dearly later.

As a result of our decade-long military operations in Iraq and Afghanistan, both the Army and the Marine Corps face significant military readiness issues, particularly with regard to nondeployed units. The Army has said it will need 2 to 3 years of reset funding beyond the end of combat operations, while the Marine Corps has said it will face a $5 billion bill for reset and an additional $5 billion bill to reconstitute the force, yet have only allocated $250 million in the fiscal year 2012 budget to address this looming funding request.

The Navy and the Air Force also face significant backlogs in maintenance and repair of equipment. For example, because the Navy has failed to fully fund their depot maintenance accounts over the past few years, we currently have a $367 million maintenance backlog.

Similarly, the Air Force has failed to fund their readiness accounts, at 83 percent in fiscal year 2011 and 84 percent in fiscal year 2012. This inadequate funding has resulted in a significant backlog of aircraft in great need of repair.

Last year in the committee, we attempted to address this problem by adding $532 million to address unfunded requirements for ship depot maintenance, aircraft depot maintenance, and spare parts identified by the Chief of Naval Operations, and $337 million for unfunded requirements for weapon system sustainment that were identified by the Air Force Chief of Staff.

I hope that we will hear from our witnesses today whether their depots are operating at capacity or could repair equipment faster and enhance unit readiness if any additional funding were available.

I hope we will hear from each of our witnesses today what steps they plan to take to address these backlogs of deferred maintenance and reset requirements and ensure that all of our units, not just deployed units, reach the level of readiness that we need and expect. This effort will undoubtedly require a long-term strategy which extends beyond fiscal year 2012, and probably even beyond the scope of Future Years Defense Program (FYDP).

Finally, as I have said at our previous hearings, I do not believe there is anything the Department of Defense (DOD) is doing that it cannot do better. I do not believe there is any part of the budget

that should be off limits as we look for savings. While we are not about to cut funds that are needed to support forces engaged in ongoing military operations, I am convinced there are things that we can, and should, do better.

In this regard, I am particularly concerned about the extent that we have become reliant upon contractors to provide logistics support for these operations. As the Commission on Wartime Contracting recently concluded, there are too many areas in which the contractors have become the default option. I recognize that our witnesses today are not contracting experts, but you are responsible for providing logistics support, including contractor support, for ongoing military operations.

As I understand it, the military departments are responsible for: ensuring that operational contract support requirements are identified and integrated into the operation plans; ensuring that contractor management plans are incorporated into operation plans; ensuring that contract oversight processes and manpower requirements to execute oversight are incorporated into operation plans; integrating identified contract requirements into training simulations, mission rehearsals, and exercises; ensuring that military personnel outside the acquisition workforce who are expected to have acquisition responsibility, including oversight responsibility, are, in fact, properly trained; determining requirements and qualifications for contracting officer representatives (CORs), making sure that the corps are properly trained and certified; and collecting and distributing operational contract support lessons learned.

I intend to ask our witnesses today what actions they and the Services they represent have taken, and plan to take, to carry out these important responsibilities.

I look forward to the testimony of our witnesses, and I now turn to Senator Ayotte for any opening remarks that she might have.

STATEMENT OF SENATOR KELLY AYOTTE

Senator AYOTTE. Thank you, Chairman McCaskill, for calling this important hearing on the materiel and logistical readiness of our Armed Forces.

I want to also welcome Senator Inhofe here, as well.

I also thank the witnesses for appearing before our subcommittee today, and for your service to our country, and for all of those that are serving beneath you.

I believe it was Napoleon who first observed that, in warfare, while the amateurs discussed tactics, the professionals discussed logistics. Our committee has no greater role than ensuring our military personnel are properly equipped to succeed in their missions. In tough fiscal times, with decreasing budgets across all Federal agencies, it is especially important to review department resource decisions regarding logistics programs to understand their impact on readiness. We need to be clear about what risks to the force we are willing to assume in the short term, and in the future, based on the declining availability of resources. While the Pentagon must relentlessly pursue efficiencies and eliminate waste—and I certainly agree with the statements made by the Chairman—we must devote sufficient resources for weapon system sustainment, prepositioned stocks, equipment accounts, and depot operations.

Given the current state of world affairs, tasking our warfighters to do more with fewer resources is going to extend the strain on the force, resulting in longer deployments and shorter amounts of downtime needed to allow our troops and their families to recuperate, units to train, and equipment to be reset.

I look forward to receiving the details from the witnesses on the risks associated with each of the department's efficiency initiatives in the 2012 budget request affecting logistics. We also need to remember that the Services have already assumed risks, for years, in certain aspects of readiness, such as facility maintenance and adequate training for all aspects of roles and missions. For example, the Department of the Navy recently estimated that they already have a backlog of over $3.5 billion for estimated costs of facility repairs at their four public shipyards alone, and almost $40 billion in other shore infrastructure requirements. Another example all Services have acknowledged in their testimony this year, is that the readiness of nondeployed forces has been sacrificed in order to ensure the readiness of forces deployed to Iraq and Afghanistan. This mortgaging of the nondeployed forces' readiness to ensure the readiness of those deploying to Iraq and Afghanistan has undercut our Nation's preparedness for a variety of contingency missions. We've already seen how those have risen. For example, adequately equipping deploying forces has often left units stationed back home, particularly in the Reserve and Guard units, without the equipment they need to train for their next deployment or to carry out stateside missions. Too often, we hear of units seeing equipment for the first time in theater, or at the last minute, in their final predeployment training. I wonder just how much longer we can continue to defer maintenance in training before we start to see the signs of a hollow force. We need to hear, from our witnesses, how they are addressing these issues.

Finally, the witnesses have all stated, in written testimony, that over 10 years of persistent conflict has taken a toll on military readiness and the availability of equipment. They have stated, as well, that years of dedicated funding for reset and reconstitution will be required after our forces come home in order to restore adequate levels of readiness across the full spectrum of operations. I look forward to hearing detailed information from the witnesses on what supplies, equipment, and levels of activity in our depots and shipyards are needed to reset our forces. In addition, this committee needs to hear from our witnesses regarding the amounts of resourcing that will be needed in the next 5 years to restore the levels of full-spectrum readiness necessary to preserve our national security. While we must reduce Federal spending in all areas to restore the fiscal health of this country, we must not lose sight of our sacred vow to fully equip, train, and support those who defend our Nation and keep us safe.

I thank the witnesses in advance for their candid views on these matters, and look forward to a productive hearing on this topic.

Thank you, Chairman McCaskill.

Senator MCCASKILL. Thank you very much.

I will now turn to our witnesses. I know you are aware of how much we want you to give us information, but then, at the same time, we tell you not to talk for too long. So, we're hopeful that you

all can keep your comments to about 5 minutes. Obviously, all of your statements have been available to us, have been reviewed, and will be placed in the record. We look forward to your testimony. We'll begin with you, Lieutenant General Stevenson.

STATEMENT OF LTG MITCHELL H. STEVENSON, USA, DEPUTY CHIEF OF STAFF, LOGISTICS, U.S. ARMY

General STEVENSON. Chairman McCaskill and Ranking Member Ayotte, as you asked, I will not read my opening statement, but rather just ask that it be accepted into the record. What I'd like to do now is just highlight a few points from that statement.

First, in terms of the materiel readiness of the Army, as you acknowledged, we certainly have our challenges. But, I would argue that we are more ready today than we have been in a long time in a lot of areas. I can elaborate on that, if you'd like, in my upcoming testimony. This is in no small measure to the amount of unwavering support we get from Congress to keep us well funded.

In Iraq and Afghanistan, we are on track and, in some cases, ahead of schedule. In the drawdown from Iraq, we've been getting pretty decent marks from the Government Accountability Office (GAO), in that regard. I can talk about that later, if you'd like, as well.

Our readiness posture in Afghanistan is actually quite strong, and getting stronger every day. Just this morning, I had an update on materiel readiness in Afghanistan of all of our forces. In all but one case, we are at or above the 90-percent goal that we set for ourselves in terms of readiness.

Here at home, we've improved our ammunition readiness. It's stronger than it's ever been, that I can remember. We're reconstituting our Army prepositioned stocks. Like everyone in the DOD, as you pointed out, we logisticians are focused on being better stewards of our taxpayers' dollars. An example of that is a pretty aggressive property accountability campaign that mandates a culture of supply discipline.

Our depots and arsenals remain quite busy, though. As a result of the drawdown in Iraq, the workload is declining. Having said that, as you point out, it is still the case that we will require reset funding for 2 to 3 years after operations finally end.

Your support has made us ready.

I look forward to your questions.

[The prepared statement of General Stevenson follows:]

PREPARED STATEMENT BY LTG MITCHELL H. STEVENSON, USA

Chairman McCaskill, Ranking Member Ayotte, members of the subcommittee, on behalf of all soldiers, Army civilians, and their families, I appreciate the opportunity to appear before this subcommittee.

As the Secretary and the Chief of Staff of the Army have testified, the war is not over yet, and we remain in an era of persistent conflict facing an uncertain and increasingly complex strategic environment. To that end, I continue to be impressed by the work of Army Soldiers and Civilians. I have visited them as nearby as Fort Lee, VA, and as far away as Bagram, Afghanistan, and I can say without equivocation that the Army's sustainment system, and the personnel who make it work, is a well-tuned enterprise capable of supporting a versatile and adaptable Army.

As I appear before you today, the Army is seamlessly moving supplies and equipment out of Iraq to multiple destinations, while simultaneously supporting complex military operations in the land-locked country of Afghanistan, with its treacherous terrain and poor infrastructure. We have utilized our prepositioned stocks several

times, most recently to aid our allies in Japan, and after each usage, quickly rebuilt them to be ready for the next requirement—Army prepositioned stocks (APS) are doing precisely what they are intended to do. Our depots, arsenals, and ammunition plants have surged to keep the warfighter on the front lines stocked with the best and most reliable equipment and supplies. On top of all this, we are working to get even better: the Army's soldiers and civilians are pursuing cutting-edge technologies in operational energy, improving efficiencies and accountability. Because of these efforts, your Army is more prepared to meet operational challenges than it ever has been—a state of readiness that I think will improve even more in the coming years.

Of course, such a feat would not have been possible without the support of Congress. Speaking on behalf of the Army, let me just acknowledge that this subcommittee's commitment to our men and women in uniform has been instrumental to our success, and we are committed to being good stewards of the resources you have authorized us.

RESPONSIBLE DRAWDOWN

The Army is currently drawing down our presence in Iraq. As part of this effort, we will redistribute over 3.4 million pieces of equipment, redeploy more than 143,000 U.S. military personnel, and transfer or close 505 Forward Operating Bases. These bases were supported by 22 Supply Support Activities (the Army equivalent of a Walmart store), containing a total of over 135,000 lines of repair parts, 21,000 short-tons of common-use supplies, and 34,000 short-tons of ammunition. As part of our drawdown effort, we have already retrograded roughly 2.3 million pieces of equipment, and have only 74 Forward Operating Bases still in place. This is, as you would imagine, no small task. Based on results of reviews by both the Army Audit Agency and the Government Accountability Office, I am pleased to report that we are currently on track or ahead of schedule in every measurable area, and I am confident we will complete this mission on time, and do so responsibly.

Since the beginning of the Iraq drawdown process, the Army has had clearly defined, coordinated, and synchronized plans and policies for the redistribution and retrograde of materiel. Our first priority for any piece of equipment no longer required in Iraq is to fill requirements in Afghanistan. After we meet those needs, some equipment redeploys home with units for unit level Reset; the remainder is sent directly to industrial base facilities for national level Reset. Upon completion of Reset, we distribute this equipment in accordance with Army priorities to fill unit equipment authorizations in the active Army, Army National Guard, and Army Reserve, or to restock APS. Also we are using Congressionally granted authorities to provide varying types of equipment to Iraqi and Afghan Security Forces to help build up their minimum essential capabilities. Finally, we are working with State and local governments to provide them the opportunity to claim certain pieces of excess, non-standard equipment.

SUPPORTING OPERATIONS IN AFGHANISTAN

While our efforts to draw down successfully and responsibly in Iraq have been noteworthy, what makes it even more remarkable is that this drawdown in Iraq is being accomplished while concurrently supporting combat operations in Afghanistan. As many of you who have traveled to these places know, the challenges a soldier faces in Iraq are not always the same as he or she faces in Afghanistan. In Afghanistan, a land-locked country with poor infrastructure, we are put to the test every day to find new and better ways to sustain the warfighter, both in moving supplies into theater, and then also in successfully delivering it to soldiers in remote locations under austere and dangerous conditions. The Army, working in conjunction with our partners in U.S. Central Command and U.S. Transportation Command (TRANSCOM), use multiple modes of transportation to get the soldier what he or she needs on the battlefield. Critical and sensitive equipment, such as communications equipment, ammunition, repair parts, and weapons are delivered by air, while the remainder of the equipment is generally delivered by ground. In some cases, the poor to non-existent roadway infrastructure and the high risk of enemy activity require us to resupply remote military outposts by airdrop. Recently, the Army and Air Force conducted the largest ever resupply of fuel when they dropped approximately 20,000 gallons of JP8 fuel for Wasa K'wah, an outpost that has not had ground convoys resupply it in nearly 3 years.

INDUSTRIAL BASE

While supporting the war effort, the Army has relied heavily on our organic industrial base, which has operated at historically high rates, the highest since the

Vietnam War. In fiscal year 2011, the Army expects to Reset approximately 116,000 items at our depots (including 1,000 Mine Resistant Ambush Protected (MRAP) vehicles). Army rotary wing aircraft continue to operate at up to six times non-combat usage levels; and many tactical wheeled vehicles have similar and, in some cases, even higher tempo of operations (OPTEMPO). Yet our maintenance facilities have enabled the Army to maintain operational readiness of equipment in theater at rates of over 90 percent for ground, and 75 percent for aviation equipment. Our current equipment readiness rates are a good indicator that we are meeting our requirements, but the Army continues to look for ways to keep improving. With our efforts in Iraq winding down, we are pursuing strategies that will sustain capabilities in the long-term, both in terms of workforce and facilities.

The Army, with the help of Congress, needs to make the right choices to maintain the critical capabilities of depots and arsenals in the future. The fiscal year 2012 President's budget request is a good step forward in transitioning from a reliance on overseas contingency operations (OCO) funding to the standard base budget. This will allow us to better ensure that depots sustain core capabilities as we draw down from the high wartime OPTEMPO. Additionally, given all the new equipment brought into the inventory as we have conducted operations in Afghanistan and Iraq, we need to adapt our depot programs to accommodate the latest systems. A good example of that is the work we are doing right now in establishing a competency for repair of MRAPs at Red River Army Depot, and route clearance equipment at Letterkenny Army Depot.

I know the industrial base is an issue of importance to this subcommittee. As part of the National Defense Authorization Act for Fiscal Year 2009, Congress required an independent study on the capability and efficiency of the Department of Defense (DOD) depots. Prior to this study, the Army was already working to address many of its key elements. The Army has instituted a "portfolio review" process to provide overarching analysis and recommendations to posture us even more effectively for the future—we are using this process to comprehensively assess the organic industrial base and consider options to sustain ready and relevant depots, arsenals, and ammunition plants for the 21st century. In addition, we had already been working hard to ensure we had a well thought out industrial base strategy, and were meeting our core requirements in our maintenance depots.

ARMY PREPOSITIONED STOCKS

Like the industrial base, our Army Prepositioned Stocks (APS) program must be maintained to meet the need of future contingency operations. The APS program is doing exactly what it was created to do, which is to give our combatant commanders access to strategically placed equipment to enable a rapid response to contingencies. As an example, we have issued and reconstituted our APS–5 set in Southwest Asia several times in order to meet operational requirements in both Afghanistan and Iraq. To help restore APS, the Army has requested $679 million in Base funding and $288 million in OCO funding in the fiscal year 2012 budget request. Our current focus is the reconstitution of a fully operational APS–3 Army Strategic Flotilla I Infantry Brigade Combat Team (BCT), APS–3 Army Strategic Flotilla III Sustainment Brigade, APS–3 Army Strategic Flotilla IV Theater Opening/Port Opening Package, APS–4 Heavy BCT, APS–5 Sustainment Brigade, APS–5 Heavy BCT, and APS–5 Infantry Battalion. With your continued support, the Army is committed to completely restoring our prepositioned stocks, a task we expect to accomplish by the year 2015. The APS program supports our National Military Strategy by positioning critical warfighting stocks afloat and ashore worldwide which provides combatant commanders maximum strategic flexibility and operational agility.

OPERATIONAL ENERGY

Access to energy is also an important function of readiness. The Army purchased just over $1 billion worth of fuel in Afghanistan during fiscal year 2010. Operational Energy represents a complex set of challenges and opportunities for us. It requires synchronization across the Army and with joint and other external organizations. In terms of sustaining our operations in theater, it is critically important that we manage our energy resources in order to maximize our overall combat effectiveness. That means our approach to managing fuel and energy requires a comprehensive approach—no single solution (process/procedural change, technology-insertion, or otherwise) can address the challenges we face across the full spectrum of operations. In addition, it is important to note that Operational Energy is inextricably linked to the management of water and other resources.

There are several system initiatives underway for Army Operational Energy, with energy efficiency improvement of Army base camps representing one of the best op-

portunities to reduce, and more intelligently manage, energy and water usage. The Army is taking a systems approach to demand reduction of both energy and water—this includes the use of energy-efficient shelters, micro-grids and renewable power and water reuse systems.

To support our focus on energy savings, the Army developed a tool to estimate the Fully Burdened Cost of Fuel (FBCF) and made it available to all of the DOD, so that it can be used to estimate the FBCF for specific types of equipment, different types of units, and various locations throughout the world. Reducing our demand for energy will take fuel convoys off the road and save lives.

EFFICIENCIES

As part of the overall Army efficiency initiatives, we logisticians are looking at ways to reduce the need for taxpayers' dollars without adversely affecting current or future readiness. The Army is partnering with TRANSCOM to consolidate shipments and use more efficient modes of transportation. We are also saving money by accelerating the completion of chemical demilitarization activities. By reducing War Reserve Stocks for Allies Ammunition Stockpile in Korea, we are saving money on the associated storage and maintenance costs—we are currently reducing that stockpile by 32,000 short tons per year. The Army is also becoming more efficient by using bar code technology to reduce processing times and improve inventory management for Organizational Clothing and Individual Equipment, along with an entire suite of initiatives aimed at streamlining supply operations across the board for this gear.

EQUIPMENT ON HAND READINESS

The Army is also taking actions to improve our equipment on hand readiness and to ensure we do a better job of reporting the true capability of our modular force. The logistics, readiness and equipping staffs are conducting a thorough review of all the Army's equipping requirements to ensure we have the right capabilities in the right quantities reflected in our authorization documents. Taking advantage of the experience and advice of our combat-experienced commanders, we are validating and where appropriate, adjusting our requirements. This allows us to redistribute on hand equipment so that we can make maximum use of the dollars Congress provides.

STEWARDSHIP

Property Accountability is the foundation of good stewardship and a top priority of the Army's leadership. The Army is adapting its corporate equipment accountability policies and processes to support Army Force Generation and streamline its procedures. We have placed increased emphasis on stewardship by publishing orders that mandate that all Army Commands, Army Service Component Commands, and Direct Reporting Units account for everything, account for and redistribute excess, and educate leaders at every level to reestablish a culture of supply discipline. The Army's Property Accountability Campaign is a highly visible, enduring effort that enables the Army to make prudent use of its resources and enhance its readiness.

AMMUNITION READINESS

Over the past 9 years of war, the Army has steadily improved its ammunition readiness while supporting our deployed forces. Our forward positioned forces can fully support their missions, while maintaining their stocks at the highest readiness levels. The Army's ability to flex to support missions and operations has vastly improved since 2003, when we came out of our post Cold War hiatus on ammunition production. We continue to monitor our ammunition readiness closely, working in conjunction with the other Services, to ensure that the DOD is able to supply a highly trained force when and where they are needed.

CONCLUSION

Army logisticians work tirelessly to make sure that the Army is ready whenever called upon; and we continue to improve on our readiness every day. We are simultaneously meeting our goals of drawing down in Iraq while supporting the needs of the warfighters in Afghanistan. In addition to these military operations, the Army has executed multiple humanitarian assistance and disaster relief missions in which it has provided support in the aftermath of events such as the earthquake in Haiti, the flood in Pakistan, and the earthquake and tsunami in Japan. Here at home, we are determining the best ways to respond to future contingencies by supporting our industrial base facilities, strategically placing equipment and supplies across the

globe in prepositioned stocks, fully supporting deployed forces with critical ammunition and other supplies, and pursuing new initiatives in operational energy. As mentioned throughout my testimony, Army logisticians are also looking at ways to become more efficient. We believe we are successfully addressing current challenges and working to posture our equipment, policies, industrial base, and people so that we can be ready for the future. I would like to thank the subcommittee again for their support and look forward to your questions.

Senator MCCASKILL. Thank you.

Lieutenant General Panter.

STATEMENT OF LT. GEN. FRANK A. PANTER, JR., USMC, DEPUTY COMMANDANT FOR INSTALLATIONS AND LOGISTICS, U.S. MARINE CORPS

General PANTER. Chairman McCaskill, Senator Ayotte, and other distinguished members of the subcommittee, thank you for the opportunity to speak to you about the materiel readiness of the U.S. Marine Corps. On behalf of all the marines and their families, thank you for your unwavering support.

I would respectfully request my written statement be submitted for the record.

I just returned from Afghanistan yesterday. I had the privilege to travel with our Commandant of the Marine Corps and our Sergeant Major of the Marine Corps. We observed the marines and sailors in the Regional Command Southwest. That's the area were the U.S. Marine Corps is operating in Afghanistan—a pretty tough neighborhood. I'd like to share with you just a couple of stories, what I saw while I was there.

There's no other way to put it. It is pretty eye-watering to observe your marines and sailors professionally performing their assigned missions in a very harsh environment. It was 105 degrees while we were there. They're doing it without complaint. We saw things like young captains, lieutenants, staff sergeants, and gunnery sergeants planning and conducting convoy operations to resupply outlying forward operating bases. These convoys range in size from 17 vehicles, roughly, to as high as 70 or 80 vehicles, with as many as 140 personnel assigned to them. These are, essentially, combat patrols and they're dangerous.

We watched a section of the light armored vehicle battalion return from a route interdiction mission in Southern Helmand Province. These marines have been out from their forward operating base since late February. They hadn't had showers. They'd been living off of meals ready-to-eat. But, they were in high spirits and motivated.

It was pretty impressive to see them come back to the forward operating base, and watch them immediately turn to maintaining their equipment, accounting for their equipment, repairing their equipment.

I had a chance to watch our doctors operate on wounded marines. I saw one doctor operating on a marine that had been shot in the neck, and he saved his life.

The stories go on and on. The bottom line is that they're in a dangerous environment. These stories represent any of my brothers at arms sitting at the table. The leadership that's being shown by our young warriors is just simply amazing. Bottom line, you have the right to be proud of your marines forward-deployed.

As you mentioned, our equipment abroad has been stressed over the last almost 10 years of combat. Our readiness ratings at our home station are not what we would like for it to be. We continue to globally source equipment to respond rapidly to emerging treats in the Middle East, and elsewhere in the globe, throughout the Marine Corps.

I'd be more than happy to answer your questions related to our planning for reset and reconstitution.

In closing, I'd like, again, to thank you, on behalf of our brave and dedicated marines and their families, for your continued support and your past support. The U.S. Marine Corps stands ready to fulfill our role as "America's Expeditionary Force-in-Readiness." And with your support, we will continue to respond appropriately.

Thank you.

[The prepared statement of General Panter follows:]

PREPARED STATEMENT BY LT. GEN. FRANK A. PANTER, USMC

Chairman McCaskill, Ranking Member Ayotte, members of the subcommittee, thank you for the opportunity to provide you a report on how the Marine Corps is sustaining the force. Despite high operational tempo, your marines are resilient, motivated, and performing superbly in combat, maritime security, humanitarian assistance and disaster relief missions around the globe.[1]

Today, partnered with the U.S. Navy, we have roughly 32,000 marines forward deployed and forward engaged around the world. This past year alone, our afloat forces conducted humanitarian assistance missions in Pakistan, Haiti, and the Philippines; recaptured the pirated ship Magellan Star, rescuing its crew from Somali pirates; and partnered with allied forces in engagement missions in the Pacific Rim, Latin America, Africa, and Eastern Europe.

Even as we speak today, your U.S. Marine Corps is supporting disaster relief operations in Japan as the result of the recent devastating earthquake and tsunami while concurrently supporting Operations Odyssey Dawn and Enduring Freedom.

The Marine Corps is keenly aware of the fiscal realities confronting our Nation. During these times of constrained resources, the Marine Corps remains committed to being the best stewards of scarce public funds. We maintain a longstanding tradition in Congress as the DOD's "Penny Pinchers." Our institutionalized culture of frugality positions us as the "best value" for the defense dollar. For approximately 8.5 percent of the annual Defense budget, the Marine Corps provides the Nation 31 percent of its ground operating forces, 12 percent of its fixed wing tactical aircraft, and 19 percent of its attack helicopters.

The Marine Corps' continued success as "America's Expeditionary Force-in-Readiness" is completely dependent on continued congressional investment in our marines, their families, the reset and modernization of our equipment, and the training of the Marine Air Ground Task Forces (MAGTF) for future security environments. On behalf of all marines, their families, and our civilian marines, thank you for your unwavering support.

ROLE OF THE MARINE CORPS

As our commandant recently testified, the role of the U.S. Marine Corps affords three strategic advantages for our Nation:

- We are a versatile "middleweight" force capable of response across the range of military operations;
- We have inherent speed and agility that buys time for our Nation's leaders; and
- We possess an enabling and partnering capability in joint and combined operations.

To enable these strategic advantages, the commandant identified four enduring priorities aligned with the 2010 National Security Strategy:

(1) Continue to provide the best trained and equipped Marine units to Afghanistan;

[1] CMC Posture Statement, pp. 1–2.

(2) Rebalance our Corps, posture it for the future, and aggressively experiment with and implement new capabilities and organizations;
(3) Better educate and train our marines to succeed in distributed operations and increasingly complex environments; and
(4) Keep faith with our marines, sailors, and our families.[2]

OPERATION ENDURING FREEDOM

We have made tremendous progress in Afghanistan and this clearly remains our number one priority. At present, there are more than 20,000 marines deployed in Afghanistan. The gains that we have achieved in Helmand Province are the result of the outstanding leadership, professionalism, and bravery of our young marines and their leaders on the ground. We will continue to provide forces to Afghanistan capable of full spectrum combat and counterinsurgency operations, while balancing our capabilities to meet the other tasks the Nation will ask of us in the future. We have provided, and will continue to provide, the best possible training and equipment for our marines to further capitalize on the current successes in Afghanistan.

Marine units operating in Afghanistan have the highest state of readiness for equipment, personnel, and training. Through congressional support, we continue to receive funds for the rapid fielding of urgently needed items to support the Afghanistan effort. The Mine Resistant Armor Protected (MRAP) vehicles and the MRAP All Terrain Vehicles provide superb force protection as our marines continue to reclaim ground previously controlled by the Taliban. In December 2010, we deployed a reinforced Tank Company to complement our efforts in Regional Command Southwest to further exploit our hard-earned achievements in this highly contested region.

GROUND EQUIPMENT READINESS

As the commandant testified in his statement before Congress in March, our equipment abroad and at home stations has been heavily taxed in nearly a decade of constant combat operations.[3] We continue to globally source equipment for Afghanistan, and to meet other equipment requirements as we rapidly respond to emerging threats in the Middle East and elsewhere around the globe. The requirement to fully resource deployed forces, often in excess of our tables of equipment, has resulted in redistribution of assets from nondeployed forces and strategic programs to meet these requirements. The result is a reduced availability of equipment essential to outfit and train our nondeployed units. The supply rating of units at home station that are not in pre-deployment training hovers around 65 percent. When we surged forces into Afghanistan, we sent almost half of the required equipment directly from Iraq to Afghanistan without full reset actions. Success in Afghanistan has stressed our equipment readiness posture due to the following factors:

- The harsh environment and tempo of operations in theater through nearly a decade of combat have accelerated wear and tear.
- The enemy's weapon of choice in Afghanistan (as it was in Iraq)—the improvised explosive device—has greatly accelerated wear and tear on our vehicles due to the increased weight of vehicle armor.
- The greatly distributed nature of current operations has shown us that our legacy tables of equipment were inadequate. As a result, the type and number of ground vehicles, radios, and other major end items has significantly increased. For example, in our infantry battalions, the number of tactical vehicles has almost doubled while the number of radio sets has grown sevenfold.

RESET

The decision to rapidly build combat power in Afghanistan forced us to delay our original plans to reset the Corps. We estimate that our reset requirements have increased as a direct result of the shift of equipment from Iraq to support the surge of forces in Afghanistan. While we have adjusted our original reset plan, we continually seek to synchronize Marine Corps reset efforts to ensure we effectively and efficiently reset equipment to support follow-on combat operations. Major elements of our ongoing reset plan are:

[2] CMC Posture Statement, pp. 2–4.
[3] CMC Posture Statement, p. 4.

- Better integrating our Ground Combat Tactical Vehicle Strategy as part of an overall Ground Equipping Strategy. These efforts are informing the Reset and Reconstitution resource allocation decisions for the Marine Corps.
- Maximizing sources of repair in the Central Command area of responsibility to sustain our equipment in theater by tapping into joint capabilities such as the great support provided by the U.S. Army Material Command and the Defense Logistics Agency.
- Aggressively repairing equipment at our depots and distributing to fill shortfalls for established priorities.
- Disposing of equipment deemed beyond economical repair or no longer needed in our inventory.

The commandant stated that the price tag for reset is $10.6 billion, of which $3.1 billion has been requested in fiscal year 2011, and $2.5 billion in fiscal year 2012. The remaining $5 billion will be needed upon the completion of our mission in Afghanistan.[4] This funding will provide depot level maintenance of equipment; procurement of combat vehicles, major weapons systems, and engineering equipment; replacement of ammunition; and related expenditures.

Reconstitution of Equipment. As we implement the changes identified in lessons learned from nearly 10 years of combat and from our force structure review, we will continue to assess modernization requirements for equipment to meet our post-Afghanistan posture. Our initial estimate of costs to modernize equipment sets to support future operations is $5 billion, which is completely separate from our reset costs. We have begun to address our reconstitution shortfall, requesting $253 million in fiscal year 2012 for new equipment procurement.[5]

PREPOSITIONING PROGRAMS

The current MPF program is composed of a fleet of 16 ships divided into 3 Maritime Prepositioning Squadrons (MPSRON) located in the Mediterranean Sea, Indian Ocean (Diego Garcia), and Pacific Ocean (Guam and Tinian). When completely loaded, Marine Corps prepositioning vessels today carry more than 26,000 pieces of major equipment including tanks, wheeled tactical vehicles, and howitzers, as well as the necessary supplies to support our expeditionary force.

We continue to rotate the MPSRONs through our scheduled maintenance cycles at our Blount Island complex in Florida. Our MPSRONs reset efforts will ensure the ships are loaded with the most capable and modern equipment available in order to support the full range military operations. While there are some critical shortages, the readiness trend lines remain high and our Maritime Preposition Force remains a viable option for the Nation when needed to support contingencies plans throughout the globe.

The Department of the Navy is currently funding the full Maritime Prepositioning Force (MPF) program of 16 ships through fiscal year 2012. However, the Department of the Navy POM–13 efficiency approved by the Secretary of Defense places six ships in Reduced Operating Status (ROS) beginning in fiscal year 2013. This equates to savings of approximately $500 million across the Future Years Defense Plan but implementation of this new strategy needs additional analysis. The Marine Corps will continue to optimize its MPF program to remain a responsive and relevant warfighting capability to Geographic Combatant Commander requirements.

With the deferring of MPF-Future (MPF–F), the Marine Corps and Navy have focused on an interim solution to enhance current MPF with three new programs of ships to enable future seabasing concepts. The addition of three Mobile Landing Platforms (MLP) and three Auxiliary Dry Cargo/Ammunition ships (T–AKEs) to the MPSRONs, coupled with existing Large, Medium-Speed, Roll-On, Roll-Off (LMSR) cargo ships, will enable the MPSRONs to conduct at-sea, sea-state three, selective offload of vehicles, personnel, and equipment without complete reliance on fixed ports. The introduction of MLPs, Auxiliary Dry Cargo/Ammunition ships (T–AKEs), and LMSRs provide the Navy and Marine Corps team a substantial step in enhancing our current sea-basing capabilities. It is important to note that these programs are not just strategic war reserve. Marine Corps prepositioning programs support forward-deployed training exercises, theater engagement and, with the amphibious ships of the U.S. Navy, the steady state requirements of the combatant commanders.

[4] CMC Posture Statement, p. 12.
[5] CMC Posture Statement, p. 12.

ENERGY INITIATIVES

For installations, we have a diverse and balanced portfolio including photovoltaic, wind and landfill gas generated renewable power. In 2012, the Marine Corps plans to invest over $200 million in installations energy. Over 90 percent of that will be invested on efficiency projects to decentralize heating plants, upgrade HVAC systems, retrofit lighting fixtures/controls, and improve building R-values (insulating properties) to reduce energy consumption.

Up to 10 percent of the investment will support additional renewable energy sources. Our overall energy investments over the next 3 years will enable the Marine Corps to meet the requirement to reduce Energy Intensity by 30 percent by 2015. To date, we have cut Energy Intensity by 10 percent. All facilities being constructed by the Marine Corps adhere to the most stringent energy standards in the construction industry and are certified to a minimum standard of LEED Silver. Many of our recent projects have been certified to LEED Gold and Platinum.

While our primary objectives for installation energy initiatives are environmentally and fiscally focused, for our deployed units, the safety and well-being of our marines and sailors in combat are our critical goals. We consider reducing energy consumption on the battlefield as a force protection issue in that it reduces the logistics burden to sustain forces in the field. Additionally, energy efficiency makes us more expeditionary by extending operational range and reducing reliance on logistical support.

The Marine Corps is experiencing success in a number of expeditionary energy initiatives. Our current initiatives in Afghanistan center in Helmand Province and include solar battery chargers for portable radios, photovoltaic arrays (towed and land arrayed) for static combat outposts, and solar thermal powered tent lighting. We have purchased 200 shelter liners for our standard Base-X dome tents. These liners will raise the R-value of our tents from R–1 to approx R–3. These improvements should pay for themselves in fuel saved in less than 1 year on the battlefield.

FUTURE READINESS

In fulfilling the commandant's priorities, we are seeking to rebalance the Corps, posture for the future, and aggressively experiment with and implement new capabilities and organizations. The 2010 Quadrennial Defense Review and the 2010 National Security Strategy identify the necessity of overcoming irregular threats and enabling forces that are globally available, yet regionally focused. Today, Geographic Combatant Commanders continue to register a need for forward deployed amphibious forces capable of operating across the spectrum of military engagements, from countering irregular threats to conducting security cooperation, from engaging in regional deterrence to providing crisis response.

In recognition of this shifting landscape, last fall the U.S. Marine Corps conducted a rigorous force structure review. The outcome of this review is a post-Afghanistan Marine Corps comprised of an optimum mix of capabilities to fulfill our role as America's Expeditionary Force in Readiness. This review addressed Marine Corps capabilities, cost, and readiness relative to operational requirements of the combatant commanders. The result is a strategically mobile, middleweight force, ideally suited for forward presence and crisis response. We will be light enough to leverage the capacity and flexibility of our amphibious ships, but heavy enough to carry the day when we get there. This optimum mix of people and equipment entails reorganization of our force and a modest reduction in personnel. As we make these adjustments, we will keep faith with our marines, sailors, and their families to ensure that personnel are successful in their transition back to civilian status. Achieving this future posture will of course require continued dialogue with and the support of Congress.

SUMMARY

Your Navy and Marine Corps team offers an impressive forward deployed and forward engaged capability in the defense of our Nation. It provides an immediate response to contingencies and supports the combatant commanders in setting conditions for follow-on forces as required.

On behalf of your brave and dedicated marines, I offer again our sincere appreciation for your past and continued support. The U.S. Marine Corps stands ready to fulfill our role as "America's Expeditionary Force-in-Readiness," and with your support, we will respond rapidly and capably when called upon for future contingencies.

Senator MCCASKILL. Lieutenant General Reno.

STATEMENT OF LT. GEN. LOREN M. RENO, USAF, DEPUTY CHIEF OF STAFF FOR LOGISTICS, INSTALLATIONS, AND MISSION SUPPORT, U.S. AIR FORCE

General RENO. Good morning, Chairman McCaskill, Senator Ayotte, other distinguished members of the subcommittee. Thank you for the opportunity to discuss the materiel readiness of your Air Force.

As Secretary Donley previously stated, passing a fiscal year 2011 Defense Appropriations bill is essential to avoiding severe disruptions to readiness. On behalf of the Air Force, I thank you for your hard work in resolving this situation.

Agile combat support underpins all Air Force core functions and plays a central role in our ability to create, protect, and sustain air and space forces. This is a challenging task, given over 20 years of constant combat operations.

From the development and training of airmen, maintaining and supporting weapon systems, and regaining acquisition excellence, agile combat support enables the Air Force to remain a mission-focused and highly capable force across the full spectrum of military operations.

Permit me to highlight the following areas: the fiscal year 2012 budget and Air Force efficiencies, joint support to the warfighter, personnel readiness, nuclear deterrence operations, and weapon system sustainment and readiness.

Within the Air Force's fiscal year 2012 budget request is $33.8 billion for agile combat support. This represents a careful balance of resources among the Air Force core functions necessary to implement the President's national security strategy and an extraordinary effort to ensure America gets the maximum value out of every dollar.

Last year, the Secretary of Defense directed the Services to identify $100 billion in efficiencies in overhead and support, and move it to warfighting and readiness. Our fiscal year 2012 budget supports that efficiency initiative and incorporates over $33 billion in efficiencies across the FYDP. The savings will be shifted to higher-priority combat capability as we reduce our overhead costs, improve business practices, and eliminate excess, troubled, or lower-priority programs.

Our airmen continue to inspire us with their dedication and service, serving proudly alongside their Army, Marine, Navy, and Coast Guard teammates. With airmen at 135 locations worldwide, nearly 37,000 forward-deployed and more than 57,000 forward-stationed, the Air Force fully supports the joint fight. The airmen that form the logistics chain have provided world-class support to the joint and coalition team in Operation Iraqi Freedom (OIF), Operation New Dawn, Operation Enduring Freedom (OEF), and most recently, Operations Tomodachi and Odyssey Dawn.

Continued and sustained high operations has reduced our personnel readiness. Since 2003, we have seen a steady, but slow, decline in reported readiness indicators. At present, 22 career fields are stressed. However, there are a number of programs in place to bolster manning in these career fields, as well as to mitigate potential negative effects on our airmen and their families.

We continue to provide two of the three arms of the Nation's nuclear deterrence with steadfast excellence, precision, and reliability. To that end, we have taken positive steps in the fiscal year 2012 budget to continue improving this core function.

The mission capability of the airlift and refueling fleet remains high, at 82.7 percent, while meeting robust and dynamic operational requirements. Mission capability of the fighter-bomber fleet is adequate, at 74 percent. Overseas contingency funding (OCO), the fiscal year 2012 President's budget request, and efficiencies combine to enable us to meet in excess of 84 percent of our weapon system sustainment requirements. The professionalism and dedicated work of our airmen ensure our aircraft inventory is ready.

In closing, the Air Force is prepared for today's operations and tomorrow's uncertainties despite fiscal challenges and high operations tempo (OPTEMPO). With the uncompromising commitment to Air Force core values, the Air Force remains ready to provide global vigilance, reach, and power for America.

Chairman McCaskill, Senator Ayotte, and distinguished members of the subcommittee, it's an honor to be here before you today. Thank you for your service and continued strong support of our airmen and their families.

I have submitted a written statement for the record, and I look forward to your questions.

[The prepared statement of General Reno follows:]

PREPARED STATEMENT BY LT. GEN. LOREN M. RENO, USAF

INTRODUCTION

The United States continues to confront a dynamic international environment requiring the military to remain strong and agile in the face of a diverse range of threats. Along with our joint partners, the Air Force defends and advances the interests of the United States by providing unique core function capabilities required to succeed in today's fight and future conflicts. Underpinning the work of all Air Force Core Functions are the capabilities inherent in Agile Combat Support (ACS). ACS is the ability to create, protect, and sustain air and space forces across the full spectrum of military operations, spanning the entire set of our diverse functional capabilities. The fiscal year 2012 budget request of $33.8 billion for ACS impacts our entire Air Force—from the development and training of airmen, maintaining and supporting weapon systems, and regaining acquisition excellence. ACS enables the Air Force to remain a mission-focused and highly capable force; a difficult task given over 20 years of constant combat operations.

SUPPORTING THE WARFIGHTER

Our enduring commitment to readiness and the joint fight is evidenced by the nearly 37,000 forward deployed, and more than 57,000 forward stationed airmen at 135 locations worldwide. These Airmen contribute to the fight in a variety of ways by fulfilling traditional roles as Air Liaison Officers, Combat Control Teams, Combat Communications and Battlefield Weather personnel, as well as non-traditional roles supporting Joint Expeditionary Taskings as Provincial Reconstruction Teams, Ground Convoy Operators and Agricultural Development Teams. The many outstanding Airmen that form the "logistics chain"—maintainers, security forces, vehicle operators, explosive ordnance disposal teams, engineers, aerial porters, and others have enabled the Air Force to conduct more than 45,000 sorties supporting Operations Iraqi Freedom/New Dawn, and almost 101,000 sorties supporting Operation Enduring Freedom, deliver over 1.78 million passengers and 712,000 tons of cargo, and employ almost 2,580 short tons of munitions.

The full impact of agile combat support cannot be expressed by mere statistics of tonnage moved and sorties generated. ACS covers virtually every aspect of joint and coalition operations and one example of our support to the entire joint and coalition team is Basic Expeditionary Airfield Resources (BEAR). BEAR includes virtually everything the joint warfighter might need for airfield operations in an austere envi-

ronment such as shelters, generators, hygiene kits, and airfield matting. A recent example of how BEAR was used is when the 49th Materiel Maintenance Group at Holloman Air Force Base, NM, and the Army's Surface Deployment and Distribution Command rapidly packed and shipped BEAR assets to Afghanistan. This movement equated to 14,550 short tons of equipment enabling the set of 15 housing encampments supporting 8,250 personnel. Additionally, the Air Force has transferred 22 BEAR sets to the Army and Marine Corps to support the stand-up of Forward Operating Bases throughout Afghanistan as well as two BEAR sets to the Navy to support the initial stand-up of detainee operations at Guantanamo Bay, Cuba. These tremendous efforts exemplify our unmatched Agile Combat Support—not just to Air Force units—but also to our joint and coalition partners.

PERSONNEL AND READINESS

With Air Force personnel deployed to more than 135 locations worldwide on an average day, we rely heavily on the total force. Of the 37,000 forward deployed airmen, nearly 30,000 are continuing on a rotating basis to contribute to operations in the U.S. Central Command (CENTCOM) area of responsibility (AOR), including 10,000 airmen in Afghanistan. An additional 57,000 total force Airmen are forward stationed overseas providing capabilities in direct support of our combatant commander requirements. From home stations here in the United States, approximately 216,000 Total Force airmen also provide daily support to combatant commanders' worldwide operations.

This level of activity reflects our commitment to provide Global Vigilance, Reach, and Power in today's joint fight. However, this high operations tempo (OPTEMPO) has also had some detrimental effects on our overall readiness. Readiness for full spectrum military operations is a challenge for our combat air forces and some other limited-supply/high-demand units. Since 2003, we have seen a slow but steady decline in reported readiness indicators. Our OPTEMPO since 2001 has produced lower deploy-to-dwell ratios for high-demand skills. At present, 16 enlisted and 6 officer career fields are "stressed". However there are a number of programs in place to bolster manning in these career fields, as well as mitigate potential negative effects on our Airmen and their families.

Regardless, the readiness of the Mobility Air Forces (MAF) remains high while meeting robust and dynamic operational requirements. Our airlift fleet continues to provide strategic airlift as well as theater and direct support airlift missions moving personnel and a wide variety of equipment and supplies. MAF assets continue to directly support our Joint and coalition partners, achieving a mission capable (MC) rate of 82.7 percent despite a 350 percent increase in hourly utilization within the AOR. Stateside, MAF fleet MC and aircraft availability (AA) rates have steadily improved over the last few years, attaining current rates of 78 percent and 65 percent, respectively. These improvements are attributed to initiatives such as the C–5 Reliability Enhancement and Re-Engining Program and the C–130 Avionics Modernization Program.

The readiness of Combat Air Forces (CAF) aircraft is adequate despite challenges from accumulating hours on our fleet faster than envisioned when the aircraft were first fielded. We're now flying the oldest Air Force fleet in our history as a result of 20 years of continuous combat operations. The average age of all CAF aircraft is 21.3 years. Our CAF aircraft fleet has shown a slight decline in MC and AA rates of 3 percent and 4.5 percent, respectively over the past 5 years, settling at 75 percent and 65.5 percent for fiscal year 2011. In the AOR, the current MC rate is 84 percent. This is to be expected due to the focus on warfighter support. To offset these challenges, we are conducting full-scale structural and durability tests and engineering analysis to assess the longevity of our CAF fleets. These actions to extend and modernize the legacy fleet as a bridge to 5th generation capabilities are not considered replacement actions. The F–16 Service Life Extension Program is one example of the ongoing efforts to mitigate fighter force challenges.

In the logistics arena, we've improved funding to Weapon System Sustainment (WSS); however, sustainment challenges continue as we field new weapon systems and balance contract versus organic sources of repair. To address these readiness issues, we must keep aircraft recapitalization and procurement programs on track while continually managing our force to ensure we maintain the right numbers and mix of skills in our highly tasked and highest priority mission areas. The dedicated work and professionalism of our Airmen ensure our aircraft inventory is ready, despite extensive use in contingency operations and increases in fleet service life. Notwithstanding these challenges, modernization and recapitalization of our aircraft remains a very high priority.

FISCAL YEAR 2012 BUDGET OVERVIEW

For fiscal year 2012, the Air Force is requesting $150 billion in our baseline budget and $16 billion in the Overseas Contingency Operations (OCO) supplemental appropriation. Our budget request represents a careful balance of resources among the Air Force core functions necessary to implement the President's national security strategy, and an extraordinary effort to ensure America gets the maximum value out of every dollar.

Last year, the Secretary of Defense directed the Services to identify $100 billion in efficiencies in overhead and support, and move it to warfighting and readiness. Our fiscal year 2012 budget supports the Office of the Secretary of Defense efficiency request and incorporates over $33 billion in efficiencies across the Future Years Defense Program (FYDP). The savings will be shifted to higher priority combat capability as we reduce overhead costs, improve business practices and eliminate excess, troubled or lower priority programs. As we consider how we can achieve efficiencies, the Air Force is looking across the enterprise, thinking broadly and creatively across business areas—from our organizational structures, to reducing fuel and energy consumption, to improving depot and supply-chain business processes and sustaining weapons systems.

Specifically in the logistics area and weapon systems sustainment, we conducted an end-to-end review of over 5,500 sustainment tasks, resulting in a reduction of $1.2 billion in requirements. We also looked at supply chain management processes which led to expanding the use of strategic sourcing, the consolidation of accounts, and reductions in manpower and overhead. Finally, we standardized requirements using improved collaboration and supportability reviews to increase planning accuracy and on-time depot performance. To date, our efforts have yielded $3 billion in efficiencies over the FYDP and will allow the Air Force to fund WSS at 85 percent, including funding in the OCO budget, in fiscal year 2012.

In the energy area, the Air Force continues as a Federal energy-conscious leader by advancing energy independence by reducing aviation fuel use, installation energy intensity, and vehicle fleet petroleum consumption. Our fiscal year 2012 budget request includes over $550 million for energy initiatives and focuses on reducing energy consumption through enhanced efficiencies. We are already making significant reductions in aviation fuel use through the implementation of demand reduction initiatives adopted from commercial industry best practices. As we recapitalize our mobility fleets, we expect an annual savings of nearly 70 million gallons of fuel.

The Air Force is also committed to reducing greenhouse gas emissions and carbon footprint through the reduced use of fossil fuels consumed directly through vehicles and facilities and indirectly through consumption of fossil fuel-generated electricity from the national electric grids. From replacing outdated heating/air-conditioning systems, to using energy efficient light bulbs, to working with local communities to build large solar arrays and wind turbines on installations, we are utilizing practical and innovative solutions to meet our goal of reducing energy intensity by 30 percent by 2015.

In fiscal year 2012, we will continue our energy conservation efforts, which have already reduced facility energy intensity nearly 15 percent from 2003 levels. In fiscal year 2010, we exceeded our renewable goals and produced or procured nearly 7 percent of our total facility energy from renewable sources, and we continued to lead the Department of Defense as the number one purchaser of renewable energy for the fifth year in a row. To reduce our use of vehicle fleet petroleum on our installations, we maintain over 7,000 flex fuel and hybrid vehicles and over 1,800 low-speed vehicles. The Air Force has made significant progress and is committed to further energy efficiencies wherever we can find them.

Realization of cost-savings initiatives like the ones mentioned above will allow the Air Force to reallocate funding to modernize and recapitalize weapons systems, improve capabilities, and enhance warfighter operations, especially in the current fiscally constrained environment.

NUCLEAR DETERRENCE OPERATIONS

Continuing to strengthen our nuclear enterprise remains the number one Air Force priority. Toward that end, we have taken positive steps within the fiscal year 2012 budget request related to this core function.

The Air Force Nuclear Weapons Center continues to pursue vital and deliberate sustainment of the nuclear enterprise through efforts such as the Air Force Comprehensive Assessment of Nuclear Sustainment process. ICBM modernization and sustainment includes ongoing programs to replace aging support equipment such as weapons load trailers, electronic systems test sets, weapons storage, and security systems. In addition to these important efforts, we are strengthening positive inven-

tory control and accountability for Nuclear Weapons Related Materiel by creating improved visibility and performing semi-annual inventories. We're also refining the inspection process by using a self-assessment philosophy, examining the scope and size of the inspections, and performing rigorous root cause analysis of all major write-ups.

Beyond nuclear weapon system sustainment and modernization, the Air Force is focusing on human capital as we carefully balance requirements for our limited, intensively scrutinized, high-demand airmen in the nuclear field. We've instituted changes to improve the long-term professional fitness of our most precious resource—our airmen. Our airmen must be trained, educated, and experienced through professional development initiatives designed to create the capabilities and culture this critical mission demands, and our Nation deserves. The Nuclear Enterprise Human Capital Execution Plan seeks to improve the development and retention of Airmen with appropriate experience and critical skills. Our new approach to managing enlisted talent will give us the capability to evaluate airmen in the nuclear field and provide a deliberate process for developing them.

CONCLUSION

Air Force personnel, weapon systems, equipment, and organizations are prepared for today's operations and tomorrow's uncertain challenges, despite fiscal challenges and high operations tempo. With an uncompromising commitment, the Air Force remains ready to provide Global Vigilance, Reach, and Power for America.

Senator MCCASKILL. Thank you.

Vice Admiral Burke.

STATEMENT OF VADM WILLIAM R. BURKE, USN, DEPUTY CHIEF OF NAVAL OPERATIONS FOR FLEET READINESS AND LOGISTICS (N4), U.S. NAVY

Admiral BURKE. Yes, ma'am. Chairman McCaskill, Senator Ayotte, and distinguished members of the Readiness and Management Support Subcommittee, it is my honor to participate in today's hearing, representing the Navy men and women—Active Duty, Reserve, and civilian—who work to ensure our Navy is ready to deliver the full range of capabilities we possess to defend the Nation. On their behalf, I also want to express our great appreciation for the work of this committee in support of their service. I would add my thanks on completing the fiscal year 2011 Appropriations bill. That was key to our readiness.

As I discussed in my written testimony, readiness is a function of both capability and capacity, and my goal is finding the most effective balance to deliver readiness today and in the future. Both components are impacted by how we acquire new platforms and systems, how we accomplish significant upgrades on major systems, and how we sustain the current force and its existing capabilities. My responsibility is the sustainment of our current force, including Navy shore infrastructure. We must deliver the expected service life of our current warfighting platforms to provide the future capacity to meet the Nation's needs. Our shore infrastructure must support our warfighting platforms and our sailors.

For fleet sustainment programs in the Navy's fiscal year 2012 budget, we focus first on supporting our deployed forces in the current fights and then on achieving the expected service life of all of our platforms. Ashore, we focused on those projects that provide the greatest return on investment in supporting the warfighter and on those providing quality services for our sailors and their families. Because of the impact of energy consumption on both current affordability and future readiness, we continue our investment in

reducing energy consumption and supplementing fossil fuels with renewable sources ashore, afloat, and in the air.

The President's budget for fiscal year 2012 balances risk across the entire Navy program to achieve the strongest current and future readiness outcomes.

Again, I appreciate the opportunity to be with you today, and look forward to discussing the Navy's sustainment programs with you.

Thank you.

[The prepared statement of Admiral Burke follows:]

PREPARED STATEMENT BY VADM WILLIAM R. BURKE, USN

Madam Chairman McCaskill, Senator Ayotte, and distinguished members of the Senate Armed Services Committee, Readiness and Management Support Subcommittee, it is an honor for me to be with you today representing the over 600,000 men and women of the U.S. Navy, Active, Reserve, and civilians. Their dedicated service helps ensure the security of this Nation every day. Today, as always, our Navy is deployed globally with over half the Fleet at sea and more than 24,000 personnel serving in the U.S. Central Command (CENTCOM) area of responsibility (AOR). Ashore, Navy personnel are supporting our deployed warfighters, and sailors and their families, at facilities worldwide.

The readiness of the Navy to provide the warfighting resources needed by our combatant commanders (CCDRs) is a function of both combat capability and force capacity. Achieving the required levels of each requires a fine balance between acquiring the right force structure along with new warfighting capabilities, and properly sustaining existing capabilities and platforms to achieve their expected service life. The Navy has sustained its focus on ensuring our front line warfighters have the resources they need to accomplish their planned operations—and that is reflected in a continued high state of readiness of our deployed forces in their key mission areas.

The President's budget for fiscal year 2012 provides the balanced funding necessary for the Navy to support today's force while developing the future capabilities and capacity necessary to continue to execute Navy missions in support of the National Military Strategy. Navy programming continues to be informed by our Maritime Strategy—"A Cooperative Strategy for 21st Century Seapower" (CS21). Since its publication in 2007, CS21 has provided a clear and enduring vision of the core capabilities the Navy must provide for the Nation. Based upon this foundation, the Chief of Naval Operations provides annual guidance on his principal focus areas for executing the Maritime Strategy—which have become enduring imperatives. They are:

- Build the Future Force. In recent testimony before this committee, Secretary Mabus and Admiral Roughead outlined our plans to build the Navy required to deliver our core capabilities into the future. The Navy budget submission balances these plans with acceptable risk across all our requirements to deliver a Navy program that most effectively employs the resources entrusted to us.
- Maintain Warfighting Readiness. The CCDRs demand for the capabilities delivered by Navy forces continues to grow. Concurrently, we continue to reset in stride to deliver our Global Force Management (GFM) commitments while taking proactive steps to improve the readiness of our forces, particularly our surface ships.
- Develop and Support our Sailors, Navy Civilians, and Families. We continue to expand our capabilities to support our sailors and families. The service and sacrifice of our returning warfighters, particularly our wounded warriors and their families, place a special obligation upon us, one we will not shirk.

My testimony today centers on the second of the CNO's focus areas, and the contribution of Navy readiness accounts in maintaining our warfighting readiness. The fiscal year 2012 budget provides the resources to deliver Navy units ready today, and to sustain our ships, aircraft, equipment, and supporting capabilities to be ready for tomorrow.

NAVY UNITS-READY TODAY

Global trends in an uncertain world portend an increased demand for sea power. The safety and economic interests of the United States, its allies and partners rely upon the unimpeded trade and commerce that traverse the world's oceans. U.S. vital national interests are tied, therefore, to a secure maritime environment, which places global responsibilities on our Naval forces. The fiscal year 2012 budget, including Overseas Contingency Operations (OCO) funding, supports Navy operations across this broad spectrum of responsibilities. Our readiness and operational support programs will meet the anticipated CCDR demand for Navy forces within force structure constraints and provide surge forces in support of operational plans, with an acceptable level of risk.

Afloat Operations

The Fleet Response Plan (FRP) remains the foundation for Navy force generation, and has proven to optimize returns on training and maintenance investments. It enhances sailor proficiency, and ensures units and task groups are trained and certified in defined, progressive levels of employability to meet both deployed presence and surge requirements in support of potential operation plan execution. The exact FRP Operational Availability (Ao) required each year depends on the projected GFM plan for the year plus surge requirements. Because of current OPTEMPO demands, our next-to-deploy forces are reaching deployed readiness levels later in the FRP cycle, resulting in some risk to our surge capacity at any given time.

Ship Operations

The fiscal year 2012 budget (including OCO) provides the Ship Operations account with funding for an average ship's OPTEMPO of 58 steaming days per quarter (deployed) and 24 steaming days per quarter (nondeployed). This OPTEMPO enables the Navy to meet FRP training/certification requirements with acceptable risk. Measures, such as increased use of simulators, concurrent training and certification events while underway, and the judicious use of fuel, are used to mitigate risk. While the Navy met all GFM commitments in fiscal year 2010, including the operational requirements in support of Operation Iraqi Freedom (OIF)/Operation New Dawn (OND) and Operation Enduring Freedom (OEF), we continue to experience high OPTEMPO globally. Sustainment of this OPTEMPO remains dependent upon the receipt of OCO or similar supplemental appropriations.

Air Operations (Flying Hour Program)

The Flying Hour Program (FHP) account provides 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 various enabling activities. The fiscal year 2012 budget (including OCO) resources the FHP account to achieve Training-rating (T-rating) levels of T2.3 for Navy and T2.0 for the Marine Corps. With this funding, Tactical Aviation squadrons conduct strike operations, provide flexibility in dealing with a wide range of conventional and irregular threats, and provide long range and local protection against airborne surface and sub-surface threats. FAS squadrons provide vital fleet logistics and intelligence. The Chief of Naval Air Training trains entry-level pilots and Naval Flight Officers, and Fleet Replacement Squadrons provide transition training in our highly capable, advanced Fleet aircraft. Reserve component aviation provides adversary and logistics air support; makes central contributions to the counter-narcotics efforts; conducts mine warfare; and augments Maritime Patrol, Electronic Warfare, and Special Operations support.

The Navy is increasing the use of simulation to reduce nondeployed flying hours and is continuing to invest in new simulators. We are also investing in improvements to existing simulators to enable further reductions in aircraft flying hours while maintaining requisite training levels for deployed operations.

Shore Operations

Shore infrastructure supports and enables operational and combat readiness. It is an essential element to the quality of life and quality of work for our sailors, Navy civilians, and their families. Continued high operational demand has led the Navy to take deliberate risk in Shore Readiness programs to resource our critical warfighting needs.

To meet critical mission requirements with today's available resources, the Navy is targeting our shore investments to have the greatest impact on warfighting readiness and the quality of life of our sailors and their families. We are focusing sustainment and restoration efforts on barracks and mission-critical facilities such as shipyards, airfields, hangars, piers and dry docks. Likewise, we are directing cap-

ital investments ashore toward the recapitalization of critical Navy assets and the construction and modernization of new mission and warfighter support facilities. Despite today's fiscal and operational challenges, the Navy continues to support air and port operations and key shore initiatives such as nuclear weapons security, bachelor housing, family services and shore energy initiatives.

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. 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 DOD-certified and nationally accredited. This year, we will complete our 7,000-space expansion and meet the Office of the Secretary of Defense (OSD) goal of providing childcare to meet at least 80 percent of the potential need of our military population.

Bachelor Housing

Our Bachelor Housing program currently focuses on two goals: (1) providing Homeport Ashore housing for our junior sea-duty sailors by 2016; and (2) attaining the OSD goal of 90 percent "adequate" (Q1/Q2) bachelor housing. The Homeport Ashore program will complete a new barracks for 1,000 sailors at Naval Base Coronado this year, and the final three Homeport Ashore construction projects are programmed in fiscal year 2013 and fiscal year 2014. At the same time, the Navy increased our efforts to improve the condition of our existing barracks. The fiscal year 2012 budget requests $195 million per year across the Future Years Defense Program (FYDP) to bring 90 percent of our bachelor housing inventory to "adequate" condition by 2022.

Family Housing

Navy Family Housing supports the Navy's readiness by providing sailors and their families the opportunity for suitable, affordable and safe environments in community, privatized, or Navy-owned housing. The fiscal year 2012 Family Housing budget includes $75 million for family housing improvements, planning, and design. Our investments across the FYDP will enable Navy to meet OSD's target of bringing 90 percent of our family housing inventory into "adequate" (Q1/Q2) condition by 2015. The Navy has privatized 97 percent of our CONUS and Hawaii family housing inventory. We continue to perform enhanced oversight of our privatized housing portfolio and ensure Navy sailors and their families continue to benefit from quality housing and services.

ENSURING THE NAVY IS READY FOR TOMORROW (NAVY PLATFORMS, EQUIPMENT, AND SUPPORTING CAPABILITIES)

Sustaining the capital assets of the current force is essential to building the future Navy. Using the proven engineered maintenance planning of the carrier and submarine forces, the Navy is investing in improvements in surface ship maintenance processes to enhance long-term surface ship material readiness. Investment in future F/A–18 service life extension will assist in managing strike-fighter force structure until sufficient F–35 resources are available in the Fleet. Supporting capabilities are also funded to ensure a ready Navy in the future.

Ship Maintenance

Keeping our ships in acceptable operating condition is vital to their ability to accomplish assigned missions and reach their expected service life (ESL), a key factor in the Navy's 30-Year Shipbuilding Plan. Surface ships, aircraft carriers and submarines currently in commission comprise approximately 70 percent of the ships that will be in service in 2020. Reaching ESL requires an integrated engineering approach to plan, fund, and execute the right maintenance.

In 2009, Navy Fleet Commanders recognized significant deficiencies in surface ship material readiness and commissioned a review, known as the Fleet Review Panel for Surface Readiness, to fully investigate the causes and propose corrective action. Initiatives are currently underway to reverse the identified negative readiness trends, including an increase of 1,105 billets for optimally manned ships in fiscal year 2012, and increasing manning at our Regional Maintenance Centers (RMCs) by 400 sailors and 385 civilian personnel across the FYDP. Navy is reopening the Intermediate Maintenance facilities in Norfolk and Mayport, providing maintenance support and valuable sailor skill training.

We have also expanded the Surface Ship Life Cycle Management Activity into the Surface Maintenance, Engineering Planning Program (SURFMEPP). This activity is re-establishing the engineered requirements and Class Maintenance Plans (CMPs) necessary for surface ships to reach their ESL. Using the CMP and individual ship life-cycle maintenance plan, SURFMEPP is building a Baseline Availability Work Package (BAWP) for each scheduled availability, and then tracking the completion of all required maintenance actions. NAVSEA is conducting an independent technical review of the CMPs to verify they account for all individual ship life-cycle maintenance plan requirements. SURFMEPP provides the Navy with centralized surface ship life-cycle management and discipline in defining maintenance and modernization requirements. The result is better use of available maintenance dollars to achieve long-term readiness and achieve surface ship ESL.

The fiscal year 2012 budget (including OCO) resources the ship maintenance account to 94 percent. This funding level represents the best balance between current force readiness and building the future force within available top line funding. Although we will defer $367 million of maintenance, primarily in the Surface Force, the work accomplished by SURFMEPP enables us to mitigate risk by scheduling and completing the most critical maintenance in fiscal year 2012. We are also able to better understand the impacts and accurately track the deferred maintenance that must be accomplished in the future.

The Navy is committed to the right level of ship maintenance at the most efficient cost but remains dependent upon the receipt of OCO or similar supplemental appropriations to fund ship maintenance requirements. 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 the 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. Budget years with multiple ship-docking availabilities increase required funding.

Surface ship availabilities are conducted almost exclusively in the private sector. Nuclear 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 that maintenance organizations need a stable and level workload to maximize efficient execution. We level the workload to the maximum extent practicable within operational constraints.

Aviation Maintenance

The Aviation Depot Maintenance account ensures operational aviation units have sufficient Ready for Tasking (RFT) aircraft to accomplish assigned missions. The fiscal year 2012 budget request (including OCO) resources the Aviation Depot Maintenance account to 95 percent of requirement, and funds the repair and overhaul of 742 airframes and 2,577 engines. The shortfall results in a projected backlog of 23 airframes and 162 engines, which is moderate, but acceptable risk and below our 1 year red-line backlog of 100 airframes and 340 engines." The Naval Aviation Enterprise (NAE) AIRSpeed strategy continues to deliver cost-wise readiness by focusing efforts to reduce the cost of end-to-end resourcing, increase productivity, and improve the operational availability of aircraft. This strategy provides a robust capability to use efficiencies to manage the highest priority requirements.

Navy Expeditionary Forces

Expeditionary Navy forces support global missions that expand and enhance CCDR capabilities by deploying security, construction, logistics and training units. NECC's cost effective capabilities are expected to remain in demand supporting OND/OEF missions and CENTCOM's long-term, steady state security posture. The fiscal year 2012 budget supports major expeditionary capabilities in the following areas:

- Explosive Ordnance Disposal (EOD): Provide Brigade/Battalion-level HQ elements or Platoons and Mobile Support Teams executing Joint EOD operations in multiple theaters, as well as supporting Carrier Strike Group and Amphibious Ready Group deployments around the world.
- Maritime Expeditionary Security Forces (MESF): Provide force protection for high value assets, including maritime infrastructure protection in the CENTCOM and Pacific Command (PACOM) AORs. MESF forces also provide landward and seaward security for Global Partnership Station operations, and Embarked Security Teams for Operation Vigilant Mariner.

• Naval Construction Force: The Seabees provide construction services for Theater Security Cooperation efforts, disaster response, and build partner capacity. Alongside the USMC, they led surge forces into Afghanistan, and currently provide a Regimental Headquarters controlling a Joint force of more than 3,000 personnel executing hundreds of projects as well as four Naval Mobile Construction battalions in support of OEF. In addition, the Seabees continue direct support to other CCDRs, such as PACOM's Combined/Joint Special Operations Task Force-Philippines. They provided infrastructure support to relief efforts in Haiti, including reconstruction of port facilities.

• Additional expeditionary forces supported by the fiscal year 2012 budget include the Naval Expeditionary Logistics Support Group, Riverine Forces, Mobile Diving and Salvage Units, the Maritime Civil Affairs Security and Training Command, and the Navy Expeditionary Intelligence Command. The multiple capabilities of each of these organizations are highly valued by the CCDRs.

Environment

Our Navy continues to engage in comprehensive and robust environmental planning for at-sea training and operating areas to ensure environmental stewardship while carrying out the national defense mission. To date, we have completed documentation for 11 at-sea testing, training, and combat certification areas, and anticipate completing documentation for an additional four areas over the next year. We are always preparing for the next round of at-sea environmental planning.

The Navy continues to maintain the world's foremost marine mammal research program to ensure science-based protective measures for Navy activities at sea. These measures allow the Navy to be both a good steward of our Nation's marine environment and a mission-ready global force for good.

Energy

Because energy is as vital to our mission as the systems it fuels, we are actively pursuing the Secretary of the Navy's energy goals to increase combat capability and reduce reliance on fossil fuel from foreign sources through greater conservation, efficiency and the use of alternative energy sources. We continue to make great progress toward these energy goals, laying the foundation for reduced energy consumption and increased use of alternatives.

Fuel consumption has a powerful impact on our forces and force structure, both in terms of the resources required to transport fuel and the sailors whose duty it is to protect this logistics tail. On the operational side, we are currently testing and evaluating technologies that will make our existing ships and aircraft more efficient, enhancing combat capability and reducing overall fuel consumption. The fiscal year 2012 budget includes funding to begin implementing many of these technologies in the Fleet, including efficient lighting, anti-fouling hull and propeller coatings, improved engineering plant controls, and route optimization software. We also continue research and development of technologies that will be implemented in future years, such as a hybrid-electric drive for the DDG–51 class and engine efficiency modifications for the F–35.

In addition, we have taken major steps forward with our alternative fuel test and certification program. In April 2010, we flew an F/A–18 "Green" Hornet beyond the sound barrier on a 50/50 blend of petroleum fuel and biofuel produced from the camelina plant. In October 2010, we conducted a full-power demonstration of the Riverine Command Boat-Experimental using a biofuel blend produced from algae. The following month, we flew an MH–60S Seahawk helicopter on the camelina-based jet fuel blend. Navy also recently completed the first test of a maritime gas turbine engine, using a 50/50 biofuel blend. Completion of the test and certification process will ultimately allow us to demonstrate a "Green Strike Group" in late fiscal year 2012.

We are focusing our energy investments ashore to increase the energy security of critical assets, improve the energy efficiency of our infrastructure, and develop promising technologies. Specifically, we will increase the energy security of our Pacific Missile Range Facility in Hawaii and replace antiquated steam plants at three bases with modern and efficient energy systems. We are transforming our energy culture and behavior using enabling systems, with our new advanced metering infrastructure and secure system technologies to provide greater energy consumption transparency, efficiency opportunities, and control. Our strategy is to focus first on efficiency to enable compliance with legal mandates, while increasing our energy security and making progress toward alternative energy goals.

Finally, along with developing and implementing new technologies, we will drive energy awareness education in afloat and ashore training to capitalize on the gains we have made and magnify the effect of our future efforts. Changing our culture to value energy as a strategic resource depends on every sailor's commitment to the accomplishment of the Secretary's goals.

Total Ownership Cost Optimization

Building and sustaining a capable, yet affordable Fleet is one of the CNO's highest priorities. Optimizing the Fleet's total cost of ownership is a critical component of meeting that goal. The Navy defines total ownership cost as the total life cycle cost of a system from concept, research and development, production, and sustainment through disposal, including the total supporting infrastructure that plans, manages and executes that program over its life cycle.

In execution, we seek to maximize performance and retain flexibility while controlling total ownership cost. However, we must also balance required performance with sufficient flexibility to adequately respond to changes in our battle space. We employ a broad spectrum of contracting tools and procedures to craft, award, and administer contractual vehicles to incentivize total ownership cost efficiencies. The following contracting tools are being used to control total ownership cost in the sustainment arena:

- Performance based logistics contracts for sustainment logistics aligns contractor incentives with Navy performance objectives. This optimizes system readiness while keeping cost in check.
- Strategic sourcing and commonality approaches lead to "buying smarter" (and more affordably) through consolidated purchasing, reductions in technical specification variability, and tailored performance work statements.

One common characteristic of these contracting strategies is the long-term nature of their required funding. The Navy is focused on developing sustainment strategies early in order to identify the proper contract type, clearly define performance requirements, and develop a clear understanding between government and industry regarding required performance standards. These efforts ensure equitable risk and performance measures resulting in the right performance for the right price.

CONCLUSION

Together with the U.S. Marine Corps and the broader joint force, our long-term allies, and newer partners, the Navy remains ready to defend our Nation, and the common interests of the community of nations, from those countries or other actors who would seek to harm us. In the fiscal year 2012 budget, we have balanced our resources to sustain Navy readiness today within acceptable risk in each of the core capabilities defined in our Maritime Strategy, while building the capacity to sustain the Navy of the future. We appreciate the committee's consideration of our budget request and thank you again for your support of the Navy's mission and particularly for your commitment to the welfare of our sailors, their families, and our Navy civilians.

Senator MCCASKILL. Thank you very much.

I want to welcome the other members who are here today. I especially want to acknowledge that Senator Inhofe is here. As the former chair of this subcommittee, I appreciate your valuable contributions, because of the expertise that you've developed over the years in this area.

Obviously, I'm glad to see both Senator Udall and Senator Shaheen.

Let me start.

First on the efficiencies program. I think it's great what Secretary Gates has done in terms of identifying $78 billion in the Pentagon and $100 billion across the branches. I am a little worried about some of the ways the money is going back in. Let me drill down on the Air Force. You're planning to spend more than half of your savings, from the efficiency effort, on operation and maintenance (O&M). You are a little bit different than the other branches in that regard—$2.2 billion in fiscal year 2012 and $17.4 billion over the FYDP, all on O&M. Clearly, this was not in your

budget, as you originally drew it up. I'm particularly curious about the $165 million on something called "administration," and $104 million for something called "other servicewide activities." Could you explain what that $269 million actually represents, in more specific detail than just those categories?

General RENO. Chairman McCaskill, I don't have the detail on that line item, but I will be happy to provide it for the record.

[The information referred to follows:]

A portion of the Air Force efficiencies was aligned to support increased costs of day-to-day operations such as pay and allowances, fuel and weapon system requirements. The $269 million for administration and service wide activities covers civilian pay pricing impacted by updated workyear costs. The Air Force supported these types of increased costs through savings generated by efficiencies.

General RENO. I would add though that in addition to the O&M requirements that we have, we have found significant savings and efficiencies in our weapon system support areas; in fiscal year 2012, $605 million, where we have streamlined the tasks and processes, we have reviewed requirements, and have made depot improvements. These would provide efficiencies that we can then put back into the Air Force to support operations.

Senator MCCASKILL. I think the efficiencies effort is great. It's just the putting-back-in part that I'm a little worried about. If this is, in fact, O&M money that was not in your budget when you put it together last summer, and it's gone back in as O&M money, I want to make sure that the money that's coming back in from the efficiencies is actually going to a priority that can be clearly stated and not just into some grab bag category, like administration or other servicewide activities.

The goal here is to spend less money. Obviously, the first goal is to have a military that is the best in the world, and ready and capable of doing whatever we've asked them to do, which, by the way, they have done, and you have done, in a spectacular fashion. But, we also want to save money. So, if this money is going back in, in a way that I don't think reflects what we're trying to get accomplished here, I think we need to identify it as quickly as possible, and save that money.

Let me go to COR questions. GAO has reported that the units continue to deploy to Afghanistan without designating CORs, without designating them ahead of time, that the COR function is still often an additional duty for personnel with other responsibilities, and CORs often lack technical knowledge and training needed to oversee contracts.

Now, it's frustrating to me, because, as a brand-spanking-new Senator, I went to Iraq—right out of the auditor's office—and looked at the Logistics Civil Augmentation Program (LOGCAP) and looked at what was going on in Iraq. It was clear to me that the COR was just somebody who was just handed a clipboard. It was a low man on the totem pole. They were not performing oversight functions. They were filling a niche on a sheet, but they weren't getting trained. They didn't understand their oversight responsibilities. They weren't empowered to even do oversight within the units. So, it's really concerning to me that now, some years later, after we know the kind of money that walked out the door on contracting in Iraq—and while we still are struggling with problems

with contracting dollars walking out the door and not being accountable for them, that we still are not designating these CORs, and not training them and not lifting up that particular expertise within the culture of the military. I'd like any of you to respond to that. What is your role in establishing qualifications for CORs and ensuring they're appropriately trained? If you could each briefly address that.

General STEVENSON. Yes, ma'am. We think we're improving. I don't know the date of the GAO report you're referring to, but we've taken a number of steps to improve how we're performing there.

First of all, we have a number of places you can get the COR training from. We teach it internal to the Army. It's taught at the Defense Acquisition University. It's taught online. It is our requirement that we've issued to all the forces deploying, that they figure out how many CORs they'll require before they deploy, get them trained before they deploy, so that the COR can report to the contracting officer, satisfy the contracting officer that they do know—they have been trained, and obtain their certification there from the contracting officer.

We have almost 1,000 trained CORs downrange now. We've taken—in a number of cases, we—there are certain specialties in the Army that tend to always end up being a contracting officer. I'll give you a couple of examples.

Dining facility sergeants, the sergeants that run our dining facilities here in the States, often are the ones who are overseeing the contract for running dining facilities. So, we just have made that a part of their course. As they become a dining facility sergeant, they get a week's worth of COR training.

We do the same thing with maintenance warrant officers, with supply warrant officers, and others, in an attempt to populate the Army with people who already have this training and don't have to go through some sort of special rigmarole to get downrange.

I won't sit here and tell you we're perfect and that we're meeting our requirements exactly, but we're focused on it, and think we're improving.

Senator MCCASKILL. Anyone else want to briefly address that?

General PANTER. Yes, ma'am. Chairman McCaskill, our problem is, of course, smaller in scale and in scope, because of our size. I do know that those contracting officers that we have embedded on those Marine Corps staffs are closely aligned with the commanding officers, and they get plenty of oversight from the commander; that is not lacking, there, at all.

Our staff noncommissioned officers (NCOs) are, I think, appropriately trained. But, just to show you size and scope of our effort relating to contractors in theater, there's 477 contractors that are actually deployed in direct support of the second MEF forces. Now, that doesn't count third-nation folks that are used to pick up trash and things like that. But I would make the point that the primary contracting officer is closely aligned with that commander, and therefore has to report. He gets oversight, on a daily basis, from either the commanding officer or XO. That's all I would say about it.

Thank you.

General RENO. Chairman McCaskill, the contracting business is out of my lane. But, I will tell you that the contracting officers and NCOs that we send downrange are fully trained and experienced. They are properly warranted, and they receive the oversight, in connection to the on-scene, on-ground commander, that they should receive.

I would tell you, of six officer career fields that we have that are stressed, this is one of them. That's bad news, on the one hand. On the other hand, it shows you the level of experience that they have, as they go back again and again.

Senator MCCASKILL. Thank you. Thank you.

I will now turn questioning over to Senator Ayotte.

Senator AYOTTE. Thank you, Chairman McCaskill.

I have an overall question for all of the witnesses. This really cuts to the heart of our responsibility, so if you need to take it for the record, I understand. Has any unit deployed overseas at a contingency location, particularly in Afghanistan, provided an urgent needs request for supplies or for an equipment item, in the past year, that has not been satisfied in a timely manner?

General STEVENSON. As you would imagine, we get quite a few operational needs statements from units. I think we do a pretty good job of satisfying them. But, they continue to come as new requirements develop.

We focus on this every week. There's a meeting with the folks in Afghanistan, as well as Iraq, where they tell us what their top 10, top 20 priorities are. We work to satisfy them. But, I'm certain that we've not satisfied every wish list of every unit. I can assure you, though, that critical things they need for warfighting are being met and they're being filled.

Senator AYOTTE. That is one of the things that I want to make sure that we have a full understanding on in this committee. I have a whole series of follow-ups on it. But really, the bottom line is wanting to make sure that we're fulfilling all of our responsibilities when there is a request made for equipment that is needed for our troops. We have to have a strong understanding of how that's happening in theater, whether you're meeting their needs, and also, if there are concerns from that end.

So, what I'd like to do is just give you all that question, in six parts. I would hope that you could all get back to this committee in detail on those so that we can be sure, if there are any areas we need to address right away, that we're fulfilling that function to make sure that we're helping you get our troops what they need. Given what we're asking from them at the moment, it is important.

[The information supplied by the witnesses appears as an answer to Senator Ayotte's question for the record (see question 58).]

General RENO. Ranking Member Ayotte, could I just give you one short example that gets at what I think you're talking about?

Senator AYOTTE. Yes.

General RENO. It was last year when we saw the requirement came from Afghanistan, in particular—to field a uniform that would give better camouflage protection outside the wire, the terrain in Afghanistan being different than it is in Iraq and other places. Working with the Army and the Army Program Executive Officer (PEO) office, as lead, we've co-fielded the OEF camouflage-

pattern uniform, and the Army has been putting their soldiers in it. We have been putting our airmen in it who are outside the wire. This gives increased camouflage protection. It is a lighter-weight uniform. It gives the airmen and the soldiers what they need. But, this is an example of the way that we rapidly respond to requirements that come from the theater.

Senator AYOTTE. Very good. I appreciate that. I will submit my question for the record, just because it's fairly detailed. I want to make sure that I have a full picture of what's happening in theater. I know that that is a top priority for all of you in making sure that our troops get what they need.

I wanted to ask you about logistics support of operations in Afghanistan, so this is probably a appropriate question for General Stevenson or General Panter. Without the support of the logistics community, obviously, our men and women fighting on the front lines wouldn't be able to do what they're doing and have the successes that they have had. For years, the southern supply route into Afghanistan, through Pakistan, has been plagued by instability and repeated attacks. In fact, I just got a headline today of another one, unfortunately, on NATO troops. Also, pilferage, stealing supply of convoys, and I know that we've been able to add two additional supply routes through central Asia and the Baltics.

Just for perspective, what percentage of our U.S. supplies are currently being trucked through Pakistan? Particularly, I think this is important to bring up, in light of the discussions we're having about our relationship with Pakistan at this time.

General STEVENSON. Yes, ma'am. Currently, it's about 40 percent of the total supplies shipped into Afghanistan, on the surface, that don't fly in, come through Pakistan; the other 60 percent, from the north. We're taking a number of steps to deal with potential problems there, and potential disruption of that supply line. As a matter of fact, ongoing today, there's a sitdown strike going on outside the port that our trucks are not able to get through. It's going to probably last a couple of days. Not uncommon; we've dealt with this before. But as you point out, this is problematic for us.

The goal is to get to 75 percent from the north. We're not there yet. That was a goal established by the U.S. Transportation Command commander to his staff, and, working with us, we're trying to get there.

We're sending nothing that is what we consider sensitive on the ground. No ammunition flows on the ground. No high-tech military gear—we even flew the mine resistant ambush protected all-terrain vehicles into theater, rather than send them and potentially subject them to pilferage.

We have created what we call "theater-provided equipment." It's a pool of equipment that just stays in Afghanistan so that as a unit rotates out each year, it doesn't have to drag out its equipment, and the new unit has to bring in its own. We just keep the equipment there. Now, as you would imagine, that creates a second problem that we have to deal with, which is, after about 2 or 3 years, that we have to do something significant to refurbish that equipment. We're doing that. But, the idea is, keep things off that ground lock.

The last point I'll mention, that we're now experimenting with, is the notion of sending things, surface, to a friendly country. This is an open hearing, so I'd rather not get into the details—but, a friendly country in the Mideast, and then just flying over from there using C–17s. It takes advantage of the inexpensiveness of surface movement, but avoids that entire trip into Pakistan. We've just done that with two Brigade Combat Teams that have flown in and flowed out. We're happy with it. It's a bit more expensive, but, in the long run, we think—and we're doing a business case analysis—we think that it will be cheaper in the longrun, because we avoid all the pilferage and problems with that.

Senator AYOTTE. Just to be clear, as a follow-up, if all of those supply routes were to suddenly be shut down—Pakistan, Afghanistan—what type of long-term impact would that have on our mission?

General STEVENSON. I'll start out, and then ask the others to chime in.

Initially, we'd probably last several weeks before we had any significant impact. We, just this year, upped the fuel stockage that we have on the ground, to 45 days of supply. So, we have 45 days of fuel on the ground to withstand these kinds of disruptions. We've increased the amount of materiel we fly. We'd increase our airdrop, which is already pretty high. We'd try to flow more in from the north than we are today. It is longer and more expensive, so there's some downside to using that route.

I honestly believe we'd overcome it. I don't think it would stop our operations in Afghanistan, but it would certainly be a challenge.

Senator AYOTTE. My time is expired.

I appreciate your answer on that. I'll look forward to asking you some additional questions in the next round. Thank you.

Senator MCCASKILL. Senator Shaheen.

Senator SHAHEEN. Thank you, Chairman McCaskill.

General Reno, I just wanted to give you a postscript to your anecdote about the camouflage uniforms, because I was in a company in New Hampshire recently—Velcro USA. One of the things they described was that they are actually doing camouflage Velcro for those uniforms, because of the testing that shows that it makes a difference, if the Velcro is not also camouflaged, in terms of being able to be picked out when the soldiers are on the ground. So, thank you for that quick turnaround.

General RENO. Thank you, Senator. It's the great support of the Army and PEO Soldier that made that possible.

Senator SHAHEEN. Thank you.

Admiral Burke, like Senator Ayotte, who represents the Portsmouth Naval Shipyard—I wanted to go back to your comments about making maintenance a bigger priority, and taking care of what we have. A GAO report came out in November cited several troubling examples of underfunding for maintenance at our shipyards. They gave several examples at the Portsmouth Naval Shipyard: plywood boards replacing broken windows, mold that had been painted over because leaks hadn't been fixed, those sorts of things. I wonder if you could talk about the effort to address the issues that have been raised in that GAO report. Specifically, as I

understand, your written testimony states that, "Continued high operational demand has led the Navy to take deliberate risk in shore readiness programs to resource warfighting needs." Can you elaborate on what some of those risks are? Is that what we're talking about—the kinds of underfunding for maintenance at our shipyards that have been affected? What do we need to do to address those challenges?

Admiral BURKE. Yes, ma'am. Specifically with shipyards, the requirement is that we put 6 percent funding back into shipyards for maintenance and upgrades, et cetera, based on a 3-year running average of the volume of work that they've done. We look at it as a one-shipyard concept. So, we look at that across the board, if you will.

In the case of that requirement, we've met that requirement every year since 2007. If you were to break it—and once again, I said we do this—we look at it as a one-shipyard concept—but, if you break it down, and you look at it by individual yards, in the case of Portsmouth, we've met it—we've met that 6-percent number every year since 2008.

In the fiscal year 2012 budget, there's 22 percent going to Portsmouth. So, we're well above that 6 percent requirement. We average nearly 10 percent across all shipyards in 2012. We meet that with military construction (MILCON) restoration and modernization funding, capital equipment expenditures, and minor property.

So, pretty significant effort, in the last few years, to address that backlog, and specifically—and I'm—it's just—we're not cooking the books, here, on Portsmouth Shipyard. It just works out that, this year, a number of projects made it to the top of the list on Portsmouth. I think you're going to be pretty pleased with what you see from your perspective.

Senator SHAHEEN. Yes, well, so noted. We did notice that there's a bump in 2012. We appreciate that and think that it's critical, because of the backlog in maintenance that needs to be done there.

Admiral BURKE. But, if you'd allow me, I'll address your larger point, I think, of maintenance.

Senator SHAHEEN. Please.

Admiral BURKE. As it was pointed out earlier by Chairman McCaskill, I think that it is a pay-me-now or pay-me-later. It's probably a pay-me-now or pay-me-more-later situation. So, it's just a case where we can afford to not change our oil today, because we won't have the engine seize up tomorrow. It will seize up at some point if we don't do the maintenance because we're trying to push more money into the operating forces. But, we must get back to addressing that at some point. So, I think that's the challenge we have.

Certainly, in the shore is where we've taken most of the risk. We are not putting as much money in sustainment as we know we should be putting in, and I hope that that is a short-term issue that we will address in the longer term.

Senator SHAHEEN. Good. I would agree. I hope that's the case, as well.

Several of you mentioned energy use as part of your remarks, and I wonder if you could speak to the kinds of efficiencies that you're looking at, in terms of energy use, and what coordination is

going on between branches as you're looking at that energy use. General Stevenson, maybe you want to start off.

General STEVENSON. Yes, ma'am. In terms of the last part of your question, the coordination that's going on, we're very much watching what the Air Force is doing, with regard to aircraft energy, fuel, because we intend to use that same technology that comes from that work, in our helicopter fleet.

We're doing a number of things across the board, both tactically and operationally—like in Afghanistan and Iraq—as well as back home, here in the States. We have an Army Energy Council that's personally led by the Secretary of the Army. It's important enough that he personally chairs it. That happens quarterly. I sit in on those with him. We have to report on various tasks that he's assigned to us. We have a number of net-zero installations that we are just now starting, with a goal that, by 2020, they'll be producing as much energy as they consume. By 2030, we hope to have that up to another couple of dozen energy installations. We have 126 renewable energy projects ongoing.

Then, lastly, I'll just mention, because I know you're pressed for time. We're trying to reduce demand for energy. That is, as we buy new equipment—we have a procurement that's ongoing on the ground combat vehicle—we hope that one day we'll replace the HMMWV with a joint light tactical vehicle. Those new pieces of equipment will have significantly more stringent miles-per-gallon requirements than do their predecessors.

Senator SHAHEEN. Thank you.

My time is expired, Chairman McCaskill.

Senator MCCASKILL. Thank you.

Senator Inhofe.

Senator INHOFE. Thank you, Chairman McCaskill. You pointed out, initially, that when the Republicans were a majority, I was the chairman of this subcommittee, and I've always considered this to be perhaps the most significant one, because the readiness is what it's all about.

I see problems that I kind of put back in the perspective of the 1990s, when I did chair this. I see a lot of the problems that are much more serious than they were at that time.

Now, I have to say this about these meetings. One of the reasons that I spend so much time actually in Iraq and Afghanistan and places like that is because—I don't mean this personally to you guys, but by the time we get some kind of testimony here, with all the media out there—you get kind of rosy in your interpretation as to what we have.

Here's the problem with that: There are a lot of people that I serve with, in the U.S. Senate, who don't hold defending America as high a priority as I do. For those who are wanting to cut back on the military spending, all they do is point to testimony here—"Well, they don't have any problems at all. They said everything's fine now." I remember back when I was in the Army, we had 9 percent of the gross domestic product (GDP) spent on defending America, General Stevenson. Up until the last budget, I believe, before this current administration, it was 4.7 percent of the GDP.

I remember when Rumsfeld came in for his first confirmation hearing, I told him that in my last year on the House Armed Serv-

ices Committee, we had someone testify, at that time, that, in 10 years, we'd no longer need ground troops. Are you listening, General Panter? That's what they said. It was back in 1993, 1994. So, I said to Rumsfeld, "You're going to have to make determinations as to what you're going to do today to be where we want to be 10 years from now. You're going to be surrounded by a lot of real smart generals, but they're going to be wrong, because there's no way in the world you can say what our needs are going to be."

Now, the question is this. It's not a question, really, but an observation. The American people assume our kids going into battle have the best of everything; and they don't. In order to get there, what would your recommendation be? Rumsfeld responded. He said, "Well, for the last 100 years, our average percentage of GDP to defend America—average for 100 years—5.7 percent." Now, it's down to 3.5 percent, with the goal of getting down to 3 percent. Now, I see that as a problem. This is a readiness hearing. When I think about the age of some of the stuff that we're dealing with right now—the Abrams, the Bradley fighting vehicles, the Paladin—I'm very thankful that the Paladin Integrated Management program is there, and we're now going to advance that. But really, the Paladin technology, that was World War II. We went through these things like we were supposed to have the upgraded capabilities, and those programs that we get a big investment going in it, and then we slow it down. So, we're dealing with a lot of old stuff. It has to take its toll.

Let me throw in one other thing, too, and that's end strength. Right now, we're talking about cutting back—what? 20—some 20,000 marines and 49,000 soldiers. We've been running a dwell-to-BOG ratio of 2 to 1—actually, 3 to 1, and we're not even at 2 to 1 yet. We are in the Army, but not in the Marines.

So, combine all those things. It has to, to me, translate into an increase in risk. You mentioned maintenance. Deferred maintenance is the first thing that goes—and you all know that—when you're strapped. When we go over there and say, "We need more body armor and these things," we come back and we get that. Then what suffers? It's maintenance, deferred maintenance, and you said it very well, Admiral Burke, you said, "You pay now or you pay a lot more later."

So, in light of that, do any of you have any comments to make, in terms of how this affects risk, in terms of readiness?

General PANTER. Sir, if I may start off with——

Senator INHOFE. Yes. Are the marines still using the retreads?

General PANTER. Not so much anymore, sir. Over the last few years, we've gotten better.

We do have some challenges, and I will not paint a rosy picture. We have identified the fact that, when the time comes, we'll need the support of Congress to reset our equipment sets. That's a requirement to the tune of about $5 billion, as Chairman McCaskill alluded to earlier.

We have a reconstitution piece, as well. We have learned that our legacy TEs, in both Iraq and Afghanistan, are not satisfactory. For example, a infantry company today has the same command-and-control capability that a infantry battalion had in the early 1990s. Our radio assets that are in our units, the requirements for

those have increased, as well as ground tactical equipment. We need to—after this thing is over—after Afghanistan, we need to address those issues. That's part of the $5 billion in reconstitution that I mentioned earlier.

Now, trying to keep our heads above water, because, Senator, about 50 percent of the equipment that we currently have in Afghanistan came right out of Iraq, when we drew down in Iraq and we shipped——

Senator INHOFE. Exactly. Yes.

General PANTER.—that equipment over, that added to the stress of that equipment.

Senator INHOFE. To the personnel.

General PANTER. To the personnel, most definitely.

What we could, we did bring back to our depots to reset that OIF equipment. That continues, and that should be completed later this year.

We do have continuing deliveries of equipment that were part of previous-year contracts. Those deliveries continue on, which gives us some degree of relief.

We're attempting to repair forward and refresh that equipment as best as we can. In fact, I'm asking Army Materiel Command to help us out in that endeavor, and to mature their capability within Afghanistan so we can hit the refresh button on that equipment.

For the Marine Corps, we have a equipment rotation plan that we——

Senator INHOFE. Yes. I'm really trying to get to how all this affects risk. We know what risk is.

General PANTER. Sure.

Senator INHOFE. You know what the risk is. In terms of end strength, in terms of the age of the equipment, in terms of everything we've been talking about here, which is the percentage of the GDP that is going to—do you have any comment to make about how that affects readiness?

General PANTER. Yes, sir.

Senator INHOFE. Is there a price? There's a price we have to pay for all that stuff.

General PANTER. Exactly. If we don't get help from Congress to reset our equipment when we pull out of Afghanistan, we are at risk to respond to contingencies.

Senator INHOFE. That's good. That's good.

Any very brief comment about that, General Stevenson?

General STEVENSON. Sir, I agree. As you noted in my earlier statement, that I think that we are in better shape today than we've been in a long time. I honestly believe that. It's not all rosy. We have issues. But, we've been very well funded. We've gotten—our reset—every dollar we've asked for, in reset, we've gotten.

Senator INHOFE. Okay.

General STEVENSON. It's reset that's eliminating a lot of that risk.

Senator INHOFE. Chairman McCaskill, if I might, I'd like to ask one last question to General Reno.

Yes, I don't agree with that, but I do feel that, when you're looking at the deferred maintenance—there's another area, also, that goes, and that is in spare parts. I have to say this, Chairman

McCaskill, about General Reno. He possesses a character that is very rare in his side of the table and our side of the table, both. It's called humility. He was the commander there at Tinker Air Force Base, and, I think, probably one of the best—the best commander we've ever had there.

General RENO. Thank you, Senator.

Senator INHOFE. But, let me just say this about General Reno, because I think it's very important. When you are backed up on spare parts—and we're talking about the KC–135s, all the stuff that's going through there—you—I understand up to 4,000 spare parts are always identified as being critical and on backorder. Then I have a statement, that's too long for me to read right now, but it comes from Tinker Air Force Base and addresses your choices. When you run out of a part and you have it on jacks, you have a choice of either dropping it down, taking 5 or 6 days out of the work week and—or cannibalizing it and hoping that it gets there in time. Could you just make one comment about the critical nature of our spare parts inventory? I think whatever you say about that particular operation is true in the rest of the operations, also.

General RENO. Thank you, Senator. The choices available when a part is not available are not good. None of them are good. It's either inefficient or delayed or waiting. None of the choices are good if the part is not available. The parts have to be—you have to have the requirement right. That's a joint problem—a joint solution with the Defense Logistics Agency (DLA) and the Air Force. We have to get the procurement right. That is, shortening the timeline on the acquisition lead time and the production lead time. We have to get the delivery right so that there's perfect order fulfillment and so that the customer wait time is absolutely minimized. But, whether at an ALC, a depot, or in the field, if the part's not available, there are no good choices.

Senator INHOFE. Chairman McCaskill, the other question I'm going to ask him will be for the record, but it will address the somewhat arbitrary 50/50. I'll ask a specific question about that on your ALC, as well as the rest of them.

Thank you, Chairman McCaskill.

Senator MCCASKILL. Senator Chambliss.

Senator CHAMBLISS. Thanks, Chairman McCaskill.

Following up on that, General Reno, what are we going to do about this parts issue? I had a visit with General McMahon, at Robins, just last week, and obviously this is one of the issues we continue to work. But, tell me what your thoughts are, where we're going, here. How are we going to improve this availability issue?

General RENO. Thank you, Senator. General McMahon is doing a terrific job.

Senator CHAMBLISS. He is.

General RENO. I would start by telling you that our Chief of Staff, General Schwartz, has had an eyeball-to-eyeball conversation with the director of DLA, so there is no ambiguity in where he stands and what we need as an Air Force.

Second, the Air Force Materiel Command commander has met twice in the last year with the DLA director to not only lay out what our needs and requirements are, but to track the progress. I meet with the DLA director bimonthly, and members of his staff

and mine get together even more often than that. It's getting the right requirement. It's getting the right procurement. It's getting the right delivery and continuing in the proper engagement, and holding them accountable.

Senator, I would tell you, the DLA has a long record, almost 50 years, of excellence in wholesale supply. As a result of the the Base Realignment and Closure (BRAC) 2005, they are now in the retail supply business. It's different. They are adjusting to it, and we are holding them accountable.

It's not all bleak. The C–5, for example, which you are very familiar with, enjoys the best support it's had in years. It has the highest mission-capable rate that it's had in 7 years. It has the highest aircraft availability rate it's had in 6 years. It has the lowest—not-commissioned—not-capable-for-supply—not-mission-capable-for-supply parts—the lowest rate in 20 years. So, there are some good things that are happening, but as DLA gets into the retail supply, we absolutely have to have what we have signed them up to do.

Senator CHAMBLISS. The delays in delivery are concerning to all of us. It's happening at all three of our ALCs, and it looks like this is the big issue. Of course, we made the change, a couple of years ago, to try to improve efficiency and save money. All that's well and good. But, if it's not going to work, then we have to figure out what direction we need to go in. But, I appreciate your commitment to it, and General Schwartz's commitment, to making sure we get this issue solved.

General Panter, you note, in your written statement, that the Marine Corps equipment, both at home and abroad, has been heavily taxed in a nearly decade of constant combat operations. You also note that the requirement to fully resource deployed forces has resulted in a redistribution of assets from nondeployed forces and strategic programs to meet these requirements. None of this is surprising, obviously, given the OPTEMPO of the last decade. The Marines have done a tremendous job, both with your combat units and your reset effort. Your contributions will be critical to our success. However, the situation you lay out, with respect to availability of equipment and supply rating of units at home, is somewhat troubling.

Specifically regarding reset, as you just alluded to a minute ago, you note that reset requirements increased as a direct result of the shift of equipment from Iraq to support the surge forces in Afghanistan. This is also understandable.

Regarding how you will address your reset shortfall, you mentioned several actions, including, and I quote, "aggressively repairing equipment at our depots and distributing to fill shortfalls for established priorities." What do you mean by that last phrase of "distributing to fill shortfalls"? If that means outsourcing work, where's it going to go?

General PANTER. Sir, relating to fulfilling established shortfalls, by direction of our Commandant, we have a priority list that we fill. It's a listing of units that are racked and stacked according to what the priority or the needs are.

For example, anything forward in Afghanistan—of course, they're top-tier folks, they get what they need. Their readiness ratings hover at 92, 93 percent, as you know.

Next thing that would come up in the priority stacking or rating would be units that are preparing to deploy the theater. We attempt to ensure that those units, as mentioned earlier, don't see this equipment for the first time as they train to go forward. So, those readiness—readiness rating of the units that are on deck, ready to deploy, is fairly high.

The outsourcing piece that you mention, it is—we're not there, on outsourcing. Right now, we're not leveraging outsourcing to fulfill the needs that we have.

Is that the basis of your question, Senator, or did I miss the mark here?

Senator CHAMBLISS. Let me just continue on a little bit. So, is it my understanding you're not looking at outsourcing now.

General PANTER. Yes, sir. The capacity at our depots right now—we can meet our requirement, as we know it. Now, when the day comes—and I'll use the analogy "the pig and snake"—when we come out of Afghanistan, that is a consideration; and to leverage other Services' depots, as well. It may well be, if we have the resources to get this equipment reset as quickly as possible, we might have to consider outsourcing.

Senator CHAMBLISS. If I understand what you're saying, you're not at that point now. Based upon the priorities that you just alluded to, both the depots are doing the work that needs to be done right now. That appears to be the case for the immediate future.

General PANTER. Yes, sir, that's correct. Both depots are roughly on a shift, shift-and-a-half workload.

Senator CHAMBLISS. Yes, okay.

General Reno, I want to discuss one other issue with you. I mentioned the Occupational Safety and Health Administration (OSHA) issues to Mr. Yonkers, but, there again, it seems like OSHA may be holding our depots to arbitrary standards, and to standards that really have no relevancy. We have real issues with OSHA that General McMahon is working through, and looks like we're on track to get those resolved. But, if we're not careful, this is going to absolutely hamstring our ability to carry out our mission.

What's your perspective on OSHA's role? How can we ensure that the depots are not subjected to arbitrary regulations that do not affect the safety and health of the workforce?

General RENO. Senator, we absolutely care about the safety and welfare of our workforce. That is paramount. We do not push back on that at all. There were 36 findings that OSHA gave us under General McMahon's leadership. Thirty-three of those have already been responded to. Another will be responded to in June; the final two, in October. So, he has moved out smartly on those.

As far as the grasp or the extent of OSHA's involvement in what we do, compared to what they do with others, I would tell you that the Assistant Secretary of the Air Force, Mr. Yonkers, is personally engaged and involved in this. This is something that we are involved in and we are pursuing. But, we want to first make sure that our people are being taken care of. We don't push back on that at all, sir.

Senator CHAMBLISS. Yes. Obviously, that is a priority, and the Air Force has always done a good job with that. We've never had a significant issue with OSHA before. That's why it's puzzling to me as to why we're encountering these somewhat major issues right now. Frankly, they appear to be inhibitors to getting the job done, and not for the right reasons. It's not safety and health of the employees that is the issue with these OSHA issues. So, we look forward to continuing the dialogue with you and Mr. Yonkers, with respect to that.

General RENO. Thank you, Senator.

Senator MCCASKILL. Thank you, Senator Chambliss.

I talked about—in the opening statement, about this committee, last year, adding money on maintenance and reset. I can look at the Air Force as an example. You report that, for fiscal year 2012, your budget will only cover 84 percent of the needed aircraft repairs. Last year's provided only 83 percent of the needed aircraft repair money.

It appears to the committee that you are underfunding reset and maintenance, and I'm trying to figure out why. Is it because you can't absorb any more of the funding, in terms of what your capabilities are?

General STEVENSON. Ma'am, you're looking at me, so I'll——

Senator MCCASKILL. Any of you—whenever I ask one of these open-ended questions, everybody looks down like I'm about to pass the plate in church. [Laughter.]

General STEVENSON. I'll take the first shot. We're not underfunding reset and maintenance. We have the reset money we require, and we're thankful for it. You'll note our reset request this year in 2012 is lower than it's been in previous years. It's a function of not having our large mechanized forces deployed in Iraq. It's a function of leaving that equipment that's in Afghanistan there for longer than just a year's rotation.

When we finally bring it all out of Iraq, by the end of this year, and in Afghanistan, whenever—we're looking at about a 20 to 25 billion liability, in terms of reset. We're hopeful that you'll continue to provide the reset dollars that we need for it. Up to now, it's been great.

Senator MCCASKILL. Okay.

General STEVENSON. We've—and we don't have capacity issues.

Senator MCCASKILL. Marines?

General PANTER. Yes, ma'am, very similar to the United States Army. Now, we have had a challenge this—Chairman McCaskill, about moving the OCO into base; and we've gotten better at that. For example, in fiscal year 2010, it was right at $92 million, and in 2012, we have $207 million in the base. That's a constant challenge, though.

Relating to what General Stevenson said, though, we're doing okay now, but it's yet to come. That's our concern, when we do start to withdraw.

Senator MCCASKILL. Because your reset is 10 billion, right?

General PANTER. Pardon, ma'am?

Senator MCCASKILL. You've acknowledged $5 billion at the end of combat, an additional $5 billion to reconstitute the force.

General PANTER. That's correct. Now, in 2011, we asked for $3.1 billion; we got $2.9 billion. In 2012, we're asking for $2.5 billion plus the liability of $5 billion when we draw down.

Senator MCCASKILL. Okay.

General RENO. Chairman McCaskill, the reset is different for the Air Force than it is for the ground forces. Our recurring maintenance is done at our ALCs, and we bring all that aircraft back for that depot-level maintenance. With the OCO request for $2.9 billion, $2.2 billion of which is weapon system sustainment, we are funded at 80 percent. With the efficiencies that we've gained, in fiscal year 2012, of $605 million, it takes us above 84 percent. It's going to be closer to 85 percent, though that number is a moving target, as we get closer to fiscal year 2012. But, that level of funding, ma'am, will preserve the combatant commander support and will give us balanced legacy and new system support. We do not have capacity issues.

Senator MCCASKILL. Okay.

Vice Admiral Burke?

Admiral BURKE. Yes, ma'am. We also are a little different from the ground forces, because of our capital ships. In ship maintenance, we count on about $1 billion of supplemental funding. Some portion of ship maintenance can be attributed to today's ops, so we think that's—or, today's higher ops, so we think that's reasonable; the same sort of approach for aviation. So, we are reliant on supplemental funding to address some of those basic requirements.

Senator MCCASKILL. Okay.

General Stevenson, I would love to know what our LOGCAP costs are, compared to Iraq. Now, I know that it's hard to do apples to apples, because it's a completely different environment with a lot of different supply challenges that we have in Afghanistan that were not as—such a heavy lift—pardon the expression—in Iraq. But, as you look at per-soldier, in terms of logistical support, when you're looking at food and laundry and all of the things that we're using LOGCAP for, it was—I will use an unladylike term—but, it was the Wild West, in terms of LOGCAP, in Iraq, for many years, in terms of the money that was being spent and the lack of accountability. I'd be curious if anybody has done an analysis what our per-soldier cost is, in terms of logistics under LOGCAP IV, as compared to III, II, and I. Because I think that might tell us if, in fact, we are distributing lessons learned. I'm sure that you don't have that off the top of your head. If you do, I'll dance a jig. But, I'm happy to take that for the record. But I'd love to see that comparison.

General STEVENSON. Yes, ma'am, you're right, I'm going to have to take it for the record. It is less than in Iraq. But, I don't have the specifics. I'll provide that to you.

[The information referred to follows:]

The Logistics Civil Augmentation Program (LOGCAP) IV acquisition strategy was developed specifically to implement lessons learned under LOGCAP III. Most notably, with the award of the LOGCAP IV contracts, the program realized the establishment of a competitive base of LOGCAP contractors, an improved two-tiered award fee structure, and standardized performance work statements. Further refinements designed to increase responsiveness to warfighter requirements, preserve the benefits of competitively established pricing, promote effective cost control, and minimize administrative burden were incorporated into the LOGCAP IV Afghani-

stan task orders. These refinements are providing material improvements to the way we contract for LOGCAP services, and we continue to collect and evaluate lessons learned as we strive to achieve continuous improvement on the program.

As Senator McCaskill noted, comparing costs between LOGCAP III and LOGCAP IV presents significant challenges. To do so would require a comprehensive analysis. Major obstacles derive both from substantially differing and extraordinarily fluid operational conditions and requirements, and fundamental structural differences between the LOGCAP III and LOGCAP IV contracts.

A reliable baseline from which to compare the Iraq LOGCAP III and Afghanistan LOGCAP IV contracts is not readily available. We can state at a high level that the Iraq and Afghanistan task orders are being executed to different requirements, and under substantially different operating conditions. We would have to perform a rigorous analysis to identify the specific differences and the comparability of the two sets of costs. To answer your question, we would have to consider the possibility of comparing the LOGCAP III and LOGCAP IV task orders in Afghanistan. Our objective in this regard was to attempt to limit, the variability of the conditions under which the contracts were performed.

I can discuss some of the most easily identified obstacles we encountered in our efforts to compare costs under LOGCAP III and LOGCAP IV task orders in Afghanistan.

Troop Uplift: Rapid growth in Afghanistan LOGCAP IV operations started in late September 2008 to support troop uplift in the south area of responsibility. An increase in troop strength, accompanied by extreme fluidity in requirements led to rapid growth in Afghanistan LOGCAP IV operations. The troop uplift contributed to an increase in contractor commercial procurements due to shortfalls in the Federal Supply System (schedule and availability). Additional equipment leasing was required to make up for government furnished equipment from Iraq that did not materialize.

Unavailable MILAIR: LOGCAP III utilized 100 percent MILAIR for all intra-theater travel. National Command Element (NCE)/Combined Joint Task Force (CJTF) 101 required that LOGCAP IV contractors provide their own air assets within theater.

"Ring Route" Services: LOGCAP III had 33 Forward Operating Bases (FOBs) that were serviced by ring route where the LOGCAP III contractor did not have an enduring presence; support was provided by a team traveling from FOB to FOB. For LOGCAP IV, the NCE (CJTF 101) required that that FOBs be fully supported by site.

Performance Work Statement (PWS): Differences between the LOGCAP III and LOGCAP IV performance work statements exist both in structure and requirements. Also each Contractor's unique approach to performance of the individual PWS requirements and each contractor's internal accounting policies present inherent cost variations at the PWS level.

Levels of Service/Maintenance: The majority of facilities on LOGCAP III supported bases had minimal Operations and Maintenance (O&M) and a large percentage of facilities were not on routine maintenance by LOGCAP. Additionally, the LOGCAP IV contractor was required to provide O&M services to facilities that had received minor to no maintenance under LOGCAP III.

These obstacles are the most easily identified, but are by no means a comprehensive listing of the variations that would have to be taken into account when attempting to compare costs between the LOGCAP III and LOGCAP IV task orders in Afghanistan. A full business case analysis would be necessary to derive any reliable conclusions from a broad based comparison of LOGCAP cost per soldier. Given the continuing pace of change in LOGCAP requirements, it is highly unlikely that a stable baseline suitable for such a comparison will exist in the foreseeable future.

The most reliable estimate of the difference in costs between LOGCAP III and LOGCAP IV at this time is the 9 percent savings figure developed by the U.S. Army Central (ARCENT) J8 and validated by the Army Cost and Economic Analysis Center for use in the Iraq Base Life Support (BLS) business case analysis. In support of the business case analysis for Iraq BLS, the ARCENT J8 developed an estimated LOGCAP III to IV savings figure based on a comparison of incurred costs under LOGCAP III with a composite of the proposed prices for selected similar services under LOGCAP IV. The best data available at the time was the O&M costs from six LOGCAP III task order cost reports in Afghanistan. The cost reports from the six task orders were compared to the average Fluor and DynCorp band pricing from LOGCAP IV awards. The supported populations under LOGCAP III per task order were compared to similar band sizes under LOGCAP IV. The comparison did not include any construction or engineering activities as those costs were unknown at the time. The estimate did not include any contractor unique costs such as Over-

head, General and Administrative, or Fees. The 9 percent savings figure was validated by the Army Cost and Economic Analysis Center. In our opinion, this remains the most reliable estimate of the difference in costs between LOGCAP III and LOGCAP IV.

Notwithstanding the challenges associated with developing a reliable comparison of costs between LOGCAP III and LOGCAP IV, as we noted in our 10 December 2009 response to the inquiry regarding concerns about the LOGCAP IV task order strategy for Afghanistan, the following mechanisms were built into the Afghanistan task orders.

Service Price Matrix: Included in both LOGCAP Afghanistan task orders are service price matrices that can be independently executed over the life of the task orders. The competitive pricing established at time of award sets the budget from which the contractor manages its costs. The budgets also set the cost base from which fees are calculated. While under a cost reimbursement contract the contractor will be reimbursed for its allowable costs determined reasonable and allocable to the task order. The budgets are only adjusted in the event of a recognized change in accordance with a unique change management clause I will discuss later on.

Keeping the fee base under control is a crucial element in controlling overall costs under a cost type contract. The establishment of the competitively based price matrix in tandem with a disciplined approach used to manage changes has provided a substantial incentive for the contractor to control costs. Under a cost type contract, the contractor does not earn more profit simply for spending more money; it is only when the fee base is expanded that the contractor increases its returns. As experienced under the LOGCAP IV task orders, the fee base has only been adjusted under circumstances dictated in the change management clause of the contract. Indeed, the task order in the north has stopped earning base fee due to an apparent cost overrun status. By keeping the fee base under control the contractor is incentivized to minimize the incurred cost to protect its profit margin. This effect is accentuated by the fact that the Federal Acquisition Regulation precludes contractors from recovering interest expenses.

Change Management Clause: Second in the task order control mechanism has been a structured approach to change management. The Afghanistan task orders contain a clause that clearly establishes what constitutes a change or modification requiring an equitable adjustment under the contract. The foundation of the clause is a population based mechanism for acknowledging a change has occurred. To date, the Army has recognized and is in the process of negotiating an equitable adjustment due to the uplift of forces experienced after the award of the task orders. The population trigger works both ways; when the drawdown occurs negotiations will commence to adjust the fee base downward.

Award Fee Criteria: The third element is the award fee structure. Cost/Schedule Management and Cost Control are separate and unique factors under the award fee clause making up 40 percent of the contractors score. This provides further incentive for the contractor to engage in prudent operations under the task order. Biweekly cost reports are submitted to the government with a required analysis by the contractor explaining substantial variances. The contracting officer systematically tracks incurred costs against the service price matrix budgets. Performance against the award fee criteria is briefed to the Award Fee Evaluation Board. Poor performance and inadequacies in business systems results in reduced award fee determinations. To date, two Award Fee Boards have been held for each of the task orders.

Incurred Cost Audits: Under a cost reimbursable contract the contract awarded value does not establish the cost of the task order. The actual determination of the allowable costs incurred under the task order is not until contract closeout after a formal DCAA audit of the direct costs and indirect costs and the negotiation/settlement of the final costs. Therefore, the government gets multiple "bites of the apple" on cost type task order awards based on conducting audits during contract performance and monitoring of cost control activities. Presently, the LOGCAP definitization team is working closely with DCAA Auditors in negotiating adjustments to the LOGCAP task orders.

Senator MCCASKILL. If there is an analysis that has been done about why it is less—I'm looking for: Is it the competitive process that has helped? Is it more contract oversight? I'm looking for some good news, here, where I can feel good that we are at least headed the right direction, in terms of logistical contracts and the huge burden they've been, in terms of these contingencies.

Let me ask about the LMI depots study. It came out in February, and I am curious if any of you have any take on those recommendations and findings that you would like to put on the record at this time.

General RENO. Chairman McCaskill, I have read the report. While I agree with many of the recommendations that LMI makes, we have not had opportunity to fully vet that with DOD, and intend to.

The one that I would differ with is their recommendation for combining the statute with regard to 50/50 and Core. I don't think that's advisable. I think we gain flexibility by keeping those separate, as they are now. I would provide other comments after we have a chance to review that with the other Services and OSD.

[Additional information referred to follows:]

The one recommendation that I differ with is combining the 50/50 and Core statutes. I don't think that is advisable because we gain flexibility by keeping the statutes separate, as they currently are right now. As stated earlier, we have not been able to fully vet the Air Force's viewpoints on LMI's recommendations with the Office of the Secretary of Defense (OSD) and the other Services. A cross-service team will soon be formed through the OSD Maintenance Executive Steering Committee to review the report and make recommendations on any statutory, policy, and organizational structure changes.

Senator MCCASKILL. Okay. Anyone else on LMI?

General PANTER. Yes, ma'am. There are some things we agree with and some things we don't agree. We agree with strengthening the Core determination process; there's goodness in that. The recommendation that sustainment policies must be closely linked to depot maintenance activities—agree with that. We agree with some of the conclusions about why the depot workload has decreased—newer equipment, rapidly fielding UUNS, and things like that.

Things we don't agree with, much like my friend Loren mentioned, is the consolidation aspect. We think that distracts from our flexibility. There are secondary issues involved with that, such as the Services' relationship with the local community. That was a major, I think, disagreement with the study.

Thank you.

General STEVENSON. Pretty much ditto. We generally agree with the findings. There are a couple of findings in there, we don't care for. One is the notion of improving our reporting, because we think we report pretty well right now. The other is the independent commission that they suggested be set up. We don't think that's necessary.

But, what we find is that many of the things that are in that report are things we already have done or are doing. So, we agree.

Senator MCCASKILL. Okay. My time is up. I will probably take one more round, after Senator Ayotte.

Senator AYOTTE. Thank you, Chairman McCaskill.

Admiral Burke, I just wanted to follow up on Senator Shaheen's question with regard to the shipyards, and, in particular, Portsmouth Naval Shipyard. Admiral Roughead testified before the Armed Services Committee earlier this year about consolidation of a maintenance workshops project that has been proposed at the shipyard. I had a chance to go to the shipyard and really look at what this would do, in terms of efficiency and reduce cost at the shipyard. One of the things that Admiral Roughead said, that if we

moved the consolidation project up two phases right now, consolidate them into one—the P266 into one—then—and put them in 2012—we would save $8 million by doing that. I think that demonstrates two things. Number one, often, when we put maintenance off, it ends up costing us more in the long run, instead of looking at the big picture and making the decisions upfront. Then, I wanted to ask you, in particular, about—right now, you've—the Navy has proposed that this project occur, again, in a phased approach in 2015, even though we would save $8 million by consolidating it and doing it sooner, in 2012. So, could you tell me what the thought process was there, in putting it in 2015, and why we wouldn't be better off moving it into 2012 to save that $8 million that the Admiral has identified?

Admiral BURKE. Yes, ma'am. First, I've gone back and looked at the project. We don't think we'd save $8 million. We think we'd save $3 million. So, an update on the numbers.

Senator AYOTTE. So the number that was given to us previously isn't the number that——

Admiral BURKE. I think we've gone back and looked at it, and we see that if you did phase 1 alone, it would be almost $12 million; phase 2 alone would be a little over $8 million. That's a total of $20.5 million. If you did both phases together, it'd be $17.2 million. So that's a savings of $3.3 million if they were done concurrently.

Now, that has nothing to do with whether you move it up or not. So, maybe I'm missing the point of your question.

Senator AYOTTE. As I understand it, the way it's currently proposed, it's a phased approach. Is that right?

Admiral BURKE. It is. It's in 2015 and 2016, I believe, so——

Senator AYOTTE. Right. So, we're not, number one—actually, one of the reasons why we would want to move it up is because the sooner we get the efficiencies gained from actually consolidating the workshops—probably—I haven't—having been there—is that we will be able to more efficiently perform maintenance. That, in turn, will have cost savings, in terms of how we maintain the submarines. So, obviously, that number's not included in the $3.3 million.

Admiral BURKE. That's right.

Senator AYOTTE. So, that would be one of the reasons I could see of moving it up. But, just wanted to understand why, even though you know you could save money, you would still phase it in, rather than just doing it together.

Admiral BURKE. I think we'll look at the opportunity to put them together. When I've asked the question about, "Could they be done concurrently?" the answer that I've gotten is yes. So, it would seem to me that they ought to be done together. I would agree with you.

Senator AYOTTE. I would like to, obviously, hear further about what the reasoning was for moving it to 2015, as opposed to doing it sooner. So, if you want to get back to me on that, I'd appreciate it—or, unless you know now.

Admiral BURKE. Well, I'll be happy to get back to you on it.

[The information referred to follows:]

The Navy assesses all military construction requirements as we balance risk across the Navy and provide the most capability within fiscal constraints. The Ports-

mouth Naval Shipyard Structural Shop Consolidation Project (P266), while executable in fiscal year 2012, is currently programmed in fiscal year 2015. The Navy will continue to assess the Portsmouth Naval Shipyard Structural Shop Consolidation Project as we target our shore infrastructure investments to deliver greatest impact on achieving our strategic and operational objectives.

Admiral BURKE. I assume it was just placing it amongst a bunch of other MILCON projects, as well. But, I'll get back to you with a good answer——

Senator AYOTTE. Thank you very much, Admiral.

Admiral BURKE.—one that you might like. [Laughter.]

Senator AYOTTE. An answer I like, that would be even better. I appreciate it.

I wanted to ask, also, General Stevenson, about our Guard and Reserve, because, with the conflicts that we've been involved in, in Iraq and Afghanistan, they're an operational force now, as how we traditionally envisioned our Guard and Reserve. The most recent National Guard and Reserve equipment report identified nearly a—$4.1 billion in significant major item shortages that were identified just for the Army National Guard. Obviously, this could apply in other contexts, as well, in any other services.

Can you tell me what you estimate the shortfall to be for the National Guard? Also, could you address for me—both what I'm seeing and what I have just heard from our Guard—is that often the Guard has outdated equipment, versus the Active Forces. Just one example, in New Hampshire, the Active component's fielding M–4 carbine with M–68 close-quarter optics, and the New Hampshire Guard is still using the M–16 with the iron sights. So, could you address for me just what we're doing? We're asking so much more of them. We need to make sure that they have what they need—the readiness, and also, with the important missions that they carry for us on the homeland front, as well.

General STEVENSON. You're right, in years past, the Guard and the Army Reserve have suffered lesser-quality equipment—in some cases, shortages of equipment, outright—than the Active component has. Under the Army Force Generation Model, which we using today, as I'm sure you know, that will not work. The Reserve component has to be equipped as good as the Active component, and we're committed to that. Matter of fact, I just talked, yesterday, with General Carpenter, who's the acting director of the Army Guard, and—because I had noticed, in his testimony last month, that he was pretty pleased with the amount of equipment fills they're starting to see happening in the Guard. I asked him, "Are you still comfortable that the equipment is flowing, your shortages are being addressed?" He said, "Absolutely. The equipment is coming in droves." In the TOE—the way we organize our units—a rifle company in the Guard has the same equipment as a rifle company in the active. So, if they're authorized M–4s in the active, they'll be authorized them in the Guard, and they should have them. If they don't have them today, it's probably a function of, "We have those weapons being used downrange for other reasons."

We have a lot of equipment in use in Afghanistan that doesn't exactly match the way units are organized. I'll give you an example.

Today, our aircraft crews, we equip with an M–9 pistol. The pilots—the crews in Afghanistan want to carry M–4s in addition to

their pistol, because if their aircraft goes down, they want to be able to fight.

Senator AYOTTE. Absolutely.

General STEVENSON. Absolutely logical. We've given them the M–4s. But, to give them the M–4s, somebody else is short, back here in the continental United States. We'll get that fixed. But, it's just a short-term problem.

Senator AYOTTE. Does anyone else want to add on this issue?

General RENO. Ranking Member Ayotte, the Air Force Air National Guard, about 102,00 strong, fly the same aircraft that we do Active Duty—fifth-generation fighter F–22, F–15, as you're very well aware, F–16s, tankers, airlift, C–17s. So, we use the same equipment.

Senator AYOTTE. I'm certainly familiar with that. What I've heard the feedback on is, there's much more at the ground troop level, of making sure that we're prepared, given what we're asking them to do.

General PANTER. Senator, if I just may add—now, the quantity of equipment is, of course, different, because we give our Reserves training sets to train on. But, there's not sufficient Active Duty Marines at that site location to maintain a full-up table of equipment. So, there is a difference in quantity.

But, like General Stevenson mentioned, as these units get ready to deploy and they go through their predeployment training and all the workup packages, they get the same equipment as our Active-Duty Forces.

Thank you.

Senator AYOTTE. Thank you very much.

With the latitude of the Chairman, I have one other question. That is about the Maritime Prepositioning Force Program changes, and I would address that to General Panter and Admiral Burke. I had a chance to go over to the Pentagon, about a week ago, and receive a briefing on readiness from the Army and the Marines. One of the issues that I noticed was that the Navy plans to place 6 ships of the 3-squadron/16-ship total maritime prepositioning forces for the Marine Corps into reduced operating status, beginning in fiscal year 2013, and—in the Mediterranean—and wanted to get two things. General Panter, one, you said, in your testimony, that that needs additional analysis. I'm concerned, given what we see happening right now in that area of the world, that that reduced operating status, which I understand was part of the efficiency initiative recommended—and probably was recommended before we—any of us could have predicted, maybe, some of the activities that are occurring in that area of the world—wanted to get, General Panter, what your view is on that.

Then, Admiral Burke, yours as well, in understanding what went into that thinking of really reducing that prepositioning in the Mediterranean.

General PANTER. Would you like for me to start, ma'am?

Senator AYOTTE. Yes, General. Thank you.

General PANTER. Okay. Two or three points on this thing. Anytime that you don't have that Maritime Prepositioning Squadron (MPSRON), that maritime preposition, in our view, geographically located, which—and you were briefed on it—that's the intent, up

to—if they're not in the maintenance cycle, to have them forward-deployed. You quickly would have to question, "Okay, if they're not in the geographical area, how much longer would it take to get them there?"

Second point would be the opportunity to train with this particular MPSRON in the U.S. European Command (EUCOM) and U.S. Africa Command (AFRICOM) areas of responsibility. If you have them tied up to the pier, you might have a missed opportunity related to that.

But, of all this, one of the major concerns we have is just assembling the ammunition requirements. That's a long process if that capability is not associated with the MPSRON. For example, it takes 18 million pounds—there's a 18-million-pounds requirement for class 5 associated with these MPSRON. That equates to roughly 600 tractor trailers that come throughout the United States, continental United States, to put this package together. That takes time. That's roughly 35 to 42 days to put that together, if you had to start from a cold start. So, to aggregate that capability with this MPSRON that's in reduced operating status is a concern for us.

Senator AYOTTE. What do you think is the impact on readiness in that area of the world?

General PANTER. Well, I—it, logically, would have to translate to, potentially, a slower response time in support of the COCOMs.

Senator AYOTTE. In AFRICOM?

General PANTER. In AFRICOM and EUCOM.

Senator AYOTTE. EUCOM.

General PANTER. And EUCOM.

Senator AYOTTE. We've seen quite a bit of activity in that area.

General PANTER. There has been.

Senator AYOTTE. Right.

General PANTER. Yes, ma'am.

Senator AYOTTE. So, Libya, Tunisia, other areas.

General PANTER. Exactly.

Senator AYOTTE. Thank you.

General PANTER. Yes, ma'am.

Senator AYOTTE. Admiral?

Admiral BURKE. I think I can see your chart there that you have—you recognize that there are two other MPSRONs that are active, one in the Western Pacific, one in U.S. Central Command. Then, we had—we have, today, the one in EUCOM that we're talking about.

I think the calculus that went into this was that we are more likely to need those maritime prepositioning ships, which are used for a high-end engagement—they would—they are part of the Amphibious Assault Force in the two theaters that we plan to keep them in. These—we have not had a situation where we have needed all three of them, in some period of time, in—and I hate to say it—forever—but, for about the 20 years that we looked at. However, they have been used frequently as single ships, or two ships, in humanitarian assistance operations. As a matter of fact, some of them were used in Haiti. Having them located on the East Coast in a reduced operating status, where they can get underway in 5 days, allows them to be able to respond to both the U.S. Southern

Command; to some degree, EUCOM; and to the west coast of Africa, for humanitarian assistance operations.

The ammunition issue that General Panter mentioned is a challenging one that we're working on. But, one of the options is to keep much of that ammo on a—afloat on a TAKE—part of the prepositioning ship squadron. As far as maintenance, we've paid for the additional maintenance to keep those ships ready even while they're in port.

So, I think it comes down to a question of, what is the likelihood of using these craft? What is the consequence of not having them ready immediately? There are few situations that we've come to, in the last 20 years, where you would need them as immediately as one—or, as you would—or, more immediately than the ROS–5 status. So, we felt like it was a reasonable approach to put those ships into the ROS–5 and be able to do the job that we think we need to do, and that we can do, and save over $400 million a year.

Senator AYOTTE. Admiral, when was this decision made? Can you tell me? Just give me a sense of when this was proposed.

Admiral BURKE. We, in the Navy, teed it up in February of last year.

Senator AYOTTE. Right.

Admiral BURKE. Well before the efficiencies came out, and it was a decision made jointly by the Navy and the Marine Corps.

Senator AYOTTE. I think we could probably almost take up a whole hearing on this, so I'm going to defer to the chairman. I'm very concerned about this decision, and particularly in light of the activities that we see happening in that area. You have Libya, you have Tunisia, you have, obviously, the African nations there that—some of them are this hotbed of terrorist activity, in many instances. So, I'm concerned that this was a decision more focused on money. We all want to save money, but this is one where I would like to gather further information, and concerned about where it puts our strategic readiness in that area of the world.

Thank you.

Senator MCCASKILL. Thank you, Senator Ayotte.

I think it's important that we get all the information, in terms of the decisionmaking process, in that regard. I do also know that, while we have had new activity that has popped up, in terms of the public knowing about hotbeds of terrorism in Africa, clearly, I think that you all were well aware of the significant stresses that we saw in Africa in those areas as these decisions were being made. I think we do need to drill down and make sure that the decision was not made prematurely, as it relates to what's going on in today's environment, and I think the line of questioning is appropriate. We need to get that information for the record and so that we can brief the full committee on it.

I want to also kind of say "me, too," on Senator Ayotte's questions on the reset funding for the Guard and Reserve compared to the Active Force. I also have concerns that we are paying attention to that because as she said, we have never, ever used our Guard and Reserve in the way that we have over the last decade. I know that many of them are gasping, in terms of their reset capabilities, and want to make sure that I said my "me, too, ditto" on the Guard and National Reserve.

Let me ask about the Arsenal Support Program Initiative (ASPI). I'm concerned about this ASPI. It started out as a pilot program. It basically has been funded by earmarks, $80 million worth of earmarks. The return on investment has been less than 2 percent. GAO has weighed in on this. The Congressional Research Service has weighed in on this. It appears to me that this program has given cheap rent to local development groups, and, in one instance, provided a hardware store at Rock Island. We're not going to do earmarks anymore, at least we're being told, I hope, that we're not doing earmarks anymore. I'm still a little cynical about different ways earmarks are being handled. I looked at the House markup, and I'm a little confused about all the amendments and the vague language associated with the amendments. Looks like, to me, that a duck is a duck is a duck. It looks like to me the House of Representatives is engaged in earmarking in the Defense authorization bill, and just trying to pretend like they're not, and it infuriates me.

But, now that you know how I really feel about it, this ASPI thing looks like a place where we can cut back on money we're spending. It looks like to me that we need to put up a white flag on the ASPI, and say, "This is not a good use of taxpayer dollars." But, I would love your input on that, General Stevenson.

General STEVENSON. Yes, ma'am. I'm familiar with the discomfort about the ASPI program. I've read the GAO report. It was an effort to try to reduce operating costs for our arsenals. Unlike the depots, which have a legislated Core requirement and a legislated 50/50 requirement, there is no legislation that covers our arsenals. I think we need some. Because, these arsenals are very critical to our ability to support our forces—particularly the Army, but others Services, as well—for their wartime needs. I mean, the only place in this country where you can build a main gun tube to a tank or a howitzer is at Watervliet Arsenal. So, we need them to be viable. Using this program which has allowed us to bring in outside entities onto the Arsenal, charge them rent and help reduce the overhead. Because, if they weren't there, the overhead costs would be spread on solely the work they are getting internal to the Army, which makes their rates very high; I mean, upwards of $300 an hour. So, when the program managers see that, they say, "I'm not taking my work to the Arsenal. I can get it done cheaper from some outside agency."

So, it's a conundrum that we're in. We have to solve it. ASPI may not be the solution. But, we have to make our arsenals more competitive, if you will, so that they enjoy work in peacetime, so that they're—when we need them in wartime, they're ready.

Senator MCCASKILL. I get it is a problem. We want to make them less expensive, because we have to hold on to them. Maybe, we need to reinvigorate what the ASPI program is. Maybe it hasn't been marketed appropriately. But, it looks like to me we've spent a lot of money and haven't gotten much return on that. Although I guess the argument can be made that 2 percent's better than nothing. But, it is only 2 percent. So, in your organization, you can task people to come up with ideas that could lessen the load for the arsenals in a way that might be a little more fiscally straightforward, and maybe not through earmarking processes, then we

are certainly willing to take a look at that and see if there's something we can put in the Defense authorization bill that would help that along.

Finally, I just want to say that I went to Lake City Army Ammunition Plant last Friday, in Independence. I know the Army submitted an $80 million reprogramming request, because General Chiarelli noticed real problems there. I have to tell you, I couldn't agree more with General Chiarelli, in terms of the quality work environment and the work that needs to be done there. I think if most Americans met and talked to the men and women who are working at that plant around the clock, I think they would not like the working conditions that they are in. I think it would make them very uncomfortable that we are relying on these men and women to the extent that we are for our warfighters, and that they are being asked to work in these conditions.

So, I certainly agree that the $80 million is something that is probably needed for efficiencies and for a quality work environment. I don't like reprogramming, obviously; you're never going to get me all excited about the idea that we're reprogramming $80 million. Why wasn't this in the long-range planning? Are we missing other facilities out there, where we are not taking a hard look at whether or not folks are working in conditions that we would expect to see in a movie about the 1940s?

General STEVENSON. I don't think we are now, but probably true that we weren't paying enough attention to quality work environment, as opposed to the production output capability of our ammunition plants. As you probably heard when you visited, we've put a half a billion dollars into Lake City since 2003. It's not enough. There needs to be more and Lake City's not alone. We have an ammunition plant just south of here in Radford, VA—a very important ammunition plant. It's had a lot of investment but it needs more.

We're going to make those investments. You're going to see those in the 2012, 2013—in our next POM submission, you'll see the requirements for those. But, we're anxious to get started now. That was the purpose of the reprogramming request. We very much appreciate the support to that.

Senator MCCASKILL. Okay.

Anything else, Senator Ayotte?

Senator AYOTTE. No, thank you, Chairman McCaskill. I do have some additional questions that I'll submit for the record, thank you.

Senator MCCASKILL. I think you all can expect more questions for the record.

We really appreciate your time and your service to our Nation. Thank you all very much.

The hearing is adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CLAIRE MCCASKILL

GOVERNMENT ACCOUNTABILITY OFFICE REVIEW

1. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, the Government Accountability Office (GAO) has conducted a series of reports on each Services' depot strategic plans and noted that the Services lacked a clear and comprehensive depot maintenance strategic plan that focuses on capital investment in facilities and

equipment, implementation of a methodology to revitalize and resource organic depot facilities, public-private partnerships, workforce planning and development, and the integration of logistics enterprise planning systems. Given the significant role the organic depot maintenance facilities have played in resetting equipment that previously returned from theater, to what extent have the Services updated or revised their depot maintenance strategic plans to address current and future reset requirements, the type and mix of equipment expected to return for reset, equipping priorities, declining reset funds for operations and maintenance, and the impact of contractor support work to reset equipment?

General STEVENSON. The Army has recently completed an Organic Industrial Base (OIB) Strategic Plan that establishes the necessary management framework needed to ensure the Army retains a relevant OIB to meet future contingency operational requirements. Our past Reset mission clearly demonstrates that we must maintain an OIB that is capable of surging rapidly, is forward deployable, and is both efficient and effective.

As current overseas operations begin to wind down, the Army's OIB enterprise must adjust to a changing operational and fiscal environment. In order to manage the eventual reduction in depot maintenance requirements the Army has developed four overarching strategic pillars that must be implemented to ensure the Army's OIB retains the necessary core competencies and capacities to meet future contingency operations, as described below:

- Modernization: The need to ensure our Army depots are modernized with new technology, training, and plant and equipment at the same rate that the Army modernizes its weapon systems. Critical to this pillar are actions ongoing that better align and document sustainment requirements with the acquisition strategies for new weapon systems.
- Capacity: The actions necessary to document the core competencies and the minimum number of Direct Labor Hours (DLHs) necessary to sustain the identified core competencies at each facility. The identified workload supporting core competencies will form a basis for capacity and capability assessments to ensure our organic depots are sized correctly.
- Capital Investment: The actions necessary to develop a capital investment strategy that focuses the Army's capital investment funding to improve each depots core competencies and capabilities. This ensures that the Army is investing in capabilities that contribute to a facilities core mission set to enable world class depot operations.
- Resource Alignment: The Army's ongoing process to prioritize depot maintenance funding so that depot workload which contributes to sustaining the depots core competencies are funded across the FYDP. This pillar has been completed and was implemented beginning in POM 11–15.

The focus on core capabilities provides the Army's OIB enterprise the mechanism to ensure Army depot workforces and infrastructures are aligned and sized properly and remain a ready, responsive, and flexible source of support during future contingency operations. This process provides a basis to determine the appropriate funding required to sustain depot core requirements which, in turn, ensures that the Army's industrial base retains the technology, knowledge, skills and abilities needed to sustain our critical warfighting equipment throughout the system's life-cycle.

Army depots have been increasingly called upon to deploy skilled workers and establish forward critical depot capabilities into theaters of operation to conduct Reset maintenance and other logistics services. Our depots have met this challenge by being responsive and adaptive to the demands of a global force engaged in persistent conflict. These requirements and challenges will continue for the foreseeable future, and so the Army's OIB strategy requires that our depots be multi-purpose and multi-use and structured to provide the required capabilities and capacities to satisfy future peacetime and wartime needs.

General PANTER. The Marine Corps recognizes that the depots are key to resetting the force, and we have an integrated strategy to ensure the depots' continued success. Key components of this strategy are described below:

- The Marine Corps depots operate the Capital Investment Plan (CIP) in accordance with financial management regulations. In addition, Marine Corps depots are compliant with published CIP policy and timelines, completion requirements and other mandated performance metrics in order to enhance the overall execution of CIP. The depots continually monitor the CIP requirements with other stakeholders to align needs with capability and capacity and to ensure infrastructure and related financing is in place at least 6–12 months prior to the requirement to support incoming workload.

• Public-Private Partnering (PPP): Since 2008, the footprint for PPP partnering with the Marine Corps depots continues to increase. Examples of such partnering are the Tunner workload with the Defense Reutilization Service and the repair of secondary items with Raytheon.
• The 2008 Marine Corps Strategic Plan, published on the OSD website, has an objective known as "Workforce Revitalization" for sustaining a highly capable, mission ready maintenance workforce.
• Workforce planning: The current Human Capital Plan (HCP) supporting the depots is both flexible and agile in order to readily respond to the needs of our customers. The HCP is designed in four segments for hiring strategies:

1. Permanent personnel: The depots retain about 70 various skills sets on a permanent basis in order to sufficiently produce baseline/routine peacetime workload.
2. Personnel to support surge workload using commercial contractors: In order to augment the workforce to support surge requirements such as our warfighting engaged customer, the HCP includes multiple commercial contracts where terms of the contract are built on the basis of ensuring readily available journey level skill sets to augment/decrease the workforce within 24–48 hours.
3. Personnel to support surge and specialty (temporary) customer needs: For some of the necessary skills, the depots have partnership agreements with the local community colleges and universities that will allow personnel with special or unique skills to be on board within very reasonable timeframes.
4. Personnel hired as temporary/term government employees: The depots have partnered with local Human Resource Offices in order to ensure that direct hiring authority can be expeditiously executed to bring in surge personnel in the most efficient and cost effective manner, filling voids in skill sets necessary to support customer workload.

Other workforce strategies include the utilization of overtime/comp time and increased shifts to accommodate customer needs. We also recognize that, as Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) conclude, depot workload will decline, and we are preparing for this transition.

General RENO. The Air Force is in the final stages of updating its Depot Strategy and is addressing the concerns highlighted in past GAO reports. The report recommended the Air Force revise the Depot Maintenance Strategic Plan to more clearly address all elements needed for a results-oriented plan. The Air Force agreed to explicitly address the Office of the Under Secretary of Defense's direction and framework for future challenges and demonstrate clear linkages to the Department of Defense's (DOD) Depot Maintenance Strategic Plan.

The Air Force requires a robust depot Maintenance, Repair, and Overhaul (MRO) capability to support its air, space and cyberspace force of the 21st century. This capability relies on a seamless integration of public and private sector competencies, achieved through an increased reliance on public-private partnering on new and existing weapon systems. The Air Force continues to maintain and improve its "world-class" organic MRO operations by ensuring they are sized to support a spectrum of operations, i.e. peace, contingencies, humanitarian operations, and war. This effort requires maintaining current infrastructure investments at a sustained level of investment that is appropriate and commensurate with private industry. It also requires continuous investment in the Air Force's organic depot maintenance workforce.

The Air Force continually resets equipment as it returns or is rotated back from theater using Overseas Contingency Operations (OCO) funding. For Weapon System Sustainment (WSS), Resource Management Decision 700 directed the Air Force to develop a plan to fund the baseline at 80 percent of requirements by fiscal year 2016. This requirement is being considered in the Air Force plan for the fiscal year 2013 Program Objective Memorandum and will require increased baseline funding to sustain enduring WSS requirements when OCO funding ceases.

The Air Force Depot Maintenance Strategy provides for:

(a) professional, skilled workforce;
(b) improved maintenance throughput and quality;
(c) sustained world class infrastructure;
(d) transformed processes;
(e) postured strategic enterprise workload capabilities;
(f) leveraged partnerships with the private sector;
(g) continued viable industrial base, and;
(h) compliance with policy and law.

Admiral BURKE. Navy ship and submarine class maintenance requirements are continuously updated based on current material condition and maintenance issues (e.g., superstructure cracking), capturing changes "in stride" resulting from OPTEMPO changes. Naval Shipyard capacity and capability, including workforce, tools, equipment, parts and infrastructure capacity, are sized to accomplish the maintenance requirements of assigned ships and submarines as part of the annual programming and budgeting process. Naval Shipyards periodically update their strategic plans to reflect the capacity and capability necessary to address the Fleet maintenance requirement which includes that resulting from OCO; shipyard workforce and infrastructure are commensurately adjusted.

Naval Aviation has been able to absorb the depot requirements driven by OCO with minimal increase in permanent personnel or facilities. Navy has adopted an Integrated Maintenance Concept with Planned Maintenance Intervals for aircraft based on calendar months, and as such the scheduling of these events has not been altered by current operations. Aircraft inductions will continue for scheduled maintenance events based on fixed induction dates, allowing Navy to budget, plan, and execute the events without having to establish a stand-alone "reset" program. The engine and component depot work is driven by flight hours and environmental exposure which have only seen a slight (less than 7 percent overall) increase in workload since the beginning of operations. This workload has been absorbed by the normal depot workforce through overtime or augmentation by contractor support; both of which are temporary and can be returned to normal operations in a short timeframe. Last December, Commander Fleet Readiness Centers promulgated an fiscal year 2011–2017 Strategic Plan embedded in which are goals, objectives and initiatives designed to address Naval Air Systems Command's strategic priorities of current readiness, future capability, and people.

2. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, to what extent have the Services assessed the affects of reset on the baseline budgets, competing demands to reset equipment to meet unit readiness goals, the preservation of core capabilities, and the risk level organic depot maintenance facilities may be able to accommodate in order to complete reset workload requirements?

General STEVENSON. The Army assesses annually the affects of Reset on baseline budgets, competing demands to reset equipment to meet unit readiness goals, the preservation of core capabilities and the risk to organic depots to complete reset workload requirements. Workload requirements, both base and OCO, are forecasted and planned across the industrial base to ensure that the equipping needs of units are met within the Army Force Generation (ARFORGEN) cycle while reducing any risk. Army uses this information to assess competing demands to repair equipment in support of unit readiness goals. Additionally, this information informs our ability to meet core requirements with both Reset and base program workloads. Total workload is assessed to ensure that depots have the capability to meet both Reset and base requirements. Risk is mitigated through prioritization of requirements and the contracting of work beyond depot capabilities.

General PANTER. Mindful that OCO resources are diminishing, we are moving more depot maintenance costs into baseline budgets. In fiscal year 2010, we had $92 million in our baseline for depot maintenance - our baseline request for depot maintenance in fiscal year 2012 is $207 million. From a 'peace time' perspective-prior to OCO supplemental—in the fiscal year 2001–2004 timeframe our depot maintenance baseline requests averaged $107 million per year. Factoring for inflation, we are much closer to that level of funding today. When we begin to conclude OEF activities and determine our new depot maintenance demands, we are unlikely to revert to a pre-September 11 OPTEMPO. We believe the requested baseline provides a sufficient foundation on which to make informed adjustments in funding in the out years. Nonetheless, our confidence in the posture of our baseline depot maintenance funding in fiscal year 2012 and beyond assumes that OEF reset will be funded with OCO dollars in line with stated intent of both the administration and Congress. However, mindful of the austere nature of present fiscal conditions, we are watching this assumption closely.

As we look beyond OEF, we are developing the core capabilities of a Middleweight Force. The results of these efforts (including our Force Structure Review Group, Lighten the MAGTF initiative, Table of Equipment reviews, and others) will shape the decisions on what equipment to reset and how best to reconstitute the force so that we are postured to respond across the range of military operations. The processes in motion to define our post-OEF force will inform our decisions to smartly program acquisitions to modernize the force.

When the Marine Corps withdraws from Afghanistan, we will quickly return mission capable equipment sets to operating forces and strategic programs in order to ensure our ability to decisively respond to future missions. This will require the full use of our organic depots, as well as the strategic use of commercial repair sources to rapidly reset the equipment that has sustained significant wear throughout the war. Our organic maintenance depots have the flexibility to surge capacity to meet the needs of the Marine Corps.

General RENO. The Air Force is addressing equipment reset budgeting by two strategies. First, Weapons System Sustainment (WSS), during the fiscal year 2012 President's budget build, the Air Force was directed via Resource Management Decision 700 to develop a plan to fund the baseline at 80 percent of requirements by fiscal year 2016. This plan requires increased baseline funding to sustain enduring WSS requirements when OCO funding ceases. Without this restoration to baseline funding, WSS will experience significant risk resulting in deferred depot-level maintenance and possible aircraft groundings.

The second budget strategy affects assets such as vehicles (i.e., forklifts, trucks, etc) and equipment (i.e., aerospace ground equipment, generators, etc). When repair or replacement is needed, OCO funds are used. If the Air Force can't repair an asset in-theater, or an asset has exceeded its useful life, we dispose of that asset. OCO funds are still required for replacement of needed vehicle and equipment items until all such assets are reset. Once these assets are returned to peacetime use, the Air Force's baseline budget is sufficient to fund peacetime replacement and sustainment at required levels. However, if OCO ceases before all equipment is reset, the Air Force will assume some level of risk in readiness.

The competing affects of reset to meet unit readiness goals are minimal. The Air Force continuously monitors environmental factors on deployed equipment, use rate, and failure rates. Air Force organic depot maintenance requirements for aircraft and engines are calendar driven or operating hour-based. Consequently, the depot maintenance of these systems is ongoing; the items return from deployment to the depot when maintenance schedules dictate. This process is carefully managed for all large equipment items to ensure unit readiness is continuously maintained. In so far as support equipment, the AF prioritizes asset use in-theater to ensure unit readiness goals are met.

As for preservation of core capabilities, the Air Force identifies core requirements early in the acquisition process utilizing the Depot Source of Repair (DSOR) process. The DSOR process identifies core capabilities required by 10 U.S.C. § 2464 for the program office and candidate depot. This ensures all parties understand the requirement to develop and maintain capabilities necessary to sustain the weapon systems. The program office works with the depots to stand up the core capability and the depot maintains the capability at a level to support the mission.

Admiral BURKE. Navy maintenance decisions are driven by class maintenance plans and schedules. Navy resets in stride after each deployment, and therefore expects minimal impact on depot maintenance facilities resulting from the drawdown of operations. However, Navy depots are still dependent on OCOs funding, with only 79 percent of the ship maintenance requirement and 87 percent of the aviation depot maintenance requirement funded in the base budget. Core depot capabilities should be unaffected by the reset, and are assessed biennially, in accordance with DOD Instruction 4151.20 and Section 2464 of Title 10 U.S.C.

OVERSEAS CONTINGENCY OPERATIONS

3. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, with a drawdown of current operations on the horizon and related reductions in separate contingency funding, the baseline budgets for DOD and the Services are likely to have substantial requirements placed on them in the future. To what extent are the Services planning to include funding that is considered OCO funding into their baseline budget?

General STEVENSON. The Army has conducted a comprehensive assessment of OCO requirements to identify potential "enduring" requirements that should shift to the base budget in future years. This analysis is updated every year as part of the budget development.

The Operation and Maintenance, Army (OMA) OCO to Base in fiscal year 2011 was $965.5 million and fiscal year 2012 is $1.2 billion. A subset of this is Depot Maintenance with $353 million in fiscal year 2012. We anticipate that as fewer units are deployed, the requirements for home station training and support will grow in the future.

General PANTER. The Marine Corps is continuously working to identify programs that originated in OCO and are currently funded in OCO but that we anticipate becoming an enduring requirement (i.e. one that will be maintained after OCOs are ceased). As an example, our Depot Maintenance OCO request has decreased significantly over the past four budget cycles. This decrease is in part due to a conscious effort to fund the correct level of enduring depot requirements within our baseline budget.

General RENO. The Air Force has been reviewing all OCO funded requirements to determine those that will be enduring when OCO funding is no longer available. As the Air Force builds the fiscal year 2013 Program Objective Memorandum, every opportunity is being taken to move enduring requirements to the baseline.

Admiral BURKE. In fiscal year 2012 budget submission, the Navy proposed migrating items totaling $651 million to the base budget. They include:

- Flying Hours support costs, which funds civilian personnel, transportation of equipment, travel, and simulator support, increases from 61 percent to 90 percent to fund enduring requirements in the baseline. No longer leveraged on OCO. (OMN $180 million)
- Flying Hours Program Cost per Hour and MV–22 (OMN $83 million)
- USNS *Mercy/Comfort* medical support funding (OMN $5 million)
- OCO portions of Family Readiness programs (OMN $4 million)
- EOD and Counter IED (OMN $9 million)
- Navy Manpower and Personnel Systems and Navy Standard Integrated Personnel System (OMN $9 million)

The Navy continues to re-evaluate enduring OCO requirements in other areas of the budget for migration to the base budget in future years.

4. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, to what extent are the Services able to fund the reset of equipment returning from operations in Afghanistan from the base budget when OCO funding ceases?

General STEVENSON. The Army base budget request funds workload sufficient to sustain Core depot maintenance competencies. Over the past two budget submissions, the Army has been increasing the base depot maintenance budget (and decreasing the OCO RESET request) to restore our capability to fund Core out of the base. We do expect that equipment returning from the current OCOs will require more resources for reset than we will have in the base budget due to damage from the harsh operating conditions. The Army will request OCO funds, separate from the base budget, for this portion of reset. The Army also expects that the some level of OCO funding will be required for 2–3 years after the return of forces.

General PANTER. The Marine Corps would be unable to fund reset requirements from within our base budget. Reset is a direct cost of the wars in Iraq and Afghanistan and can only adequately be funded through supplemental OCO funding.

The Marine Corps is heavily reliant on OCO funding to sustain current operations in Afghanistan and around the globe. The Marine Corps will continue to need this critical funding until reset is well underway, post-conflict. A lack of sufficient resources to repair and recapitalize equipment used after years of sustained combat operations could jeopardize the long-term readiness of the force. Accomplishing reset from within the Marine Corps' top-line budget in a time of fiscal austerity would likely put Marine Corps modernization and investment programs at risk.

General RENO. The Air Force is addressing equipment reset budgeting with two overarching strategies dictated by the nature of the equipment affected. First, for WSS, the Air Force is developing a plan to restore the baseline by fiscal year 2016. This plan requires increased baseline funding to sustain enduring WSS requirements when OCO funding ceases.

The second strategy for resetting equipment affects assets such as vehicles and generators. Resetting occurs as each piece of equipment completes its mission in Afghanistan. Using a forklift as an example, the Air Force will either dispose of the forklift or repair and redeploy it to meet other Air Force mission requirements. The Air Force will continue to require OCO funding to repair or replace equipment items like this until all such equipment is reset. At that time, the Air Force's baseline funding for these types of equipment is sufficient to fund peacetime replacement and sustainment at required levels.

Admiral BURKE. The Navy will be unable to fund the reset of equipment returning from operations in Afghanistan from within our baseline accounts. If OCO funding is not appropriated as requested in fiscal year 2012, the Navy will only be able to fund 79 percent of the ship maintenance requirement and 87 percent of the aviation depot maintenance requirement from the baseline budget.

5. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, what challenges do the Services expect to face with resetting equipment when OCO funding ceases?

General STEVENSON. We have consistently requested that OCO supplemental continue until the end of hostilities plus 2–3 years to ensure that all equipment returning from contingency operations can be Reset and returned to units to support future contingency operations. It is absolutely critical that we invest in restoring equipment readiness to ensure it is reliable and capable to support the needs of our Nation.

Without this resourcing, the Army would be challenged to meet the incremental cost of war with base budgets that are at peacetime resourcing levels. We would have to take risk on the maintenance and modernization of equipment which, over time, would result in lower readiness and increase Operations and Sustainment (O&S) costs.

General PANTER. Two pressing challenges relate to how the Marine Corps will reconstitute its equipment to meet future needs and how readiness will impact future combat operations. During the past 8 plus years of sustained combat operations, the Marine Corps has experienced a steady increase in operational tempo. Wartime usage rates have been 4–9 times higher than pre-September 11 peacetime rates, while normal peacetime operations continue. These increased equipment usage rates now constitute the new normal as equipment sets have experienced accelerated wear and tear in the harsh operating environments of Iraq and Afghanistan.

Prior to the decision to increase the Marine Corps force size to support a surge in Afghanistan, reset budget trends were in alignment with projected reset requirements and timelines. However, the surge resulted in a significant shift of equipment from Iraq to Afghanistan, impacting the planned reset for that equipment. Therefore, reset actions initially forecasted to be completed in fiscal year 2012 were deferred due to operational necessities. A consequence of this reset deferment is that the Marine Corps has accepted considerable risk to the long-term readiness of its equipment. Foregoing reset actions now (e.g. field or depot-level maintenance) will result in higher than normal wash-out rates and more costly depot repairs when the equipment is eventually able to be reset. If OCO funding ceases prior to completion of reset efforts then the Marine Corps' modernization efforts will be severely impacted.

General RENO. The Air Force is addressing equipment reset budgeting with two overarching strategies dictated by the nature of the equipment affected. First, WSS, the Air Force was directed during the fiscal year 2012 President's budget build, via Resource Management Decision 700, to develop a plan to fund the baseline at 80 percent of requirements by fiscal year 2016. This plan requires increased baseline funding to sustain enduring WSS requirements when OCO funding ceases. Without this restoration to baseline funding, WSS will experience significant risk resulting in deferred depot-level maintenance and possible aircraft groundings.

The second strategy for resetting equipment affects assets such as vehicles and generators and occurs as each piece of equipment becomes excess to operations in Afghanistan. Using a forklift as an example, the Air Force will either dispose of the forklift or repair and redeploy it to meet other Air Force mission requirements. The Air Force will continue to require OCO to fund replacement of needed equipment items like this until all such equipment is reset. At that time, the Air Force's baseline funding for these types of equipment is sufficient to fund peacetime replacement and sustainment at required levels. However, if OCO ceases before all equipment is reset, the Air Force will assume some level of risk in readiness.

Admiral BURKE. Navy capital intensive platforms (ships/aircraft) reset in stride after each deployment, however, they remain dependent on OCOs funding, with only 79 percent of the ship maintenance requirement and 87 percent of the aviation depot maintenance requirement funded in the base budget. Navy platforms and expeditionary equipment readiness will decrease if OCO funding ceases at the current baseline funding levels. Additionally, Navy estimates it will also require OCO funding for reset of expeditionary equipment for about 2 years following the return of equipment from OIF/OEF to complete depot maintenance.

6. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, how will the maintenance depots determine the "new normal" budget since they have relied on contingency funds for several years?

General STEVENSON. The Army has aligned its budget process and resource prioritization to support ARFORGEN depot maintenance requirements. Additionally, fleet readiness and core requirements are synchronized and constitute the majority of the future depot maintenance budget requirements. The process allows the

Army to look forward as it considers Base and Reset requirements in a synchronized fashion across the 5 Year Defense Plan.

Army depot maintenance priorities are based on ARFORGEN equipping needs to support training, readiness and deployment requirements. The Army's depot maintenance requirements and repair programs reflect the size and composition of our fighting force, the age of our equipment fleets and the technological advances made over the last decade. As a result, the Army's depot maintenance requirements determination process has evolved and incorporates fleet management strategies synchronized with modernization strategies; expands Post-Production Software Support for a net-centric battlefield; and sustains non-standard equipment that has been rapidly procured and is now being designated as enduring.

These efforts enable a synchronized Army depot maintenance budget that is forward looking, tied to ARFORGEN and ensures the Army's industrial base remains a critical and viable sustainment strategy supporting the "new normal".

General PANTER. The Marine Corps Equipment Maintenance Program has historically relied on contingency funding to fund both Home Station (Baseline) and OIF/OEF requirements. In an effort to right-size the baseline, the Marine Corps has increased baseline funding to support the OSD Depot metric of funding 80 percent of the total depot maintenance requirements. The increase in baseline funding is reflected in the fiscal year 2012–2013 equipment maintenance budget.

Changes in the Marine Corps brought on by the Force Structure Review Group (FSRG) and Ground Combat Tactical Vehicles Strategy (GCTV) will lead to new equipment sets. We will be revalidating our maintenance strategies for equipment to forecast probable equipment returns over the long-term horizon. The Enterprise Level Maintenance Program (ELMP) will involve the entire Marine Corps enterprise to better define the requirement.

General RENO. During the fiscal year 2012 President budget build, the Air Force was directed via Resource Management Decision 700 to develop a plan to migrate all remaining WSS funding from OCO to the baseline budget by fiscal year 2016. This plan will require increased baseline funding to sustain enduring WSS missions once OCO funding ceases. Without OCO-to-baseline funding migration, WSS will experience significant risk resulting in deferred depot-level maintenance and possible aircraft groundings.

Admiral BURKE. Depot maintenance workload and funding roughly tracks the operational tempo for ships and aircraft. The Navy expects that as ground forces depart the CENTCOM AOR, Navy operations for ships and aircraft will continue at close to current optempo levels to ensure regional stability in an area of vital economic interest to the United States and does not expect significant changes in depot workload for ships and aircraft. Navy has been working to establish the proper balance between the "new normal" baseline and contingency funding.

7. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, what are the depots' plans to manage workload as current operations draw down and how will DOD plan for any decreases in maintenance requirements when these operations end?

General STEVENSON. The Army has taken a number of steps to ensure the health of the depots in a future era of declining budgets.

Our primary focus ensures that our depots maintain their Core competencies and capabilities to meet future requirements. This strategy requires that Core competencies are identified, and our facilities and workforce are sized to meet and sustain those Core competencies.

We are developing and executing an Industrial Base Strategy that ensures ARFORGEN requirements are met with ready equipment; supports the integration of comprehensive fleet management and sustainment strategies; and integrates the sustainment of non-standard equipment.

We have made significant changes in how we view and prioritize Core requirements in the 5 Year Defense Plan budget process. Core requirements are now identified and highlighted as critical requirements to be funded, thereby enabling the Army to successfully transition from wartime to a peacetime footing.

Our depot workforce management remains flexible and responsive to meet the Nation's requirements through working multiple-shifts and hiring additional temporary personnel. This provides the flexibility to adjust personnel strength as the workload requires and avoids unnecessary turbulence in the permanent workforce.

General PANTER. The size of the workforce is constantly adjusted to meet workload requirements. This includes increasing or decreasing term, temporary and contract employees as the workload requirements ebb and flow. To best utilize taxpayer dollars, the workload requirement is continually assessed and the workforce sized

appropriately. This includes workforce reductions when requirements have decreased.

As projected through fiscal year 2013, the Marine Corps is beginning to right size the workforce in order to meet the expected workload. The Marine Corps executed a build-up in support of the war with an anticipated post-war downsizing. The build-up consisted of contractors, temporary worker's and term workers so adjustments could be made as changes in workload requirements occurred.

General RENO. The depots manage their staff levels per 10 U.S.C., § 2472. which requires that employees shall be managed solely on the basis of the available workload and the funds made available for such depot-level maintenance and repair. Therefore the depots are continually reviewing their budgets and manning levels to ensure they are in compliance with the law.

Admiral BURKE. Navy ship and submarine class maintenance requirements are continuously updated based on current material condition and maintenance issues (e.g., superstructure cracking), capturing changes "in stride" resulting from OPTEMPO changes. Naval Shipyard capacity and capability, including workforce, tools, equipment, parts and infrastructure capacity, are sized to accomplish the maintenance requirements of assigned ships and submarines as part of the annual programming and budgeting process. As the ship and submarine maintenance requirement changes, shipyard workforce and infrastructure is commensurately adjusted.

Naval Aviation has been able to absorb the depot requirements driven by OCO with minimal increase in permanent personnel or facilities. Naval Aviation has adopted an Integrated Maintenance Concept with Planned Maintenance Intervals for aircraft based on calendar months vice material condition, and as such the scheduling of these events has not been altered by the current operations. Aircraft inductions will continue for scheduled maintenance events based on fixed induction dates which allows Navy to budget, plan, and execute the events without having to establish a stand-alone "reset" program. The engine and component Depot work is driven by flight hours and environmental exposure. These areas have seen a slight (less than 7 percent overall) increase in workload since the beginning of operations. This workload has been absorbed by the normal depot workforce through overtime or augmentation by contractor support; both of which are temporary and can be returned to normal operations in a short timeframe.

8. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, several years of OCO have created higher-than-ever levels of maintenance requirements which have caused increased expenditures. DOD and the private sector have ramped up to meet these requirements, in the near term, to reset equipment and weapon systems. What are the maintenance implications of lessons learned in supporting the OCO and reset operations that will affect the future of DOD maintenance?

General STEVENSON. There are several major implications from lessons learned in supporting OCO that will affect the future of DOD maintenance. The ability of our industrial facilities to adapt to the surge and ebb of Reset workloads underscores the importance of Core to sustain the right skill sets. The flexibility of our workforce using permanent, temporary and contracted labor has enabled our OIB to respond as needed. Moreover, the investment in our facilities provides the right capacity to achieve the outcomes realized.

The Depot Level Reset Repairs, especially those constituting full recapitalization or rebuild, have reduced future maintenance liabilities for systems which otherwise would be approaching the end of their life-cycles and therefore would be more expensive to maintain. In addition, wartime experience has refined fleet management strategies for many systems and adjusted our supply chains accordingly.

The Army optimizes repair expenditures based on maintenance lessons learned during OCO. We can forecast the expenses associated with deploying and Resetting specific pieces of equipment.

General PANTER. The Marine Corps conducts annual capacity and capability analysis to ensure preparedness to execute planned and budgeted/funded customer workload at its maintenance depots. There are many dynamic variables that affect requirements for reset. For example, the Marine Corps had a well planned OIF reset strategy and plan in place, but world events caused significant modification to the plan as the Marine Corps surged personnel and equipment into Afghanistan.

The Marine Corps' depots have routinely responded to lessons learned from previous wars and aligned themselves to readily meet the needs of their customers for reset of warfighting equipment. While the level and scope of capability required to execute reset remains unknown, the flexibility of the depots' HCP already incor-

porates the ability to acquire skilled personnel within short timeframes. The build-up is considered temporary.

In addition, the depot is undergoing investment projects which will be able to support either continual warfare or reset. Until decisions are made on the eventual OEF draw down phasing, velocity and Force structure and size; the depots will not be able to fully determine throughput requirements. However, as in past wars, the depots have proven their ability to quickly respond to these needs.

General RENO. OCO and reset operations have not significantly impacted the way we do maintenance. The Air Force's depot maintenance requirements for aircraft and engines are very structured and calendar-based or operating hour-based. For this reason, the depot maintenance of these systems has been ongoing. The aircraft or engines return from the Area of Responsibility to the depot when the maintenance schedule dictates. This process ensures the right assets receive the required depot maintenance at the right time and enables the Air Force to execute its logistics campaign strategy for future engagements.

Admiral BURKE. Navy ship and submarine class maintenance requirements are continuously updated based on current material condition and maintenance issues, capturing changes "in stride" resulting from OPTEMPO changes, and ensuring ships can reach their expected service life. Consequently, there are no significant implications from supporting OCO and reset operations. Naval Shipyard capacity and capability, including workforce, tools, equipment, parts and infrastructure capacity, are sized to accomplish the maintenance requirements of assigned ships and submarines, as part of the annual programming and budgeting process.

During OCO operations, Naval Aviation has been able to absorb the scheduled depot requirements driven by OCO with minimal increase in permanent personnel or facilities. Forward deployed Contract Maintenance Teams (CMTs) were added to assist Sailors and Marines with day-to-day maintenance requirements, along with an increased pool of fly-away artisans to ensure expeditious depot-level repair while in the field. Navy expects to draw down both the CMTs and size of the fly-away teams as we return to normal peacetime flying operations.

9. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, DOD has acquired millions of dollars in tactical non-standard equipment to address the evolving threat in Iraq and Afghanistan, including the enemy's use of improvised explosive devices (IED). To what extent are you considering this nonstandard equipment purchased by Joint IED Defeat Organization (JIEDDO) and others to meet urgent warfighters' needs as equipment that should be added as standard equipment to unit requirements?

General STEVENSON. JIEDDO currently develops and equips counter-IED capabilities in response to joint urgent warfighter needs. Proven fielded capabilities are sustained by JIEDDO for a maximum of 2 years then transferred to the Services for sustainment. JIEDDO and the Services develop an annual Transfer/Transition (T2) list utilizing JIEDDO's Transition Working Group (TWG). Headquarters Department of the Army (HQDA), Deputy Chief of Staff, G–3/5/7, serves as the Army lead to the TWG and works with JIEDDO to integrate/transfer proven CIED capabilities to the Army after 2 years of JIEDDO funding. Transferred capabilities are sustained in the G–3/5/7's annual OCO funding request until the Army decides which proven materiel/non-materiel capabilities will be recommended to become enduring through the Capabilities Development for Rapid Transition (CDRT) process.

The Army instituted the CDRT process in 2004 to identify nonstandard equipment and (later) non-materiel solutions developed by JIEDDO and others that the Army should incorporate throughout the force as enduring. The CDRT process was also developed to significantly reduce the time it takes to field selected enduring capabilities to the operational force. To date, 18 of 86 (21 percent) JIEDDO initiatives were transferred to the Army and identified as enduring in CDRT. Enduring capability examples include: Battlefield Forensics Training, Husky Mounted Detection System (HMDS) and Greendart. Additionally, the CDRT process has selected 54 of 556 (10 percent) capabilities purchased by other agencies as enduring. Examples include: Common Remotely Operated Weapons System (CROWS) and Command Post of the Future (CPOF).

The CDRT process does not bypass the JCIDS process for materiel systems, but leverages a provision in Chairman of Joint Chiefs of Staff Instruction (CJCSI) 3170.01 that provides for a military utility assessment enabling entry into the process at a later stage if a system has performed successfully. The Joint Staff and the Army have interpreted this provision to apply to nonstandard systems performing well in an operational environment.

Capabilities identified as enduring are transitioned into new or existing acquisition programs. These enduring capabilities are assigned to a U.S. Army Training

& Doctrine Command combat developer, and an Assistant Secretary of the Army (Acquisition, Logistics, and Technology) materiel developer.

General PANTER. Nonstandard equipment purchased by the JIEDDO with U.S. Marine Corps (USMC) equity is submitted to the Marine Corps Combat Development Command (MCCDC) for consideration for transfer or termination. The Marine Corps published a Marine Corps Administration Publication in October 2009 that outlines the procedures to determine viability of the equipment (MARADMIN 0595/09). In accordance with this MARADMIN, the initiative is submitted to the Capability Development Integration Board (CDIB) for processing through the Urgent Universal Needs Statement (UUNS) Process. The equipment is validated by the operating forces through the Marine Component of Central Command (MARCENT) and voted on by members of the CDIB. If the system is acceptable to the CDIB, it sends a memo to the Marine Corps Requirements Oversight Council (MROC) for approval and funding decision.

Two systems that have transferred successfully to the Marine Corps are Counterbomber and Keyhole. Counter Suicide Bomber Capability "DRAGON–VISION" combines video tracking and an active, non-imaging radar to interrogate human torsos for anomalies. KEYHOLE is a Counter-IED Reconnaissance, Surveillance, & Target Acquisition (C–IED–RSTA) Kit. This initiative provides Marine Corps snipers enhanced detection equipment, increases force protection and reduces the enemy's ability to emplace IEDs.

General RENO. The Air Force has used much of the Joint Improvised Explosive Device Defeat Organization (JIEDDO) fielded equipment in association with Mine Resistant Ambush Protected (MRAP) Vehicle program and Counter-IED operations supporting Joint Task Force Paladin and Joint Task Force Troy. The majority of this equipment is fielded and currently accounted for on theater provided equipment accounts, which are managed by the Air Force, Army, or Central Command. The Air Force is transitioning MRAPs from vehicle management to weapon systems management and in that process is identifying multiple JIEDDO funded systems to be considered as standard MRAP equipment and accounted for on Air Force property records as a program of record.

The Air Force is not considering adding nonstandard JIEDDO purchased equipment fielded to Joint Task Force Paladin in Afghanistan and Joint Task Force Troy in Iraq to Air Force property records and that are picked up as a program of record.

Admiral BURKE. Equipment purchased by JIEDDO or others to meet urgent warfighter needs are reviewed/evaluated for potential to fill a capability gap, provide enhancement to legacy systems and/or be addressed within requirements of planned development programs to meet future warfighter needs. Examples are: (1) Specific components from EOD Dismounted Tool Suite (JUON CC–0402) were added to force's equipage list; and (2) Non-Line-of-Sight (NLOS) capability for robots (JUON CC–0412) has been incorporated within the capabilities development document for Advanced EOD Robotic System (AEODRS) program.

10. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, to what extent has DOD identified future maintenance and other sustainment costs for these items that will have to be funded in the future?

General STEVENSON. The Army's Capability Development Rapid Transition (CDRT) process along without the System Acquisition Life Cycle process ensures that systems that are enduring are considered for future maintenance and other sustainment costs. Items that are enduring will transition to a Program of Record and will be included in the Army's Base budget requests.

General PANTER. Through the JIEDDO, Special Equipment Items (SEI) were purchased as a result of Urgent Universal Needs Statements (UUNS); therefore, there was no initial long-term sustainment requirement planning conducted. However, items identified as standard equipment to unit requirements will be put through the DOTMLPF process in order to determine overall sustainment cost requirements.

In the interim, these items will continue to be sustained by OCO funds, while we collect historical data from similar systems and current data from these unique items to determine projected sustainment costs.

General RENO. The Air Force is transitioning MRAP vehicles from vehicle management to weapon systems management. We are also in the beginning stages of working the maintenance and sustainment transition plans and cost estimates to move MRAP vehicles from a joint program to a Service-sustained program. At this time, maintenance and sustainment costs have yet to be determined.

Admiral BURKE. The Navy takes a holistic approach when adding equipment to a Table of Allowance (TOA) and coordinates across stakeholders to plan for resourcing and programming sustainment costs. Further, when equipment is trans-

ferred from JIEDDO or through other urgent warfighter needs processes, coordination takes place between the Program Offices and the resource sponsors to ensure program sustainment funding is in place.

WORKING CAPITAL FUNDS

11. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, GAO has done some great work on the Services' Working Capital Funds, more specifically the Army and Air Force. I recently drafted a letter to examine the Marine Corps next. How do we do a better job at managing cash on hand and carryover issues?

General STEVENSON.

DWCF Cash

Managing cash on hand is a very complex task as reflected by GAO audit coverage. The Department is currently conducting a cash study, which was directed by the National Defense Authorization Act (NDAA) for Fiscal Year 2011. The Army supports this cash study and anticipates the review will provide recommendations and best business practices that will further improve cash management.

Carryover

The Army continues to work aggressively to meet production schedules and minimize carryover by using higher than normal overtime, multiple shifts, and contractors in the workforce. In addition, senior leaders are working intensively to eliminate production roadblocks. The Army will continue to push to accomplish as much workload as possible so that carryover is minimized. It should be noted, however, that the later in the fiscal year that the appropriations bill is passed, the more likely it is that there will be carryover issues.

General PANTER. The Marine Corps readily accepts, appreciates and welcomes any help, assistance, and/or guidance that the GAO can provide to help achieve more effective and efficient depot operations.

With respect to managing cash on hand and how the MC can do a better job: The Marine Corps depots have struggled to maintain the 7–10 day on hand cash levels. However, beginning this fiscal year, as a result of a 2 year tiger team analysis of revenue and outlay patterns, we managed to establish a level of stability and compliance with the on hand cash levels.

The tiger team continues to work elements of operations affecting cash and employing performance metrics aimed at ensuring cash is managed by activity.

Managing carryover for the depots has also been a struggle. The timeframe required to complete a heavy workload in support of home-station training requirements and sustain OEF operations, including the additional hours required to repair heavily damaged weapon systems, has impacted the ability of the depots to comply with the elements of a peace time designed carryover threshold metric.

In 2008, the same tiger team approach for cash was applied to carryover. As a result, organizational problems such as timely fiscal job closure, pursuing customer order reductions for closed workload, and working with DFAS to track and clear problematic system errors were addressed. The tiger team review of these issues and other systemic and customer behavioral elements (i.e. customer financing needs, statement of work comprehensiveness and funding availability) produced results in 2009 when we achieved a historic 4.9 million direct labor hours and $589 million in revenue and were only $38 million over the carryover ceiling.

In fiscal year 2010, we continued this progress with basically the same level of direct labor hours (4.5 million) and revenue ($580 million) and were only $19 million above the ceiling. The team continues its work today by closely monitoring performance metrics and stakeholder coordination to help reduce carryover. In many cases, carryover has been exacerbated by late funding and Continuing Resolution Funds (CRFs). While the Marine Corps worked hard to obtain funding, other services or accounts were delayed. Regardless, the depots accepted work because it needed to be done.

General RENO.

Carryover

In fiscal year 2010, Headquarters Air Force and Air Force Materiel Command (AFMC) began implementing actions to improve the accuracy of Air Force Working Capital Fund (AFWCF) carryover budgets. First, the Air Force began including OCO-funded orders in the fiscal year 2012 AFWCF budget. Second, we requested and received approval from the Office of the Under Secretary of Defense Comptroller (OUSD(C)) Revolving Funds to use an alternative outlay rate for software

maintenance workloads when calculating the allowable amount of carryover. We requested the alternative outlay rate because software work is fully funded upfront but requires years to complete, and in many cases, requires the procurement of hardware from vendors. The alternative outlay rate is expected to reduce future variances between budgeted and actual allowable carryover. Third, AFMC is taking steps to improve workload and budget forecasts. Specifically, in December 2010, AFMC developed a process which improves coordination between organizations that affect the performance of depot maintenance work (i.e., systems program office, maintenance wings, and supply chain managers). To accommodate workload requirement changes, this initiative includes an approval process to adjust future budgets and workload estimates. The Air Force expects these changes will improve on-time aircraft and missile performance and reduce variances between budgeted and actual carryover.

Additionally, the Air Force implemented the following GAO recommendations into the AFWCF budget process. First, we will compare budgeted carryover that is over or under the allowable amount to the actual amount to identify the difference and reasons for the differences, and consider these trends in developing future budget estimates on carryover. Next, we will compare budgeted orders to actual orders to identify the differences and reasons for the differences and consider them when developing future years' budget estimates on new orders received from customers. Finally, we will compare the forecasted workload requirements (i.e., number of hours of depot maintenance work to be performed) to the actual work accomplished and consider these trends in developing future years' depot maintenance workload requirements.

Cash

The DOD cash management policy is to maintain the minimum cash balance necessary to meet both operational requirements and disbursement requirements in support of capital programs. Thus cash levels should be maintained at 7 to 10 days of operating cost plus 6 months of capital disbursements. Cash generated from operations is the primary means of maintaining adequate cash levels. The AFWCF generates cash by setting revenue rates to recover full costs to include prior year losses, accurately projecting workload, and meeting established operational goals. In the event workload or operational performance differs from budget and drives cash levels outside the target range, Working Capital Fund organizations are permitted, with permission of the Director of OUSD(C) Revolving Funds, to direct out-of-cycle rate adjustments or surcharges at any time during fiscal years to restore cash to targeted levels. In fiscal year 2010, as a result of increased workload associated with the surge, the Transportation Working Capital Fund was able to: (a) reduce rates by $243 million; (b) relieve the Air Force of funding the Airlift Readiness Account for $315 million;, and (c) waive the cash recovery funding requirement of $663 million. These actions returned over $1 billion to the Services and AFWCF ended the fiscal year with $945 million, 8 days of cash. This type of proactive cash management is employed to maintain sufficient cash levels within AFWCF.

Additionally, we are collaborating with OUSD(C) Revolving Funds on the working capital funds cash study required by section 1402 of the NDAA for Fiscal Year 2011 and look forward to the resulting findings and cash management process improvement opportunities.

Admiral BURKE. Currently the Department's Navy Working Capital Fund (NWCF) cash balance is aligned with the 7–10 days operations, plus 6 months Capital Investment Program (CIP) outlay metric. Section 1402 of HR 6523 EH directed DOD to conduct a study on cash balances, which is ongoing. The Office of Revolving Funds, OUSD(C), is the lead for this action.

12. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, do we need a war-time versus peace-time policy?

General STEVENSON. We currently believe there is no need for a separate wartime versus peacetime policy pertaining to the cash requirement computation. This computation takes into consideration the level of workload at industrial facilities as well as the level of demands placed on the supply system. Currently, the Army Working Capital Fund philosophy is to maintain a "cash corpus" to cover current disbursements and future capital expenditure by budgeting for 7 to 10 days of operating cash which keeps us in compliance with the Antideficiency Act.

As directed by the NDAA for Fiscal Year 2011, DOD is conducting an independent review of each working capital fund within DOD to ascertain the appropriate cash corpus required to maintain good financial management of the funds. The Army supports this cash study and anticipates the review will provide recommendations

and best business practices that will further improve cash management. The 7- to 10-day metric could be adjusted based on the results of this study.

General PANTER. Absolutely. In particular, any way to encourage more timely release of supplemental funding to appropriated customers in order to adequately execute their war time requirements would be extremely helpful. In addition, a carry-over policy with more relaxed over-the-threshold metrics would help to support both the depot and the combatant commanders. The heavy workload in support of home-station training requirements and OEF operations, including the additional hours required to repair heavily damaged weapon systems, do not readily align with peacetime or static operations.

General RENO. The AFWCF executes orders from customers that are both peacetime and war-time funded. The customers have applied Office of Management and Budget (OMB) guidance to define these requirements. The OMB guidance "Criteria for War/Overseas Contingency Operations Funding Requests", dated July 2010, was provided to assist DOD in deciding if requirements should be funded with OCO funding. The Air Force accepts this guidance as sufficient policy to distinguish peace-time and war-time requirements. Thus, AFWCF customer orders are based on the above referenced OMB guidance.

Admiral BURKE. DOD generally prepares a peace-time budget. However, following the events of September 11, 2001, enhanced security and force protection requirements are now permanent parts of peace-time budgets.

13. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, is 7 to 10 days enough of a window for combat operations?

General STEVENSON. We currently believe 7 to 10 days of cash is enough of a window for combat operations, but the Department is conducting a cash study as directed by the NDAA for Fiscal Year 2011. The Army supports this cash study and anticipates the review will provide recommendations and best business practices that will further improve cash management. Based on the results of this study, the 7 to 10 day metric could be adjusted.

General PANTER. While it is possible that 7 to 10 days may not be enough in a costly war, expanding the on hand days of cash may cause more problems than what the Services are already experiencing. It is our belief that employing the tiger team process improvement metrics, working with DFAS on collections and systemic problems, working with contracting officers on viable outlay schedules, and working internal and external performance operations related to billings and revenue collections, the 7 to 10 day level should be sufficient.

General RENO. Yes. The current range of 7 to 10 days of cash is sufficient for combat operations. Although AFWCF disbursements may increase during combat operations, AFWCF collections also increase which tends to negate the effects of the increased disbursements on the cash balance (reflecting higher customer demand).

Additionally, the Air Force is collaborating with the Office of the Under Secretary of Defense Comptroller Revolving Funds on a working capital funds cash study required by Section 1402 of the NDAA for Fiscal Year 2011. The legislation directs the performance of a study on working capital fund cash balances to determine a sufficient operational level of cash that each revolving fund of (DOD should maintain in order to sustain a single rate or price throughout the fiscal year. The study will also provide an up-to-date perspective on cash requirements since it takes into account existing DOD practices.

Admiral BURKE. Navy Working Capital Fund (NWCF) activities are not involved in combat operations, but provide support to readiness and combat operations. Hence, there is no impact on the 7–10 day cash metric.

14. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, Vice Admiral Burke, how do we balance a decline in combat operations with decreasing work orders and cash on hand?

General STEVENSON. As combat operations decline, we expect to see overall customer orders decline within the Army Working Capital Fund. The supply management business will be impacted most immediately as operating units return to home station or demobilize, placing fewer demands for spare parts on the supply system. The industrial operations business will continue to reset and recapitalize equipment returning from theater over a period of years but at reduced levels from wartime highs.

In anticipation of a decline in combat operations, the supply management business has not been replenishing inventory sold over the past several years on a one-for-one basis. Buying less inventory than sold helps preserve cash on hand as supply system orders decline. To minimize the impact of reduced workload on our depots,

the Army has identified critical core requirements that must be resourced to support capabilities for future contingencies. In addition, the Army is examining fleet strategies and whether other equipment items should be put through depot maintenance to sustain readiness and help maintain efficient depot workload levels. These actions also help preserve cash on hand.

General PANTER. Both cash on-hand and work orders are relative to points in time as well as the performance metrics for such timeframes (i.e. as outlay/disbursing rates change, so does on hand cash level requirements). Not to oversimplify a multifaceted and somewhat difficult management process, the Marine Corps Working Capital Fund depots align their budget, finance and execution with customer demand. As such, if workloads decrease due to a decline in customer work orders, adjustments are made for personnel and other support utilizing the current temporal contractual and other hiring terms that include the agility and flexibility to readily respond to customer change in demand. As the change in demand completes in execution; so does on hand cash calculations. These are balanced with continual attention to performance metrics and proactive and reactionary strategies as we work with stakeholders for compliance and support as necessary.

As point of note, even with an eventual decline in combat operations, we anticipate depot maintenance work will continue at least 2 years after the war and funding will be needed.

General RENO. Declining combat operations does not necessarily result in reductions in orders or cash on hand. As a result, AFWCF activities work closely with customers in projecting requirements for our products and services. This collaboration is critical to the AFWCF correctly budgeting for customer demand whether the operations tempo is increasing, decreasing or steady. The process enables the AFWCF activities to plan for volume and mix changes in both maintenance and supply chain requirements. As a result, we ensure revenue rates are set to recover our operating costs and to maintain sufficient cash on hand, commensurate with the level of orders projected.

Admiral BURKE. Although a decline in combat operations may negatively impact some workload, the cash metric requirement (7–10 days operations plus 6 months Capital Investment Program (CIP) outlays) remains applicable, even if calculated on a smaller base of workload. NWCF depots formulate their annual operating budgets using information obtained from customers about changes in workload levels and schedules, so that adjustments can be made to NWCF workforce, production support, and infrastructure elements in a timely manner.

DEPOT MAINTENANCE REPORT

15. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, in the past 5 years, what steps have depots taken to ensure core capabilities will be maintained in a post-reset environment?

General STEVENSON. The Army has taken a number of steps to ensure the Army depots play an integral role in the depot core requirements determination and sustaining workload processes in a post-reset environment. The Army acknowledges that an effective core depot process is essential to the goal of developing and sustaining a relevant OIB. Thus, the core depot process is the centerpiece of the Army's recently developed OIB strategy.

As current overseas operations begin to wind down, the Army's OIB enterprise must adjust to a changing operational and fiscal environment. In order to manage the eventual reduction in depot maintenance requirements the Army has developed four overarching strategic pillars that are being implemented to ensure the Army's OIB retains the necessary core competencies and capacities to meet future contingency operations, as described below:

- Modernization: The need to ensure our Army depots are modernized with new technology, training and plant and equipment at the same rate that the Army modernizes its weapon systems. Critical to this pillar are actions ongoing that better align and document sustainment requirements with the acquisition strategies for new weapon systems. Key to this is recent policy that requires the development to conduct a Core Logistics Analyses (CLAs) by Milestone B and Core Depot Assessments (CDAs) by Milestone C to identify core requirements early on in the development cycle of a weapon system.
- Capacity: The actions necessary to document the core competencies and the minimum number of DLHs necessary to sustain the identified core competencies at each facility. The identified workload supporting core com-

petencies will form a basis for capacity and capability assessments to ensure our organic depots are sized correctly. The Army has taken action over the past 2 years to identify and correct core capability shortfalls in our organic depots to include, OH–58D, Bradley Fighting Vehicle, Stryker and M88A1/A2.

• Capital Investment: The actions necessary to develop a capital investment strategy that focuses the Army's capital investment funding to improve each depots core competencies and capabilities. This ensures that the Army is investing in capabilities that contribute to a facilities core mission set to enable world class depot operations. The CIP Plan identifies the facilitization requirements to establish core capabilities at organic depots such as facility upgrades, plant equipment, tooling, access to technical data, workforce training, and other facilitization requirements are planned, funded, and implemented.

• Resource Alignment: The Army's ongoing process to prioritize depot maintenance funding so that depot workload which contributes to sustaining the depots core competencies are funded across the FYDP. This pillar has been completed and was implemented beginning in POM 11–15.

The focus on core capabilities provides the Army's OIB enterprise the mechanism to ensure Army depot workforces and infrastructures are aligned and sized properly and remain a ready, responsive, and flexible source of support during future contingency operations. This process provides a basis to determine the appropriate funding required to sustain depot core requirements which, in turn, ensures that the Army's industrial base retains the technology, knowledge, skills and abilities needed to sustain our critical warfighting equipment throughout the system's life-cycle.

General PANTER. The Core Capabilities requirements for all the Services are currently calculated on a bi-annual basis to ensure Depots operate proficiently through adequate equipment, facilities, and skill sets that enable them to meet Core requirements. The amount of volume based on past Reset requirements could be well above Core requirements (e. g., war related reset requirements could be part of the 'above Core' requirements).

- The Marine Corps recognized opportunities for improvement in the Core Determination process and initiated a study in fiscal year 2009 to identify/rectify the gaps/voids/weaknesses in the process.
- The study expanded to include both halves of the core scenario:
  - Industrial Depot Maintenance Core Logistics Capabilities Determination
  - Acquisition Core Determination (designation of new weapons systems as core or non-core)
- Gaps/voids/weaknesses were identified.
  - 12 Industrial (5 process related, 7 policy related)
  - 5 Acquisition (1 process related, 4 policy related)
- COAs to resolve were selected.
- Actions ongoing
  - Development of Automated Systems to resolve process issues
  - Policy review/rewrite to resolve policy issues

Marine Corps depots are engaged in continuous process improvements in the facilities which support the maintenance of our equipment. This is done by investing an average of 6 percent of working capital funds toward these type of improvements. Additionally, the Marine Corps has leveraged greater capacity from the U.S. Army to yield more efficient returns on select platforms such as the M–1 tank that receives depot level maintenance at Anniston Army Depot.

General RENO. The Air Force identifies core requirements early in the acquisition process utilizing the Depot Source of Repair (DSOR) process. The DSOR process identifies the core logistics capabilities required by 10 U.S.C., § 2464 for the program office and the candidate depot. This ensures that all parties understand the requirement to develop and maintain those capabilities necessary to sustain the weapon systems. The program office works with the depots to stand up the core capability and the depot maintains the capability at a level to support the Air Force mission. The organic depot maintenance requirements for aircraft and engines are very structured and calendar or operating hour-based. The Air Force has continually reset equipment as it has returned or rotated back from theater using OCO funding. For WSS, Resource Management Decision 700 directed the Air Force to develop a plan to fund the baseline at 80 percent of requirements by fiscal year 2016. This plan requires increased baseline funding to sustain enduring WSS requirements when OCO funding ceases.

Admiral BURKE. In the past 5 years, the Navy has focused on becoming more efficient and effective in delivering our products to the Fleet. Naval Aviation has continued with a distributed maintenance philosophy, and in some areas has co-located depot artisans with intermediate level maintainers to interdict and repair components close to the flight line. This saves turn-around-times (TAT), cost, sparing requirements, and improves the knowledge and skills of our military maintainers. The Navy has centralized the Capital Investment Program (CIP) and initiated a CIP Working Group that is responsible for improving the process, managing the portfolio, and acquiring replacement machinery, tools, information technology systems, and minor construction to maintain the Fleet Readiness Center's capabilities.

Navy ship and submarine class maintenance requirements are continuously being updated, based on current material condition and maintenance issues (e.g., superstructure cracking), and capturing changes "in stride", resulting from OPTEMPO changes. Naval Shipyard capacity and capability, including workforce, tools, equipment, parts, and infrastructure capacity, are being sized to accomplish the maintenance requirements of assigned ships and submarines, as part of the annual programming and budgeting process. As the ship and submarine maintenance requirement changes, shipyard workforce and infrastructure are also adjusted based on the long-range workload projections and facilities plans that support them.

WORKING CAPITAL FUNDS

16. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, to what extent have the Services conducted periodic reviews of their organic depot maintenance facilities to ensure that they have the necessary skills and capabilities needed to reset equipment in a timely manner and respond to the Services' rapid change in force structure and equipping requirements related to Service equipping strategies and modernization goals?

General STEVENSON. The Army monitors organic maintenance facilities' performance, capabilities and infrastructure at both the Headquarters Army Materiel Command (HQAMC) and Headquarters Department of the Army (HQDA) levels. This is an ongoing process that occurs and is integrated within the Army's overall Industrial Base management process. The following are examples of forums used:

> HQAMC conducts weekly production reviews that provide a complete overview of the health of the OIB to include financial, productivity, safety and workload execution.
>
> HQDA conducts a quarterly Depot Maintenance Corporate Board that provides strategic guidance and direction for the Army's depot maintenance efforts and ensures that the depot maintenance enterprise complies with all Army policies, regulations, and guidance.
>
> HQDA Capability Integrated Process Teams that are chartered to strengthen and resolve policy issues, resolve core capability and workload issues and ensure Army OIB stakeholders are informed and implement the core depot process correctly.

The Army Working Capital Fund Capital Investment Strategy (CIS) is also a key enabler to improving the effectiveness and efficiency of our industrial base facilities. CIS recommends investment in the depot and arsenal infrastructure, ensuring facilities maintain technological capability and currency. In fiscal year 2010, the Army invested $167 million in depots and arsenal projects; an additional $155 million is programmed for fiscal year 2011 and fiscal year 2012.

Future planning incorporates the experience gained in the Reset of equipment redeployed from Iraq and Afghanistan. This planning is informing current and future investments in the infrastructure and the workforce. The Army is committed to a modernized industrial base infrastructure that is resourced to sustain current and future core capability requirements.

General PANTER. The depots have a strategic plan in place to ensure they have the capability and capacity to execute current and future workloads. This includes 5-year and 20-year plans for infrastructure considerations for industrial facilities in order to facilitate mid and long-term workload forecasts. The Capital Investment Program (CIP) addresses planning, budgeting, procurement, and management-in-use for all capital assets. CIP uses the Strategic Plan to reinvest and develop projects for new equipment, minor construction and IT programs to meet the needs of our operating forces. To maintain skills and capabilities, the depot teams, along with civilian counterparts and academia, ensure the depots have the skills and capabilities for the 21st century. The Strategic Plan along with the 5-year plan is a fluid document. The depots routinely analyze the workload requirements for the cur-

rent year and the next 2 fiscal years to determine the skill sets and quantities of each specialized skill set needed to execute the scheduled workload. This analysis is conducted twice annually, and each time a major change in workload occurs.

General RENO. The Air Force reviews core capabilities every 2 years to determine if the correct skills and capabilities exist within our organic depots to support core requirements. Force structure is continuously reviewed to ensure the correct skills are at the depots and adjusted to funds available for depot maintenance and repair efforts, per 10 U.S.C., § 2472.

Admiral BURKE. The Navy "resets in stride" after each deployment. Thus, a significant upward trend in workload at the conclusion of operations is not expected. However, Navy does perform core analysis biennially, in accordance with DOD instruction, to ensure that we have ready and controlled maintenance resources available when needed. Navy also has a well-established, rigorous, model-based process for determining maintenance requirements and associated /capability required to accomplish those requirements.

Maritime: Ship and submarine class maintenance requirements are continuously updated, based on current material condition and maintenance issues, thereby capturing any changes in ship maintenance resulting from changes in operational tempo. Naval Shipyard capacity and capability, including workforce, tools, equipment, parts, and infrastructure capacity, are sized to accomplish the maintenance requirements of assigned ships and submarines, as part of the annual programming and budgeting process.

Aviation: We will continue to induct aircraft for scheduled maintenance events, based on fixed period end dates which allow us to budget, plan, and execute without having to establish a stand-alone "reset" program. The engine and component Depot work is driven by flight hours and environmental exposure. These areas have seen a slight (less than 7 percent overall) increase in workload since the beginning of operations. This workload has been absorbed by the normal Depot workforce through overtime or augmentation by contractor support; both of which are temporary and can be returned to normal operations in a short timeframe.

17. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, what were the results of those reviews?

General STEVENSON. In accordance with the Army's industrial base management process, the Army assesses, prioritizes and funds the necessary changes needed to address any noted deficiencies and/or shortfalls. For example, since fiscal year 2010 the Army has established a Core depot capability for the OH–58 Kiowa Warrior at Corpus Christi Army Depot (CCAD), the Stryker family of vehicles at Anniston Army Depot (ANAD), the Bradley Fighting Vehicle A3 Configuration at Red River Army Depot (RRAD) and the M88A1 and M88A2 at ANAD.

The Army Materiel Command has also developed a 1-n list of all required capital improvements across various appropriation types to include Military Construction, Army (MCA), Army Working Capital Fund (AWCF) and Procurement Army (PA). This prioritized list identifies all of the projects in categories addressing issues related to Quality Work Environment, Safety, Security, Mission and Production. As a result, the Tier 1 projects have been funded for all AWCF CIP and PAA funded work. The Army continues to prioritize the MCA funded projects based on criticality and need.

We recently laid out an industrial base capability portfolio review for the Vice Chief of Staff of the Army that identified the risk associated with our capital improvement process and provided recommendations to minimize risk.

General PANTER. These reviews have resulted in new civilian partnerships which have decreased turnaround time to our customers. These reviews also allowed the depots to increase/decrease manpower in specific skill sets and modernize equipment to match/support the planned workload. Partnerships with local academia expanded the skill sets needed and refined equipment planning needed to support new assets brought in by our customers. Lastly, key Capital Investments have allowed us to reinvest in our facilities to better meet the needs of our operating forces.

General RENO. The results of the core capability reviews helped the Air Force prioritize the 6 percent investment in our depot infrastructure as required by 10 U.S.C. § 2476. The reviews were also major contributors to the Depot Source of Repair decisions used to determine organic and contact sustainment.

Admiral BURKE. Navy's latest core capabilities determination report continues to reflect a stable core workload. This aligns with the Navy's overall maintenance strategy to reset in stride. Maintenance decisions are driven by class maintenance plans and schedules to achieve ship and aircraft expected service life.

18. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, what types of employees (permanent, temporary, contractor) currently make up the depot workforce?

General STEVENSON. Depots hire a combination of permanent, temporary, and contractor personnel to make up the depot workforce.

Depots align their permanent direct labor workforce to meet core skill requirements. Temporary and contractual employees are added to offset the surge requirements which cause the spike in workload as a result of the war efforts.

General PANTER.

Marine Depot Maintenance Command (Albany):

Permanent Civilians	789
Temporary Civilians	11
Term Civilians	497
Total Civilians	1,297
Contractors	737
Total	2,034

Marine Depot Maintenance Command (Barstow):

Permanent Civilians	854
Temporary Civilians	2
Term Civilians	213
Total Civilians	1,069
Contractors	203
Total	1,272

General RENO. There are 24,694 Federal DOD civilian employees, 56 temporary workers, and 1,021 depot onsite contract augmentees as part of the Air Force depot maintenance workforce. These are the total numbers from the three Air Force depots; Warner Robins-Air Logistics Center, Robins Air Force Base, GA; Oklahoma City-Air Logistics Center, Tinker Air Force Base, OK; and Ogden-Air Logistics Center, Hill Air Force Base, UT.

Admiral BURKE.

FRC	Military	Civilian	Contractors
FRCSE	33	3,084	367
FRCSW	38	2,547	694
FRCE	42	3,293	221
Totals	113	8,924	1,282

TOTAL OF ALL: 10,319

The above data is a snapshot of on board personnel as of 6/9/2011. Totals for Military and Civilians obtained from Monthly Muster report and the ''1532'' report for civilians.

19. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, how will the depots manage this mix of workers as current operations draw down?

General STEVENSON. The combination of temporary and contract employees allows our depot workforce management to remain flexible and responsive to meet the Nation's requirements through working multiple-shifts, overtime and the additional hiring of a temporary workforce. Depots can quickly adjust the temporary workforce to the actual workload and avoids unnecessary turbulence in the permanent workforce. This flexibility eliminates further risk of future lay-offs, inefficiencies and increased cost of depot operations.

General PANTER. The Marine Corps will drawdown contractors first, followed by temporary and term workers. In the out years, Marine Corps Logistics Command is planning to maintain their permanent workforce at 85 percent of projection, filling 15 percent with contractors in order to provide flexibility and the ability to acquire unique skill sets without exceeding the size and cost of the permanent workforce.

General RENO. Air Force Materiel Command determines the amount of depot workforce required to perform the anticipated work as part of their planning process on an annual basis. They monitor and manage the workforce during the year of execution to deal with planning variances. If less work is planned, the workforce will be adjusted. Reducing civilian overtime work hours represents the most responsive reduction in capability that can be accomplished. Next would be to reduce the number of depot contract workers and temporary workforce employees. Additionally there are a number of management tools that the Air Force could employ to adjust the permanent workforce including normal attrition, the Volunteer Early Retirement Authority or Volunteer Separation Incentive Payment, or reduction-in-force following the appropriate approval processes.

Admiral BURKE. Navy expects that operations for ships and aircraft will not drop significantly as ground forces are reduced in CENTCOM. Therefore, Navy does not anticipate a large decrease in depot maintenance hours in its depots. Through long-range planning efforts, Navy will forecast the changes with sufficient lead time to manage the workforce through normal workforce management practices.

20. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, how do the Services ensure that the organic depot maintenance facilities are resetting the right equipment at the right time for the warfighters, given the challenges the Services face in maintaining visibility over equipment assets at any given time?

General STEVENSON. The Army has developed a requirements generation process that identifies equipment that will require repair or replacement upon completion of deployed operations. The Army's process identifies Reset requirements 18 months before the beginning of the fiscal year the equipment is expected to return. Requirements are reviewed and realigned prior to execution based on actual operational conditions and specific types and density of returning equipment. This has been successful formula for our Reset program but is always subject to change due to operational decisions that impact the return of equipment from the CENTCOM AOR.

Additionally, the Army utilizes a coordinated staff process that integrates Retrograde, Reset, and Redistribute (R3) to ensure equipment is repaired and returned to units in support of their next train-up and deployment cycle. We have visibility of equipment shortages and synchronize equipment production (acquisition and depot repair) and transfers to ensure that industrial base is resetting or providing the right equipment at the right time to warfighters to meet their ARFORGEN requirements.

General PANTER. In support of the warfighter, each year the Marine Corps conducts a deliberate planning process to identify, validate, and set requirements for our depot maintenance program as part of our Enterprise Lifecycle Maintenance Planning (ELMP) process. All major commands within the Marine Corps participate in this planning process. Each weapon system that has a designated depot maintenance strategy receives an in-depth analysis to ensure our depot maintenance requirements are aligned with each weapon system's lifecycle management strategy and the operational requirements of the Marine Corps. Through the ELMP process, the Marine Corps continually seeks to synchronize our reset efforts to effectively and efficiently prepare for follow-on combat operations.

Equipment accountability and visibility are always major challenges, particularly in a combat environment. Throughout the entire period that the Marine Corps has been engaged in OCOs, we have encountered accountability and visibility challenges. To meet these challenges, we have issued updated accountability policy from our headquarters; employed our Field Supply and Maintenance Analysis Office (FSMAO) in regularly inspecting and analyzing home station and deployed unit supply and maintenance accounts; used advanced MAGTF Logistics Support Systems to meticulously track and account for our equipment; and initiated fielding of our Global Combat Support System-Marine Corps, the system that will become the Corps's chief Enterprise Resource Planning (ERP) tool and accounting system. All of these techniques, coupled with our ELMP process and continuous engagement with deployed units, enable us to mitigate visibility challenges and reset the right equipment at the right time.

General RENO. The organic depot maintenance requirements for aircraft and engines are very structured and calendar-based or operating hour-based. For this reason, the depot maintenance of these systems has been ongoing. The aircraft or engines return from the Area of Responsibility to the depot when the maintenance schedule dictates. This process ensures the right assets have the required depot maintenance accomplished at the right time. The Air Force's scheduled depot maintenance process ensures we have visibility of our assets.

Admiral BURKE. Naval Aviation airframe depot maintenance is calendar based to ensure that the force is continuously maintained and reset in stride. The Fleet Readiness Centers (FRCs) perform the work according to a master induction schedule developed by Naval Air Systems Command in close coordination with the Fleet. The Resource Allocation Management Program (RAMP) is used to track each aircraft and all upcoming maintenance requirements to determine what needs to be placed in work. This planning directs the depots to perform the right work at the right time necessary to maintain future readiness levels. The FRCs continually update the maintenance status of work. In Naval Aviation, engine depot maintenance is demand driven based upon flight hours and engine reliability. The Fleet monitors engine inventories and directs engines that require depot level repair to the appropriate repair facility to ensure engine pool levels are maintained at CNO approved readiness levels.

The Navy Expeditionary Combat Enterprise maintains visibility of construction engineering support equipment through the Construction, Automotive and Specialized Equipment Management Information System. Combatant and small craft visibility is maintained through Naval Sea Systems Command Craft and Boat Support System. These management systems track data and location of all rolling stock and boats from cradle to grave, whether equipment is undergoing refurbishment at a depot, intermediate facility, or the unit level. Further, these systems maintain accountability of equipment in theater supporting the war effort. Resetting the right equipment at the right time is accomplished through condition based inspections, evaluation of maintenance records, and adhering to established maintenance plans.

21. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, do the depots have assets onsite that they do not have the funds to induct into maintenance? If so, will the fiscal year 2012 budget enable them to induct this workload?

General STEVENSON. Army Depots do not have any critical assets onsite that require funding for induction. The Army resourcing prioritization effort ensures that the most critical requirements are addressed to support the warfighter's requirements.

Fiscal year 2012 budget requests address the Army's requirements.

General PANTER. No. Currently, all onsite assets scheduled for induction into maintenance are funded.

General RENO. There have been no assets onsite that we have not inducted due to lack of funds. The Air Force has sufficient funds to induct workload into maintenance for fiscal year 2011; however, there is a need to realign funding between two budget activities to cover higher than anticipated maintenance requirements in our mobility portfolio. Additionally, the Air Logistics Centers just completed a long range workload review (fiscal year 2012 and fiscal year 2013) and no funding disconnects were identified.

Admiral BURKE. The Aircraft Depot Maintenance account is expected to end fiscal year 2011 with zero unfunded airframe and engine maintenance assets/requirements at the depots. Additionally, the fiscal year 2012 budget is properly resourced with baseline and anticipated OCOs funding to meet required scheduled maintenance inductions.

22. Senator MCCASKILL. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, what impact will the uncertainty of future increased combat operations, particularly in Afghanistan, have on future maintenance budgets?

General STEVENSON. We expect minimal impact on maintenance budget requests due to the uncertainty of future increased combat operations particularly in Afghanistan. We expect operations, particularly in Afghanistan, to decrease in the future. However, if there is an unforeseen increase in combat operations, there will be a corresponding increase in our future maintenance budget. This increase will be reflected in all of our OCO requirements—Sub-Activity Group (SAG) 135, which supports Left Behind Equipment (LBE) and in-theater repair and SAG 137, which supports the Reset of equipment upon its return.

As operational decisions are made, the Army adjusts its request for funding in subsequent submissions accordingly, up or down. For example, operational uncertainty may cause an increase in forces and subsequent increase in future Reset requirements or delay equipment available for Reset, thereby decreasing requirements in a given year.

Our OCO submission considers the equipment that will be left behind, equipment that will deploy and subsequently return, the current operational environment, equipping concepts, Operational Tempo (OPTEMPO) and equipment that will be re-

paired or replaced. This process has been effective in identifying our requirement for the last 9 years in spite of the uncertainty related to combat operations.

Future operational uncertainty along with the incremental cost of war will require the Army to submit supplemental funding requests for 2–3 years after hostilities end to ensure equipment readiness is restored for all equipment that returns from operations in Afghanistan and Iraq.

General PANTER. Our goal is to properly align our depot maintenance requirements with the current and planned equipment life cycle management strategies and projected combat operations. As we balance the depot maintenance requirements in support of current combat operations with the requirements planning for future combat operations, the uncertainty of combat operations and extent of equipment damage in Afghanistan will continue to impact the accuracy and completeness of our maintenance budgets. Not knowing when the equipment will return makes budget submissions problematic.

This reduced budget accuracy and completeness results in a potential disparity between requested funds and executed funds. We experienced this in the recent past (e.g., plan for retrograde of equipment in fiscal year 2010 did not occur).

Additionally, we anticipate depot maintenance work will continue at least 2 years after the war and funding will be needed.

General RENO. The uncertainty of future combat operations becomes problematic for depot workload during execution years. Depot budgets are built 2 years in advance based on projected, funded workloads as determined by customer requirements. For example, aircraft Programmed Depot Maintenance (PDM) is calendar driven. However, there may be increased corrosion or wear discovered during PDMs due to combat missions. These unknown requirements, which are not budgeted for, are absorbed by the AFWCF and included in future year rates. This process drives budget increases after combat operations have ceased until the involved systems have cycled through PDM.

Admiral BURKE. The Navy is forward deployed and constantly prepared for a range of contingency operations that may arise. While it is impossible to speculate the fiscal impact of any future contingency operation, small or short duration operations should have little impact on future maintenance budgets. However, larger or longer duration operations would require increasing the maintenance budget with increased baseline funding or a supplemental appropriation.

ARMY RESET PLANS

23. Senator MCCASKILL. Lieutenant General Stevenson, to what extent has the Army developed a comprehensive reset strategic plan to determine how it intends to address current and future reset requirements amid declining reset funds, increased repair costs at organic depot maintenance facilities, costs factors for in-theater maintenance equipment that will remain in Afghanistan, and the requirements needed to fund the repair of this equipment under the base budget along with other competing repair requirements?

General STEVENSON. The Army submits an annual request for OCO funds. The OCO submission reflects our best projection of funds necessary for current Reset requirements that will sustain acceptable readiness levels across the Army, while taking into consideration the dynamics outlined in your question—declining funds, repair costs at depot and in theater and subsequent transition of equipment to sustainment. Analysis of future Reset requirements is conducted to determine the Army's total Reset liability based on equipment densities in the theater of operations and is used as a management tool to develop future OCO requests.

Our OCO requests also cover the maintenance and sustainment of equipment in theater, which consists of equipment that deployed with a unit and Theater Provided Equipment (TPE).

The level of OCO support the Army has received fully funds currently projected Reset requirements. As the drawdown in Iraq comes to a close and operational conditions change on the ground, the Army's Reset requirements will also decline. The Army reviews its Reset requirements during mid-fiscal year to leverage and redirect OCO funding across Reset requirements. This comprehensive review enables the Army to make maximum use of the Reset OCO funds provided to meet evolving operational requirements.

Our depots are operating at peak levels of production and efficiency; levels which have not been seen since the Vietnam era. As a result, our depot rates have remained stable in most cases. The productivity of our depots has allowed us to conduct analyses based on Repair Cycle Times and the type(s)/densities of equipment

that remain in theater and determine that OCO funds will be required to reset our equipment for 2–3 years after the cessation of hostilities.

24. Senator MCCASKILL. Lieutenant General Stevenson, to what extent has the Army assessed the costs to reset equipment that remains in theater, the type of reset repair capability needed to repair this equipment upon return, and how this equipment will address unit shortfalls and readiness goals, ARFORGEN, force modernization for both Active and Reserve units, and modularity priorities?

General STEVENSON. The Army assesses the annual cost to Reset equipment remaining in-theater based on the size of equipment pools in Afghanistan, troop levels, and the operational tempo. The estimate considers the type of reset repair capability needed to Reset the equipment upon its return, the expected condition of the equipment upon its return, and the deployment duration and use of the equipment. The Army has adequate capacity at our installations and depots to repair the equipment within 2–3 years after the cessation of hostilities.

The output from our Reset process is prioritized to address unit equipment-on-hand (EOH) shortfalls to meet ARFORGEN readiness goals. Reset is also synchronized with the Army's equipment modernization strategies to ensure that we are upgrading equipment to meet the Army's overall modernization goals.

The Army has made significant strides, thanks to the support of Congress, to meet ARFORGEN readiness requirements. Current Army estimates indicate that EOH levels will achieve 92 percent for the aggregate Army (Active component - 93 percent; Army National Guard - 92 percent; and U.S. Army Reserves 90 percent) by the end of October 2012.

25. Senator MCCASKILL. Lieutenant General Stevenson, has the Army conducted any recent studies or reviews on the costs to fund and maintain reset beyond the end of OCO, and if so, what were the results or lessons learned from those studies or reviews?

General STEVENSON. In 2010, the Army participated in an OSD study to forecast Equipment Reset requirements. The results of that study indicated the Army will continue to need OCO funding as long as forces are in conflict plus 2–3 years to ensure all equipment is Reset upon return. The Army learned three lessons that have influenced our OCO funds management: (1) There is a significant amount of difficulty associated with projecting future Reset requirements given the unknowns of war; (2) A degree of flexibility is needed given our ability to project equipment conditions and Reset requirements 18 months prior to equipment return from theater in light of unforeseeable operational demands; and (3) Base programs are not adequately resourced to support the incremental costs of war.

There is a direct correlation between the time of submission and the accuracy of our budget submissions. The greater the time between our submission and actual execution the less accuracy in our budget requests. Conversely, the shorter the time between our budget submission and it's execution the greater the accuracy of our budget requests. As a result, the Army periodically reviews and updates it submissions and adjusts its Reset program throughout the year to ensure that requirements are aligned with available resources.

If OCO funding ends before hostilities then the Army would be forced to take risks in the scope of Reset efforts and in the readiness of equipment in order to balance the incremental costs of war with its peacetime requirements.

ARMY UNIT EQUIPMENT REQUIREMENTS

26. Senator MCCASKILL. Lieutenant General Stevenson, as the pace of overseas operations declines, the Army is resetting equipment and rebuilding the readiness of its forces. Two documents—the Modification Tables of Organization and Equipment (MTOE), and the Table of Distribution and Allowances (TDA)—provide the basic personnel and equipment requirements against which on-hand personnel and equipment are measured in determining unit readiness. Given that during our operations in Iraq and Afghanistan, U.S. Central Command (CENTCOM) repeatedly requested force capabilities that did not align well with Army MTOEs. What actions is the Army taking to review and update unit requirements so that they better reflect the needs of the combatant commands (COCOM)?

General STEVENSON. The Table of Organization and Equipment (TOE) is a doctrinally based organizational model that establishes the requirements baseline for our modular formations. The Modified Table of Organization and Equipment (MTOE) allocates Army equipment and personnel to address TOE requirements and serves to synchronize the delivery of manning and equipping solutions in support

of ARFORGEN. The Army annually reviews MTOEs to ensure they adapt to reflect lessons learned from war and provide the required capabilities to support our soldiers in combat. The Army recently initiated an assessment of Army MTOEs to review those factors causing low equipment on-hand readiness reporting. This assessment will identify other unit-owned equipment that may be recommended for inclusion on the MTOE or Consolidated Table of Allowance (CTA) as a new capability or as an Authorized Substitute or In-Lieu-Of item for a currently documented capability, and recommend removal of equipment identified as obsolete. An Army Staff review team is conducting assessments with unit leaders at Army unit locations and will provide a final report and recommendations to the Army leadership in November 2012.

27. Senator McCASKILL. Lieutenant General Stevenson, given that billions of dollars in equipment reset and reconstitution funds will be needed to rebuild the readiness of our forces, it is important that we sharply scrub our unit requirements and that this be completed sufficiently ahead of the budget process so that we use our funds smartly. To what extent will you be able to complete your update of unit equipment requirement documents (MTOEs and TDAs) in sufficient time to be considered in the development of the fiscal year 2013 budget request?

General STEVENSON. The Army reviews its MTOEs and TDAs at some level every year. Those routine processes are ongoing. In addition, at the request of the Chief of Staff, Army and Vice Chief of Staff, Army, an Army Staff review team is conducting MTOE assessments on site at select Army installations and will provide a final report to Army leadership in November 2012. In the interim, the results of these assessments have already resulted in adjustments to Army MTOEs. Finally, the Army is vigorously executing its "Line Item Number (LIN) Validation" process, which assesses individual LINs and recommends retention or removal from MTOEs. For fiscal year 2011, LIN Validation has already resulted in the removal of approximately 500 LINs from Army MTOEs for a wide variety of reasons. Likewise, action is being taken to remove equipment identified as obsolete. All of these actions result in adjusted MTOEs and TDAs for Army units which affect the fiscal year 2013 budget.

AIRCRAFT CONDITION-BASED MAINTENANCE

28. Senator McCASKILL. Lieutenant General Stevenson, I'm very concerned with aviation readiness in Afghanistan, as our helicopters are under high demand and flying well beyond their anticipated flying hours. The Army is currently engaged in an effort to install digital source collectors (DSC) on its manned aircraft (AH–64 A, AH64 D, CH–47 D, CH–47 F, MH–47 G, UH–60 A, UH–60 L, UH–60 M, MH–60 L, MH–6, and OH–58 D) in order to conduct Condition-Based Maintenance (CBM). The DSCs are being installed on all new production utilizing procurement appropriations. However, the funding of the transmission, storage, and analysis of the data is minimally funded and heavily leveraged with OCO funding at this point. An Army Acquisition, Logistics, and Technology (AT&L) report released this month cited; "there is clear evidence that CBM+ technologies and procedures have avoided at least three catastrophic Class A accidents that would have resulted in the total loss of the aircraft." What are the Army's plans to fit all manned aircraft with DSCs by the end of the fiscal year 2013 (October 1, 2013) when the Product Improvement Pilot Program (PIPP) is set to sunset?

General STEVENSON. By the end of fiscal year 2013 we will have completed installing digital source collectors on 89 percent of the manned aviation fleet (3180 aircraft of the a 3572 fleet) leveraging the PIPP authorization. Completion of the entire fleet will not occur before fiscal year 2019, using procurement appropriations, due to a combination of fielding schedules and the materiel solution that is still in development for the CH–47F aircraft.

29. Senator McCASKILL. Lieutenant General Stevenson, will the Army be requesting an extension of the PIPP beyond fiscal year 2013? If so, why?

General STEVENSON. No, the Army has no plans to request an extension to the current PIPP authority. The Army has taken advantage of the current authority and is in the process of completing an assessment of the Aviation Pilot Program. As requested by the current legislation the Army will provide a report and recommendation to Congress in fiscal year 2012. At that time the Army will provide a recommendation to discontinue the authority or to make it permanent.

30. Senator MCCASKILL. Lieutenant General Stevenson, what are the Army's plans to appropriately fund the transmission, storage, and analysis of the data that are important to improving maintenance efforts, decreasing maintenance and spare part costs, and increasing readiness?

General STEVENSON. The Army programs the resources to support Condition-Based Maintenance (CBM) functions, such as CBM data storage, analysis and transmission, within the normal budget cycle, as part of Central Supply Activities (CSA). The fiscal year 2012 President's budget request is sufficient to meet our CBM data storage, analysis and transmission critical requirements. The long-term strategy for CBM data transmission, storage and analysis includes the integration of actionable logistics data in a future increment of the Global Combat Service Support-Army (GCSS–A). The engineering unique CBM data transmission and storage requirements to enable weapon system performance analyses are separately funded from the GCSS–A.

31. Senator MCCASKILL. Lieutenant General Stevenson, what are the outcomes/results of the condition-based maintenance effort thus far in terms of readiness, cost-savings, etc.?

General STEVENSON. Army Aviation's outcomes/results of Condition-Based Maintenance in terms of benefits to date include a 3.8 percent to 12.4 percent reduction in Non-Mission Capable Maintenance rate, a 5 percent to 8 percent increase in fleet readiness, and a 1 percent to 4 percent reduction in Maintenance Test Flight Hours. These results have increased our combat power, reduced maintenance cost and have provided critical information that avoided catastrophic failures during flight.

32. Senator MCCASKILL. Lieutenant General Stevenson, what is the overall goal of the CBM effort in the Army?

General STEVENSON. The overall goal of Condition-Based Maintenance-Plus (CBM+) is to increase combat power by performing maintenance and supply functions based upon evidence of need. The four CBM program objectives to meet this goal are to decrease the maintenance burden, increase platform availability and readiness, enhance safety, and reduce Operations and Support costs. This process is enabled by using Digital Source Collectors (DSC) that record data such as vibration, heat and engine starts, as an indicator of future or impending failure. The data collected is used to revise our maintenance processes at the field and sustainment levels of maintenance. For example the Black Hawk's oil cooler bearing is prescribed to have 1,250 flying hours of life. Using CBM monitoring and data, the bearing may remain on the aircraft for as long as 3,200 hours, thus reducing unnecessary maintenance and replacing parts that still have a useful life.

ARMY PREPOSITIONED STOCK

33. Senator MCCASKILL. Lieutenant General Stevenson, as contingency operations in Iraq decline, the Services have begun reconstituting their prepositioned equipment. At the same time, the Services have begun to review future requirements for their prepositioned stocks. I understand that DOD also intends to include prepositioned stock in some of its Department-wide strategy planning, and has a number of initiatives underway to improve the mobility system, responsiveness to forces, and effectiveness of prepositioned capabilities. Given that billions of dollars in equipment reconstitution funds are at stake in restoring our preposition stocks, to what extent is DOD working with the Services to develop and integrate a Department requirement for prepositioned stocks that is based on a Department-wide strategy?

General STEVENSON. Currently TRANSCOM and DLA are co-leading a study directed by the Vice Chairman of the Joint Chiefs of Staff, titled the Comprehensive Materiel Response Plan (CMRP). The purpose of the CMRP is to develop a comprehensive plan for DOD materiel positioning and distribution to support the full range of military activities and identify opportunities for improvement of the global materiel, storage, transportation, and distribution network. The CMRP is leveraging the work completed during other studies, most notably the OSD CAPE Global Prepositioned Materiel Capability Study (GPMCS). Along with the DOD-wide studies, the Army is also constantly reviewing our own prepositioning strategy to identify efficiencies and improve capabilities.

34. Senator MCCASKILL. Lieutenant General Stevenson, to what extent is the Army assessing which of the many pieces of nonstandard equipment that were pur-

chased to meet urgent warfighters' needs should be added to the prepositioned stock sets?

General STEVENSON. To a great extent. All non-standard equipment the Army has procured is being systematically reviewed as part of the Army's Capabilities Development for Rapid Transition (CDRT) process. One of the possible outcomes for materiel going thru CDRT is to be selected for stockage in APS. Probably the best example of nonstandard equipment being selected for APS is the MRAP—in fact, the majority of the total MRAP vehicle population will be positioned into global APS sets. Other non-standard equipment that has been identified for sourcing to APS includes: Single Channel Anti-Jam Man-Portable (SCAMP) terminals, Counter Radio Electronic Warfare 2 (CREW2) systems with Duke V2 and CREW Vehicle Receiver Jammer (CVRJ), and various commercial off-the-shelf (COTS) items for U.S. Army North.

35. Senator MCCASKILL. Lieutenant General Stevenson, what additional reset and sustainment resources will be needed to add these stocks?

General STEVENSON. The only resources required at this time is the continuation of the OCOs reconstitution funding necessary to reset equipment that will fill the remaining APS sets in accordance with the approved 2015 Strategy.

36. Senator MCCASKILL. Lieutenant General Stevenson, are these new requirements accounted for in the Army's Prepostioned Stock Strategy (PSS) 2015?

General STEVENSON. Currently, new requirements in our APS sets include Mine Resistant Ambush Protection (MRAP) vehicles, Long-Term Armor Strategy (LTAS) Tactical Wheeled Vehicles, and Counter Measure Electronic Warfare equipment. The Army continues to modernize its APS stocks in accordance with Modified Table of Organization and Equipment (MTOE) authorization changes and Army priorities. APS modernization changes have been planned for and programmed as requirements into the Army's Program Objective Memorandum (POM) 13–17.

37. Senator MCCASKILL. Lieutenant General Stevenson, the Army's plans to meet its PPS by reconstituting its prepositioned stocks around the world by 2015. However, most of the procurement funding and about half of the operations and maintenance (O&M) funding for prepositioned stocks is programmed for fiscal year 2014, after most of the equipment sets are scheduled for reconstitution. How is the Army going to meet its 2015 plan without securing funding sooner?

General STEVENSON. The Army is counting on the reset of theater retrograded equipment from Operation New Dawn (OND) and OEF in order to fill its APS strategic requirements. As for Operations and Maintenance (O&M) funds, most of the equipment will come to our APS inventory from depot stocks or procurement already purchased using previous year's OPA funding. Warehoused APS equipment will require minimal Care of Supplies in Storage (COSIS) for the first 3 years of storage. The exception being equipment stored outside in Southwest Asia (APS–5). We have adequately programmed for the O&M funding in Program Objective Memorandum (POM) 13–17 to support the COSIS requirements of our planned 2015 APS sets.

ARMY REQUIREMENTS OVERSIGHT COUNCIL

38. Senator MCCASKILL. Lieutenant General Stevenson, you participate in the Army Requirements Oversight Council (AROC), the Configuration Steering Boards (CSB), and the Capability Portfolio Reviews (CPR). With the goal of reducing long-term life-cycle costs and improving sustainment efforts, are you satisfied with your position and feel you have enough of a say?

General STEVENSON. Yes, I am satisfied that I have the opportunity to advise and influence the sustainment efforts in this process through the various forums. The G–4 plays a critical role in identifying and validating sustainment requirements, and suggests trade-offs that should be considered in reducing life-cycle costs and/or improving sustainment efforts.

The Army uses the results of the Army Cost Position for AROC, CSB, and CPR Executive Leader decision support venues, and the G–4 actively pursues opportunities to influence those Sustainment-related portions of the Army Cost Positions. By energetically leading a Sustainment and Operations & Maintenance cost management culture, The Army sets and enforces Total Ownership Cost management standards, using Sustainment costs to integrate with all OMA Stakeholders.

NAVAL SHIPYARD MAINTENANCE

39. Senator MCCASKILL. Vice Admiral Burke, to what extent has OCO increased the Navy's operational tempo and associated maintenance for readiness of its ships?

Admiral BURKE. Fiscal year 2010 Global Force Management commitments, including the operational requirements in support of OIF/OND and OEF, resulted in a high global OPTEMPO.

Ship maintenance requirements are based on ship class maintenance plans which are continuously updated based on ship condition and current maintenance issues. Although it is difficult to relate an individual maintenance action to increased OPTEMPO, there is a direct relationship between OPTEMPO and wear on rotating equipment and in the crew's ability to perform self maintenance.

Sustainment of the current high level of global commitments exceeds available base budget funding and remains dependent upon OCO or similar supplemental appropriations.

40. Senator MCCASKILL. Vice Admiral Burke, to what extent have the Navy's four public shipyards planned for or responded to any increased ship maintenance resulting from OCO (in terms of shipyard workforce, tools, equipment, parts and infrastructure capacity)?

Admiral BURKE. Ship and submarine class maintenance requirements are continuously updated based on current material condition and maintenance issues, thereby capturing any increased ship maintenance resulting from OCO in the overall requirement. Naval Shipyard capacity and capability, including workforce, tools, equipment, parts and infrastructure capacity, are sized to accomplish the maintenance requirements of assigned ships and submarines as part of the annual programming and budgeting process.

Since the Naval Shipyards are sized to accomplish the full workload requirement for assigned ships and submarines, they have fully planned to accomplish any increased maintenance resulting from OCO.

41. Senator MCCASKILL. Vice Admiral Burke, shipyard officials have provided GAO with examples of how degraded infrastructure affected efficiency and effectiveness of their workforce and led to increased costs stemming from using workarounds, working overtime, or sending workers to different shipyards in order to keep their fleet maintenance schedules. To what extent are the Navy's four public shipyards' assets and workforce currently being utilized, and to what extent have the shipyards planned to address any efficiency/productivity issues that require improvements to shipyard infrastructure (e.g. constructing new or replacement mission critical assets, such as drydocks)?

Admiral BURKE. Naval Shipyard capacity and capability, including workforce, tools, equipment, parts and infrastructure capacity, are sized to accomplish the maintenance requirements of assigned ships and submarines as part of the annual programming and budgeting process.

Shipyards use the One Shipyard concept to focus on cost, schedule, and quality through standardizing processes, sharing resources among public shipyards, and partnering with private shipyards to meet their resource requirements.

Shipyard workforce capacity and capability is reviewed monthly, and a quarterly review meeting is held to assess and adjust workforce needs. To deal with the changes in workload that occur in the year of execution, the Navy has several workforce strategies, including the One Shipyard concept, the use of the Naval Reserve Force (SURGEMAIN) workforce, additional contracting, and the use of overtime to augment the Shipyards' capacity

Infrastructure at the Naval Shipyards is almost fully utilized. For instance, in fiscal year 2011, the drydock utilization rate is 94 percent for the 18 drydocks at the Shipyards. The Navy continues to plan and invest to address Naval Shipyard infrastructure efficiency and productivity issues using MILCON and O&M Restoration and Modernization (RM) investments. U.S.C., title 10, section 2476, requires that the Navy invest a minimum of 6 percent of the average of the previous 3 years of intermediate and depot maintenance revenue into the shipyard recapitalization program. The Navy has provided investments of 9.5 percent, 9.9 percent, and 15.6 percent in fiscal year 2008 through fiscal year 2010, respectively, and is planning to invest 9.9 percent in fiscal year 2011.

The buildings and facilities of the four Naval Shipyards are primarily configured for WWII-era ship construction vice modern ship depot maintenance repair processes for nuclear ships and submarines. While ship maintenance processes have improved, the layout of the shipyards limits improvements on cost and schedule performance, and thus, improvements to operational availability. The continual im-

provement in ship maintenance processes, evolving maintenance strategies, longer ship operating cycles, and the advent of future platforms, presents opportunities to recapitalize, reconfigure, and modernize the Naval Shipyards to support future workload and gain efficiency.

42. Senator MCCASKILL. Vice Admiral Burke, to what extent has the Navy planned for a potential change in its fleet's overall composition or size (i.e., less growth than currently projected), and what are the associated impacts on workforce utilization and total infrastructure capacity across its four public shipyards?

Admiral BURKE. The Navy has not developed contingency plans for alternate force structures and remains committed to building and sustaining the force structure required to support the Maritime Strategy. If fiscal constraints require force structure changes, the shipyards' workforce and infrastructure would also be adjusted consistent with the resulting maintenance requirements.

ISSUES WITH AIR FORCE AND DEFENSE LOGISTICS AGENCY

43. Senator MCCASKILL. Lieutenant General Reno, the Air Force Logistics Centers (ALCs) have expressed frustration over the Defense Logistics Agency's (DLA) inability to deliver some parts on time to the ALCs. DLA achieves a 94 percent fill rate for spare parts; however, that remaining 6 percent can occasionally ground an aircraft. We are told that some parts can take well over a year to arrive at the ALCs and DLA will not order parts until the aircraft reaches an ALC. As a result, the Air Force is sometimes forced to cannibalize a part off of a newly arrived aircraft to repair another aircraft that is in the hanger. What is your view of DLA's track record on delivering parts to the Air Force's ALCs?

General RENO. DLA does do a good job on the majority of the orders and there are opportunities to improve parts support to the Air Logistics Centers to decrease cannibalizations and reduce aircraft delivery delays to the operational customer. DLA orders parts based on current inventory posture, any outstanding sales orders, and the forecasted demand. However, improvements in collaboration and alignment of supportability measurements will help close gaps.

For example, the Air Force measures support at the hands of the mechanic. Does the mechanic get a part when they ask for it? The Air Force calls this Issue Effectiveness. If the part is not available, how long do they wait? The Air Force calls this Customer Wait Time. By contrast, DLA measures how often a part releases from network storage sites, including material released immediately to customers. However, this measure is broad and includes material from all classes of supply not just material used for repair. DLA calls this Material Availability, which does not capture the transportation time between release and delivery to the mechanic.

These dissimilar metrics highlight some institutional differences that the Air Force and DLA are working to understand so we can collectively improve support to the warfighter. The Air Force is not dissatisfied with a 94 percent fill rate, but better collaboration will improve supportability at the ALCs. Engagements such as Air Force/DLA Service Day, Air Force Materiel Command/DLA Summit, and continuous Crosstalk Forums and Integrated Process Improvement Teams are all tools the Air Force and DLA leverage to constantly evaluate and improve performance levels.

44. Senator MCCASKILL. Lieutenant General Reno, do you think that significant changes are needed?

General RENO. Yes, we must continue to work closely with DLA to make sustainable improvements in processes, policies, and procedures to improve depot maintenance. First, we need DLA's help to define and adopt customer-facing metrics and measure all process, policy, and procedural improvement initiatives based on their impact to retail customer support. Once we establish those metrics, we must work together to define and resource our future requirements. DLA's inventory models and supply chain strategies can then be utilized to accommodate both high demand (low risk) items and the equally important low demand (higher risk) items. This is an important point as depot maintenance will sometimes use low-demand, sometimes technically obsolete items in their repair operations.

Finally, given marketplace and vendor uncertainty, we must make a concerted effort to synchronize the DLA supply chain with Air Force repair operations. In any production environment, we must partner with DLA to plan and execute better to keep our demand and supply chains in synch. We will continue to partner with DLA on these strategies through engagements such as Air Force/DLA Service Day, Air Force Materiel Command/DLA Summit, Crosstalk Forums and Integrated Process Improvement Teams.

45. Senator MCCASKILL. Lieutenant General Reno, one initiative, the High Velocity Maintenance (HVM), has shown promise by identifying needed parts several months in advance, often while the aircraft is still deployed. What is your view of the HVM program and what is the Air Force plan, if any, to continue or expand HVM?

General RENO. Improving aircraft availability is a constant objective for the Air Force. The HVM concept will improve sustainment predictability and our objectives are new policy and new metrics that will drive better behaviors. To accomplish this, we are using a phased implementation approach with three pilot projects (C–130, B–1, F–22), and are offloading best practices to all aircraft as we go. The C–130 HVM program achieved initial operational capability, as scheduled, in March 2011. Based on input from our operational customers, Warner Robins Air Logistics Center (ALC), GA, directed that efforts concentrate on integrating successful HVM tenets (i.e., known aircraft condition, standard work, tools/parts available when needed) across all scheduled programmed depot maintenance aircraft. The evidence shows the value of the HVM tenets and we are making plans to translate lessons learned from the three pilots to the rest of the Air Force Materiel Command sustainment community. Due to the outstanding progress, Warner Robins ALC, GA accelerated their projected full operational capability date from fiscal year 2016 to fiscal year 2012.

46. Senator MCCASKILL. Lieutenant General Reno, it is my understanding that depots are not included in targets and goals for energy efficiency. Why are they exempt?

General RENO. The Federal mandated goals for energy reduction are for building facility energy. Federal facilities can be excluded in accordance with the Guidelines Establishing Criteria for Excluding Buildings from the Energy Performance Requirements of Section 543 of the National Energy Conservation Policy Act as Amended by the Energy Policy Act of 2005 (dated January 27, 2006).

Department of Energy guidance allows and recommends the exclusion of process energy that is not influenced by conventional building energy conservation measures. While not all facilities on a depot installation are excluded, depot buildings impacted by process energy can be categorized as excluded structures. To incorporate the Air Force vision "Energy consideration in all that we do," the Air Force continues to encourage and investigate the reduction of energy for all processes, even if a process is excluded from the mandated reduction goals.

Although not mandated by Congress, the Air Force is exploring ways to decrease energy used for processes and in maintenance facilities. For example, at one paint facility at Robins Air Force Base, GA, process improvements yielded a $400,000 per year savings. The Air Force is currently developing a task force to look more closely at this across the Air Force.

QUESTIONS SUBMITTED BY SENATOR KELLY AYOTTE

SHIPYARD WORKLOADS

47. Senator AYOTTE. Vice Admiral Burke, I have a question about the Navy's process for determining shipyard assignments for major work. Portsmouth Naval Shipyard is conducting the first in class availability on the USS *Virginia*. After this availability is complete, it is my understanding that the next *Virginia*-class submarine availability at Portsmouth is not scheduled until fiscal year 2016. The next three *Virginia*-class submarine availabilities are at Pearl Harbor Hawaii, even though the first one was conducted at Portsmouth Naval Shipyard and resulted in a trained and ready shipyard workforce. In fact, I have heard that the workers at Portsmouth are being asked to fly out to Hawaii to train the Pearl Harbor workforce. How does the Navy manage the flow of work to the shipyards in order to maintain a consistent level of effort and a workforce operating at maximum efficiency?

Admiral BURKE. The Navy manages the assignment of submarine depot availabilities to one of its four public shipyards by first looking at the shipyard closest to a submarine's homeport, to avoid the cost and disruption of homeport changes on crew members and their families. If the local homeport shipyard is not available, due either to capacity or capability (e.g., nuclear refueling, dry-dock size, etc.), then the availability is scheduled at a shipyard that has both the capacity and capability to execute it.

The next three *Virginia*-class availabilities are on submarines homeported in Pearl Harbor, HI. Pearl Harbor Naval Shipyard and Intermediate Maintenance Fa-

cility (PHNSY and IMF) has the capacity and has been assigned to execute these availabilities.

Virginia-class submarines are being homeported in both Groton, CT and Pearl Harbor, HI. Consequently, the Navy needs both Portsmouth Naval Shipyard (PNSY) and PHNSY and IMF to develop expertise in maintaining this submarine class. To maximize shipyard efficiency, the Navy shares knowledge and experience between depots, and for that reason, PNSY personnel are being assigned to support PHNSY and IMF on the next *Virginia*-class availability. Similarly, PHNSY and IMF knowledge and experience from their *Virginia*-class availabilities will be transferred to PNSY prior to Portsmouth's next *Virginia*-class availability.

48. Senator AYOTTE. Vice Admiral Burke, are any Atlantic fleet *Virginia*-class availabilities being done at Pearl? If so, why?

Admiral BURKE. No, the *Virginia*-class depot availabilities scheduled across the FYDP at Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility are for Pearl Harbor homeported submarines.

49. Senator AYOTTE. Vice Admiral Burke, what, if any, *Virginia*-class work is being done at Norfolk Shipyard?

Admiral BURKE. Norfolk Naval Shipyard (NNSY) is not currently scheduled to conduct any *Virginia*-class submarine depot level maintenance. NNSY does provide *Virginia*-class submarines built at Newport News Shipbuilding with intermediate level maintenance support prior to each submarine's relocation to its assigned homeport.

50. Senator AYOTTE. Vice Admiral Burke, in terms of taking advantage of and maintaining the *Virginia*-class expertise that has been created at Portsmouth Naval Shipyard, what is the impact of a potential gap of 4 years between *Virginia*-class availabilities at Portsmouth?

Admiral BURKE. With a 4 year gap between *Virginia*-class availabilities at Portsmouth Naval Shipyard, Portsmouth may lose some of its expertise in dealing with *Virginia*-class unique systems and system interoperabilities. For the most part though, the *Virginia*-class consists of the same type of parts and systems found on all submarine (e.g., valves, hydraulics, high and low pressure air, seawater, freshwater, motors, pumps, electrical distribution, tanks and voids, air-conditioning and refrigeration plants, torpedo tubes, weapons systems, habitability systems, steering gear, antennas, hull, nuclear propulsion plant, etc.).

Since Portsmouth Naval Shipyard will be working at capacity on *Los Angeles*-class availabilities over the next 4 years, the Navy is confident that Portsmouth will maintain its proficiency at executing submarine availabilities. Additionally, Portsmouth will be able to leverage the experience gained by Pearl Harbor from their conduct of four consecutive *Virginia*-class availabilities.

51. Senator AYOTTE. Vice Admiral Burke, can the Navy please provide the *Virginia*-class availabilities schedule for the rest of the Future Years Defense Plan (FYDP)? I am interested in when and where the availabilities will be conducted.

Admiral BURKE. The *Virginia*-class depot availability schedule across the FYDP is as follows:

Submarine	Fiscal Year Start	Shipyard
USS *Texas*	2012	PHNSY&IMF
USS *Hawaii*	2015	PHNSY&IMF
USS *North Carolina*	2016	PHNSY&IMF
USS *Missouri*	2016	PHNSY&IMF
USS *New Hampshire*	2016	PNSY
USS *New Mexico*	2017	PNSY

REPLACEMENT OF AGING AIR REFUELING TANKERS

52. Senator AYOTTE. Lieutenant General Reno, I am pleased that the Air Force will soon be able to start replacing its Eisenhower era KC–135 air refueling tankers with the KC–46A. I know that that the 157th Air Refueling Wing at Pease Air National Guard Base has been flying 50-year-old KC–135s with an average of 20,000 flying hours for over 17 years. Despite the fact that they have done a magnificent job to keep their mission capable rates above 72 percent, they look forward to the new tanker. I am aware that the Air Force will soon establish the strategic basing

criteria as the first stage in a transparent process to determine the initial operational locations for the new tanker. How much of the decision will be based on an analysis of the wear and tear of the existing airframes?

General RENO. The Air Force Strategic Basing process links mission and combatant commander requirements to installation attributes to identify locations that are best suited to support any given mission. Wear and tear on existing weapon systems is not considered in Strategic Basing decisions.

53. Senator AYOTTE. Lieutenant General Reno, when do you expect the first KC–46As to be delivered to operational units?

General RENO. I expect the first production KC–46A to be delivered in 2016.

54. Senator AYOTTE. Lieutenant General Reno, have you identified any troubling trends or maintenance concerns with the aircraft?

General RENO. We have not identified troubling trends or maintenance concerns with the B–767 at this time. Currently, the KC–46A is in its development phase. The Air Force will participate in all design reviews to ensure our maintenance requirements are met and will monitor test and evaluation activities for trends.

55. Senator AYOTTE. Lieutenant General Reno, do you anticipate having to invest in system upgrades to the KC–135 in the interim before the transition to KC–46As? If so, can you describe what upgrades will be needed?

General RENO. A variety of sustainment modifications are currently underway or planned for the KC–135 through 2040+ as we transition to the KC–46As. Current modifications include:

(a) Global Air Traffic Management, which replaces multiple avionics components to meet worldwide civil airspace access mandates;
(b) Block 45, which replaces the digital flight director, autopilot, radar altimeter and multiple analog engine gauges with an electronic multi-function display;
(c) a Mode-S upgrade to the transponder to enable access to worldwide civil airspace;
(d) a Mode-5 upgrade to the existing transponder to meet DOD-mandated requirements for enhancements to the Identification, Friend or Foe system;
(e) a Very High Frequency/Instrument Landing System Antenna modification which will replace the existing antenna due to obsolescence, and;
(f) an Auxiliary Power Unit (APU) Oil Cooler modification which adds an oil cooler to the APU to prevent hot oil temperature shutdowns in the area of responsibility.

Planned future modifications will also include a variety of minor Acquisition Category III and low cost modifications to address maintenance discrepancies and parts obsolescence or symptoms common to aging aircraft. Safety modifications will be addressed as required. Additionally, Programmed Depot Maintenance will continue and include items such as rewiring, refurbishment of control surfaces, replacement of other primary structures, and other maintenance efforts to keep the aircraft viable through 2040+. Other potential upgrades will be vetted via the Air Force requirements process for validation, prioritization, and approval.

56. Senator AYOTTE. Lieutenant General Reno, finally, has the Air Force determined what manpower will be required to maintain the KC–46A at the base level?

General RENO. The 2010 Manpower Estimate for the KC–135 Replacement Aircraft was submitted in accordance with the reporting requirements of Title 10, U.S.C., § 2434. Required changes to the existing manpower requirements baseline will be accomplished through appropriate manpower programming actions.

57. Senator AYOTTE. Lieutenant General Reno, will routine maintenance be performed by Air Force personnel or by contractors?

General RENO. For up to the first 5 years, the KC–46A will be maintained by Interim Contractor Support (ICS). Beyond the ICS period, the plan (which is subject to additional studies) is primarily for organic maintenance at the operational bases as well as the Air Force depots.

SUPPLIES AND EQUIPMENT FOR THE WARFIGHTER

58. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, I have a question that cuts to the heart of this committee's top priority to support the warfighter. Has any unit deployed overseas at a contingency location, particularly in Afghanistan, provided

an urgent needs request for supplies or an equipment item in the past year that has not been satisfied in a timely manner? If so, can you describe the supply or equipment item in detail?

General STEVENSON. Yes. Units sometimes deploy overseas with unsatisfied urgent needs requests. The Army endeavors to always meet the continuous and steady-stream of warfighter generated Operational Need Statements (ONS) and Joint Urgent Operational Need Statements (JUONS) for either emerging technologies or additional equipment. Commanders regularly and justifiably request immediate sourcing of ONS/JUONS to mitigate risk or provide a tactical edge based on new battle space, expanded scope of operations, or changes in enemy tactics. By way of context, HQDA receives ONS/JUONS for over 200 separate items every week, and at times, these can be very short notice requests. For example, Robots were requested thru an ONS for a new capability to combat the enemy's ever evolving Improved Explosives Device (IED) threat against dismounted patrols. In response to the ONS, the Army identified and deployed an operationally ready solution that was in testing, the Small Unmanned Ground Vehicle (SUGV) 320 manportable robot. The Army used an existing contractual vehicle to procure these SUGV 320 robots as a commercial off-the-shelf (COTS) solution, and we also re-allocated resources to procure additional robots to meet future requests for Afghanistan. With the continued resourcing support of Congress, we can and will meet ONS and JUONS in the near and long term, and retain resourcing flexibility to provide equipping solutions to mitigate identified capability gaps. This process may not be always immediate, but will and does provide enduring material solutions for the operational benefit and safety of our soldiers in a quick a manner as possible.

General PANTER. The Marine Corps Urgent Needs Process is proving highly effective at meeting the urgent needs of Marines in combat. The clearest indication of this success is the increase of urgent need statement requests from 2008 until present. The Marine Corps processed 38 requests in 2008, 35 in 2009, the number increased to 63 in 2010, and 22 have been processed so far this year. In the end, our commanders do not have the time to use a process that does not provide the desired results.

The Marine Corps Urgent Needs Process is not focused on providing specific supply or equipment items; however, it is centered on quickly providing solutions to problems. Increasingly, these solutions are not available "off the shelf", but require a degree of rapid development and integration. Virtually every capability we are now delivering has never been acquired before.

The objective of the Urgent Needs Process is "to respond to urgent warfighting capability needs by providing the best available solutions to mission-critical capability gaps in a timeframe acceptable to operating force commanders". The needs of our commanders are being satisfied through the Marine Corps Urgent Needs Process.

General RENO. Air Force Central (AFCENT) is the Air Force lead to support to the combatant commander in Central Command. Neither I nor AFCENT/A4 is aware of any delays in support of urgent needs requests for supplies or equipment in this Area of Responsibility.

Admiral BURKE. The answer is "no." Navy units deploying overseas to a contingency location, including Afghanistan, embark with the required levels of equipment and supplies. Urgent requests for supplies and equipment are responded to in a timely manner, and the means exist to timely respond and accurately track completion.

In addition, for CSGs and ESGs in the 5th Fleet, due to their allowances and the transportation routes to and within, no major support issues have been reported. Cargo movement into Afghanistan is acceptable.

59. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, has the inability to meet the request been caused by a lack of acquisition resources, a constricted manufacturing or supply pipeline, or some other factor? Please explain.

General STEVENSON. The inability to meet warfighter requested delivery dates can and has been caused by all the factors you have mentioned. For example, in support of the operational needs for a Persistent Threat Detection and Surveillance System (PTDSS), the Department was required to re-program funding to the appropriate funding line. While we received excellent support at all echelons thru the process, these actions require a detailed analysis and requirements validation process to ensure the best possible solution is provided to our warfighters. An example of a constricted manufacturing base is the OEF Camouflage Pattern (OCP) uniform. There are a limited number of American textile companies (which we are restricted to by the Berry Amendment) that can produce and supply these uniforms, and because

of this, the Army ended up phasing in the fielding over a longer period of time than the warfighter would have preferred. An example of a constricted supply pipeline is SPARK II Minerollers. We have engaged in an aggressive effort to ship SPARK II Minerollers to theater; however, despite overcoming inter-theater shipping limitations, intra-country shipping challenges have adversely impacted our our ability to get them distributed within Afghanistan as fast as we would have liked. This is a tough business requiring detailed coordination—Congress has always supported our requests for appropriate levels of funding for materiel solutions in support of our warfighters' urgent requests, and we do our best to get what is required to them as quickly as possible.

General PANTER. For the Tactical Handheld Biometrics the required capability was not available off the shelf due to technological readiness levels. This was exacerbated by the requirement to be compatible with the existing biometrics architecture which included a proprietary algorithm for the capture, processing, and storage of iris images. Recent steps to solve this urgent warfighter need were met with vendor protest after a materiel solution was selected.

For the Stand-off Suicide Bomber Detection the required capability was not available off the shelf due to technological readiness levels. Several COTS/NDI systems were provided quickly, but none have fully closed the gap. Efforts are ongoing to meet the full requirement through the integration of several distinct capabilities.

General RENO. AFCENT is the Air Force lead to support to the combatant commander in Central Command. Neither I nor AFCENT/A4 is aware of any delays in support of urgent needs requests for supplies or equipment in this Area of Responsibility.

Admiral BURKE. N/A. Navy units deploying overseas to a contingency location, including Afghanistan, embark with the required levels of equipment and supplies. Urgent requests for supplies and equipment are responded to in a timely manner, and the means exist to timely respond and accurately track completion.

60. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, have any of you heard of concerns that some equipment coming out of Iraq has been sent direct to Afghanistan in a deteriorated condition as opposed to going through depot maintenance first? If so please explain and provide details.

General STEVENSON. Equipment being redistributed out of Iraq to Afghanistan did not go thru "depot maintenance" first. However, where possible, all this equipment was routed thru Kuwait to be inspected and to ensure it was in a fully mission capable condition before it was onward moved to Afghanistan. In some instances, due to urgency of need, that was not possible, and yes, there were isolated reports of non-mission capable equipment being sent directly from Iraq to Afghanistan. However, those issues have long since been overcome. Our deployed equipment has generally met or exceeded our operational readiness standards for the last 9 years of the war, 90 percent for ground and 75 percent for air, in both OND and OEF.

General PANTER. No, Headquarters Marine Corps has not received official reports concerning equipment coming out of Iraq and being sent directly to Afghanistan being in a deteriorated condition. Limited Technical Inspections (LTIs) were conducted on all equipment being transferred from OIF to OEF. Equipment deemed serviceable was sent directly to Afghanistan while equipment determined to be less than mission capable was retrograded from theater or received maintenance repair actions in order to bring it to mission capable status prior to being deployed to OEF.

General RENO. AFCENT is the Air Force lead to support to the combatant commander in Central Command. Neither I nor AFCENT/A4 is aware of any equipment going directly to Afghanistan from Iraq in a deteriorated condition.

Admiral BURKE. No, I have not heard of such concerns. The Navy goes to great effort to ensure that all equipment sent to Afghanistan is fully functional and capable of operating in the projected operational environment. Equipment being transferred from Iraq is thoroughly cleaned, inspected, and has all necessary upgrades or improvements installed and tested prior to being sent to the Afghanistan AOR. Equipment held in the CENTCOM theater undergoes a condition-based inspection and analysis, and if deemed necessary, is sent to a depot-level maintenance facility for repair or refurbishment, prior to being sent to Afghanistan.

61. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, do any of you have any concerns about the serviceability or condition of any equipment being sent to Afghanistan?

General STEVENSON. The Army is confident that the serviceability and condition of equipment being sent to Afghanistan is fully mission-capable. If transferred from Iraq to Afghanistan the equipment is inspected and repaired in theater prior to

transfer. If the equipment is deployed from a unit's home station it has been reset to 10/20 + Delayed Desert Damage and Degradation (4D) standard, with all effects of any 4D removed.

Our deployed equipment has generally met or exceeded our operational readiness standards for the last 9 years of the war; 90 percent for ground and 75 percent for air.

General PANTER. Currently, the Marine Corps has no concerns about serviceability or condition of equipment being sent to Afghanistan.

General RENO. AFCENT is the Air Force lead to support to the combatant commander in Central Command. Neither I nor AFCENT/A4 has concerns about the serviceability and condition of equipment being sent to Afghanistan.

Admiral BURKE. No, Navy goes to great effort to ensure that all equipment sent to Afghanistan is both functional and capable of operating in the projected operational environment. Equipment held in the CENTCOM theater undergoes a condition-based inspection and analysis, and if deemed necessary, is sent to a depot-level maintenance facility for repair or refurbishment, prior to being sent to Afghanistan.

62. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, do any of you anticipate any supply or equipment shortfalls in the next 12 months that we need to address?

General STEVENSON. We do not anticipate any significant supply or equipment shortfalls in the next 12 months. As we execute the drawdown of supplies and materiel from Iraq, we anticipate fewer demands and have proven processes in place to redistribute this equipment and supplies against other validated theater and Army requirements. We will continue to manage our equipment and supply needs closely as we have successfully demonstrated over the past 10 years in supporting our Army at war, and we hope to continue to enjoy the tremendous support we have received year after year from Congress.

General PANTER. No., The Marine Corps has experienced shortfalls in certain critical pieces of equipment which were mitigated through Service level prioritization initiatives (HQMC's Strategic Ground Equipment Working Group (SGEWG) actions) that give priority to the Marine units in theater and then those units training for deployment to OEF. Currently, there are no supply or equipment shortfalls for the foreseeable future (in the next 12 months [through June 2012]) that requires congressional level assistance.

General RENO. The Air Force does not anticipate any major supply or equipment shortfalls in the next 12 months; however, as part of the Chief of Staff's fiscal year 2012 Unfunded Priorities List (UPL), we submitted two items to enhance logistics and maintenance sustainment.

The Air Force requested replacement of 75 A–10 maintenance testers that are used to troubleshoot avionics and weapons functionality. The testers will provide greater strike capability and aircraft situational awareness. We also requested replacement munitions for those assets that were expended as part of Operation Odyssey Dawn.

Admiral BURKE. With respect to unit/operational support, the answer is "no." The integrated priority lists, and the budgeting and execution processes have proven sufficient to address requirements and shortfalls for OCOs. Although continued Congressional support is always appreciated, no issues have been identified that would merit such intervention.

With respect to fleet readiness and logistics programming, we highlight the response to a request from the House Armed Services Committee Ranking Member by the Chief of Naval Operations, which identified U.S. Navy fiscal year 2012 unfunded requirements of $684 million for aviation spares and ship depot maintenance. The CNO noted that "although these unfunded requirements are not of a higher priority than anything contained in the Navy's fiscal year 2012 budget submissions, these accounts are stressed by increased operational tempo." The ship depot maintenance account funds naval shipyard and private sector maintenance of surface ships and submarines, and the fiscal year 2012 unfunded component ($367 million) would restore 44 deferred surface ship non-docking availabilities. The fiscal year 2012 aviation spares unfunded component ($317 million) would provide aviation spares support for over 3,700 individual Fleet aircraft. The primary cost drivers for shortage in aircraft spares and repair parts are MV–22, EA–18G, F/A–18–E/F, and MH–60R/S. Congressional assistance and consideration of these accounts would be most appreciated.

63. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, based on an assessment of current conditions, are you aware of any changes we need to make to the budget re-

quest for 2012 to allow resources to be more efficiently and effectively applied to the most critical warfighters' needs?

General STEVENSON. We do not require any changes to the fiscal year 2012 budget request to meet critical warfighter needs. Should any new requirements emerge in the near future, we will ensure congressional staffs are made aware of them immediately.

General PANTER. The following changes to the fiscal year 2012 budget would provide the greatest impact to warfighter needs:

- Fiscal Year 2012 Unfunded Requirements List
  - Enterprise Land Mobile Radar (E–LMR) ($45.0 million PMC) - Provides the network infrastructure "backbone" to complement first responder capabilities at various locations. Also enhances training range safety by expanding coverage over a broader area, and FCC radio frequency issues at MCAS Yuma. Restores funding marked from fiscal year 2011 OCO as a "baseline requirement" but not added to the fiscal year 2011 baseline.
  - Secondary Fire Suppression Phase II for LVSR, MTVR ($17.0 million PMC) - Emergent requirement to extinguish secondary vehicle fires. Procures aqueous fire suppression systems for 1,104 MTVRs and LVSRs deployed in OEF that operate outside Forward Operating Bases.
  - Chemical/Biological/Nuclear Incident Response Force (CBRN/CBIRF) ($1.0 million PMC/$8.5 million OMMC) - Emergent requirement based on lessons learned in Japan. Upgrades Incident Response Force equipment/capability with new technology insertion devices, protective suits, replacement respirators, extended operation filters, and unified command suites.
- Medium Tactical Vehicle Replacement Realignment (MTVR) Request - The Marine Corps has forwarded a request to the Congressional Appropriations and Armed Services committees regarding approximately $298 million in PMC OCO funds that were no longer required to purchase MTVR vehicles and has requested that those funds be realigned as follows:
  - $148 million for Logistics Vehicle System Replacement vehicles
  - $82 million for Expeditionary Energy Requirements (advanced power sources, mobile power equipment, energy efficient tent liners and lights)
  - $70 million for Command and Control Equipment (data distribution systems and digital technical control)

General RENO. No changes to the fiscal year 2012 President's budget (PB) request are needed. The fiscal year 2012 PB request represents the best possible balance between mission requirements and risk within the authorized funding levels.

Admiral BURKE. The Navy would request the Senate's support for the two items on the CNO's unfunded priority list: an additional $367 million for ship maintenance and an additional $317 million for aviation spares support.

REDUCED READINESS RATES AND OUTDATED EQUIPMENT FOR NATIONAL GUARD AND RESERVE UNITS

64. Senator AYOTTE. Lieutenant General Stevenson, the Reserve component continues to face reduced readiness rates as a result of shortfalls in equipment. In the most recent National Guard and Reserve Equipment Report, nearly $4.1 billion in significant major item shortages were identified for the Army National Guard (ARNG) alone. What do you estimate to be the total shortfall in National Guard equipment and modernization requirements?

General STEVENSON. The Army continues in its efforts to address the ARNG equipment and modernization shortfall. With the help of Congress, over $31 billion has been appropriated for procurement of ARNG equipment from fiscal year 2007–fiscal year 2011. As stated in the fiscal year 2012 National Guard and Reserve Equipment Report, the total ARNG equipment shortfall was $25.2 billion as of September 30, 2010. The Army has requested an additional $3.5 billion for ARNG equipment in the fiscal year 2012 President's budget.

As a result of significant investment to improve the ARNG's equipping posture, the Army projects the ARNG will have 92 percent of its EOH at the beginning of fiscal year 2012.

65. Senator AYOTTE. Lieutenant General Stevenson, to what degree are equipment shortfalls among the National Guard impacting the ability of units to properly train and maintain readiness for potential contingencies?

General STEVENSON. The impacts of equipment shortfalls for ARNG training and readiness have been significantly reduced. The portion of ARNG units that now

meet minimum standards of readiness increased 17 percent in the past year. ARNG units are now equipped to a level comparable to active units, except for modernization, where the ARNG slightly trails the Active component. Progress is clearly reflected in the effort it takes to equip an ARNG unit for deployment now, versus in previous years: the amount of equipment redistributed in fiscal year 2010 was down by 87 percent from the historical average to 3,826 pieces. In addition, equipment on-hand for several categories of equipment important to the ARNG domestic response mission (water purification, HMMWVs, heavy cargo trucks, and fuel haulers) has doubled for ARNG units since 2005.

One readiness challenge involves training on equipment only available in theater, at a mobilization station, or fielded just prior to mobilization (i.e., Warfigther Information Network-Tactical equipment which provides mobile satellite communication, ground-based network capabilities, and MRAP vehicles). ARNG readiness issues from equipment shortages will be mitigated through future programmed deliveries.

66. Senator AYOTTE. Lieutenant General Stevenson, what is being done to ensure that the Reserve component is provided proportional and concurrent fielding with its Active component colleagues?

General STEVENSON. The Army's objective is to ensure the Reserve component is provided proportional and concurrent equipment fielding with its Active component (AC) counterparts through policy, equipping conferences, EOH and requirements analysis, the Reserve component payback program, Transparency Program and the equipping Program Objective Memorandum development process.

The Army's Equipping Strategy establishes EOH readiness Aim Points for units as they progress through the ARFORGEN process. These goals apply equally to all three components—Active, Reserve, and ARNG. The Army holds equipping conferences twice each year to finalize equipment distribution plans. These conferences are attended by each Army component and the Army commands that support the combatant commanders.

At the end of March 2009, the aggregate Army EOH was 78 percent (6.37 million out of 8.11 million), the AC 80 percent (3.1 million out of 3.9 million), the ARNG 77 percent (2.45 million out of 3.19 million) and the U.S. Army Reserves (USAR) 80 percent (.82 million out of 1.02 million). Based on procurement plans developed in collaboration with the ARNG and USAR, by the end of October 2012, the aggregate Army EOH is projected to be 92 percent (8.34 million out of 9.04 million); 93 percent (3.40 million out of 3.66 million) for AC, 92 percent (2.66 million out of 2.90 million) for ARNG and 90 percent (.89 million out of 1.0 million) for USAR.

In September 2010, the ARNG equipment modernization levels were at 72 percent, an 18 percent improvement from September 2008; USAR was at 67 percent, a 12 percent improvement; and the AC was at 74 percent, a 12 percent improvement. Modernization will continue to improve for all Army Components and is projected to be 74 percent (+2 percent) for the ARNG, 68 percent (+1 percent) for the USAR and 77 percent (+3 percent) for the AC by October 2012.

The Army conducts detailed analyses to determine if the distribution of equipment is proportional to the distribution of requirements for each of the Army's components. These analyses are conducted twice each year in coordination with the ARNG and USAR, and is used as part of the Army's equipping conferences.

The Army is committed to equipping soldiers going into harm's way with the most capable systems. This strategy applies to Reserve component units as well as Active component units and is designed to modernize the Reserve components comparative to the Active component.

67. Senator AYOTTE. Lieutenant General Stevenson, does the National Guard have adequate facilities to properly store and maintain the equipment they are receiving?

General STEVENSON. The ARNG has a 2.4 million square foot deficit in maintenance facilities nationwide. Additionally, 40 percent of the Readiness Centers in the ARNG inventory are over 50-years-old. These Readiness Centers accommodate just half of the capacity for equipment and personnel of today' s ARNG units. The Army's equipment requirements have grown with Army modernization over the last 50 years, and the current facilities do not meet the requirements to store modern equipment. To address this issue the Army and ARNG have agreed that beginning in fiscal year 2015, the Guard should receive about 20 percent of the Military Construction Total Obligation Authority based on the ARNG's real estate inventory and attributes.

ARMY RESET

68. Senator AYOTTE. Lieutenant General Stevenson, despite billions of dollars invested in reset, Army readiness continues to remain stagnant. Ready units are consumed as quickly as they can be produced. While I understand this is a function of significant demand abroad, I am concerned that any meaningful decrease in demand will likely be followed quickly by a decrease in the availability of OCO dollars. With this said, I am very disappointed that the Army agreed to forfeit over $1.0 billion in funding requested in the fiscal year 2011 OCO account for equipment reset because it was requested in the wrong account, as opposed to aggressively pursuing a reprogramming to fund other critical unfunded equipment reset priorities this year. Do you have reset requirements that you could have used the funding for?

General STEVENSON. No. Following the end of fiscal year 2010, the Army assessed its Reset requirements for fiscal year 2011 (which were built over a year prior). After careful review, it was determined that O&M Reset, in-theater maintenance, and procurement Reset were fully supported in our revised request. We could not reprogram the dollars because they had not been appropriated yet (we were under a continuing resolution) and we had no critical unfunded equipment reset requirements.

Nonetheless, the support for the Army's Reset requirements has resulted in the restoration of equipment readiness to support current and future contingencies. Our equipment operational readiness has been generally maintained at 90 percent for ground and 75 percent air for the last 9 years, a direct result of the Reset investment.

69. Senator AYOTTE. Lieutenant General Stevenson, do you have a similar problem in the fiscal year 2012 budget request?

General STEVENSON. At this point we do not anticipate having any excess Reset dollars in our fiscal year 2012 Reset request.

However, it is always possible to have operational decisions that impact the return of equipment in a given fiscal year that impact our actual Reset workload and subsequent funding posture. As these fact-of-life situations occur, we will keep Congress informed on their affect and impact on our resourcing requirements.

70. Senator AYOTTE. Lieutenant General Stevenson, given that you have repeatedly stated that it will be 2 to 3 years following the conclusion of operations in Iraq and Afghanistan before the Army can be fully reset, I can't help but envision a gap between reset requirements and available funding in the out-years. Are you confident that sufficient resources will be available through at least 2016 or 2017, as would be required to reset forces returning from Afghanistan under the current timeline?

General STEVENSON. With the support of Congress, we will have sufficient resources available through 2017 to ensure that the equipment returning is repaired or replaced to support future contingencies.

Forces are ramping down in both Iraq and Afghanistan and, as a result, our OCO requirements are decreasing.

If there is a gap we will have to prioritize our requirements to address the most critical items and take risks in restoring or sustaining our equipment since our peacetime budgets do not adequately address the incremental costs to repair or replace equipment as a result of operations in a harsh demanding environment for an extended period of time.

Ensuring that our equipment is ready for the next contingency is absolutely critical. As we have learned from history, the equipment that you have at the end of a conflict is usually the same equipment that you must use to fight the next conflict. Maintaining our equipment to a high readiness standard ensures that we are able to respond to any contingency.

CONDITIONS OF NAVY SHIPYARDS

71. Senator AYOTTE. Vice Admiral Burke, GAO released a report late last year that detailed actions needed to improve the Navy's processes for managing public shipyards' restoration and modernization needs. The report noted that "The Navy has not issued guidance detailing the need for shipyard strategic plans or what to include in them." We also received data from the Navy that details a $3.5 billion backlog of facility repair requirements at the four shipyards as of the end of fiscal year 2010. In response to these alarming trends, working with my colleagues, I've drafted legislation for the Readiness and Management Support Subcommittee mark this year that will require the Secretary of the Navy to develop an investment strat-

egy to address the inadequate facilities and infrastructure at our shipyards. Based on current funding over the next 5 years, will this backlog be reduced or continue to grow?

Admiral BURKE. The Navy anticipates that the shipyard facility recapitalization backlog will continue to grow as high operational demands and rising costs continue to cause the Navy to take risk in shore readiness, specifically in the sustainment, restoration, and modernization of our shore infrastructure.

72. Senator AYOTTE. Vice Admiral Burke, can you describe how the Navy prioritizes shipyard facility restoration and modernization requirements?

Admiral BURKE. With workforce safety, health, and quality of life as top priorities, the Navy develops comprehensive restoration and modernization (RM) projects, based primarily upon the Infrastructure Condition Assessment Program (ICAP) and Asset Evaluation (AE) program data.

We cannot address every shortfall in the desired timeframe due to fiscal constraints, so shipyard projects are evaluated and prioritized with all Navy projects. Our shore investments are prioritized to best enable warfighting and Joint capabilities, minimize the decline of critical mission-essential and quality of life infrastructure, and optimize warfare enterprise outputs and quality of service.

FUTURE CAPABILITIES OF MAINTENANCE DEPOTS

73. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, DOD operates 17 major depot activities, employing more than 77,000 personnel and expending more than 98 million DLHs annually with the mission to provide a ready and controlled source of organic depot maintenance for most major military weapon systems. Congress recently received a report from the LMI Consulting Group on the effectiveness and efficiency of these depots.

The report concluded that the increased demand over the past 9 years, which increased DOD's organic depot maintenance workload by 50 percent, will not be sustained as our Nation reduces its involvement in OCO. Also, reductions in the overall defense budget, and a likely elimination or large reduction in war-supplemental funding could further reduce depot activity. In fact, the report noted an alarming fact that the Army and Marine Corps budget for over 80 percent of their depot workload from the OCO accounts, as opposed to the base budget requested by the President each year. Does this reliance on the OCO concern you?

General STEVENSON. The Army's reliance on OCO is declining as our base depot maintenance budget is restored. As a result, our current reliance on OCO does not concern me at this time. Army's base depot maintenance funding levels have increased from $1.1 billion in fiscal year 2010 to $2.1 billion in fiscal year 2012 and have been sized to cover our Core requirements.

We have taken a number of steps to ensure that the depots are postured to support Army base requirements in a post war environment through our Industrial Base Strategy which identifies and prioritizes Core requirements; sizes our organic base facilities and workforce to meet and sustain those core competencies; and uses proven practices like Lean Six Sigma to ensure that our maintenance depots maintain their core competencies and capabilities to meet future requirements.

We do expect equipment returning from the current OCOs will require more resources for reset than we will have in the depot maintenance base budget due to damage from the harsh operating conditions. The Army will request OCO funds, separate from the base budget, for this portion of reset. The Army also expects that the some level of OCO funding will be required for 2–3 years after the return of forces.

General PANTER. Yes, while we have financed our overall Depot Level Maintenance Program with a heavy reliance on OCO funding, we are moving more into the baseline as we work through the budget process. We are positioned to bring our costs down as workload from the war diminishes.

General RENO. Reliance on OCO funding is a concern, since the Air Force's WSS portfolio currently requests approximately $2 billion a year in OCO funding. For this reason, the Air Force is developing a plan to fund the baseline at 80 percent of requirements by fiscal year 2016. Because historic funding levels, with OCO, have proven sufficient in meeting enduring mission requirements, this plan requires increased baseline funding to sustain enduring WSS requirements when OCO funding ceases.

Admiral BURKE. In general, the LMI report shows a relatively stable Navy workload, even after a projected drawdown of operations in Iraq and Afghanistan. Navy

strategy is to "reset in stride", so that our ships and aircraft reach their expected service life. Navy is concerned about the continuing reliance on OCO to fund base requirements, but is working with OSD to correct this challenge. If OCO funding is not appropriated as requested in fiscal year 2012, the Navy will only be able to fund 79 percent of the ship maintenance requirement and 87 percent of the aviation depot maintenance requirement from the base budget.

74. Senator AYOTTE. Lieutenant General Stevenson and Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, do the plans for your respective Services over the next 5 years include a return of depot operations funding back into the base budget at levels that will maintain an adequate workload?

General STEVENSON. Yes, the Army has initiated an OIB Strategy that is designed to ensure a relevant OIB is sustained in order to meet future contingency requirements. As a result, the Army has taken action to ensure that our depot core competencies are identified and that the workload necessary to sustain our core competency requirements is requested in the budgets. The Army will continue to balance depot maintenance funding with other Army priorities to ensure that the Army can meet current and future core requirements. These actions ensure that organic base facilities and workforces meet and sustain core competencies; provide a ready and controlled source of technical ability, expertise, and resources; and execute depot-level maintenance effectively and efficiently.

General PANTER. Yes, The Marine Corps has increased baseline funding for the Marine Corps Equipment Maintenance Program as reflected in the current fiscal year 2012–2013 budget submission. The increase in funding, as mandated by the OSD Depot metric of funding 80 percent of the total depot maintenance requirements, properly aligns baseline funding with projected baseline requirements.

General RENO. Yes. During the fiscal year 2012 Presidents budget build, the Air Force was directed via Resource Management Directive 700 to develop a plan to migrate WSS OCO-to-baseline funding by fiscal year 2016. We are developing the plan as part of the fiscal year 2013 Program Objective Memorandum process. The plan will require increases in baseline funding to sustain enduring WSS missions when OCO funding ceases. Without OCO-to-baseline funding migration, WSS will experience significant risk resulting in deferred depot-level maintenance and possible aircraft groundings.

Admiral BURKE. The Navy continues to evaluate a transition of depot maintenance to the baseline budget. In the fiscal year 2012 baseline submission, the Navy will be able to fund 79 percent of the ship maintenance requirement and 87 percent of the aviation depot maintenance requirement.

75. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, what are your responses and opinions of the LMI Study?

General STEVENSON. The Army agrees with many of the recommendations in the LMI report and believes them to be aligned with the Army's overall OIB Strategy. We agree that the statutory framework could be improved with regard to a clearer definition of depot maintenance. We also support the need to establish a closer link between the acquisition and sustainment policies.

However, some of the recommendations are not new initiatives. For example, the Army has already made significant improvements to the Core process and completed a draft OIB Strategy that will ensure sustainment of a relevant and responsive OIB into the future.

We disagree with improving depot maintenance reporting and establishing an independent commission to look at inefficiencies. The Army's reporting process is sound and we are actively pursuing efficiencies across DOD as well within our own service. The Army believes that current issues and inefficiencies can be addressed through a series of facilitated forums, such as the Maintenance Executive Steering Committee (MESC). Such forums would allow the Services to share best practices and allow DOD to adopt the practices that are applicable across the Services. The Marine Corps and Navy officials also agreed that existing bodies such as the MESC could address these issues.

Finally, we feel that this is an important study of a very complex issue. The report raises a number of issues that could have financial, organizational, legislative (i.e., recommendation to combine statutes such as 50/50 and core), and readiness implications. We look forward to addressing these concerns as we move forward in this endeavor.

General PANTER. The Marine Corps greatly respects the efforts of the LMI study. While there are portions of the study that the Marine Corps agrees, there are portions with which the Marine Corps disagrees such as the implied suggestion that

a Joint Depot Maintenance Command would streamline the depot maintenance process and simply reduce overhead and create more efficient business practices.

Regarding LMI's observation on Depot Reliance on OCO funding, budget proposals for POM 12 have begun to increase baseline figures to meet estimated funding requirements for post-OEF sustainment levels.

General RENO. We believe the Logistics Management Institute (LMI) study identified key issues that must be resolved. We will work with Office of the Secretary of Defense (OSD) to jointly address the necessary changes to ensure the Air Force has a ready and controlled source of technical competence and resources necessary to ensure effective and timely response to mobilizations, national defense contingency situations, and other emergency requirements. Some of the focus areas will be:

(1) strengthening the core assessment,
(2) including software in the depot maintenance definition, and
(3) retaining both the 50/50 and core laws and developing a methodology to align core consistent with 50/50 implementation.

Admiral BURKE. The LMI Study contains some good recommendations, but Navy does not agree with all the recommendations. The Navy does not see value in establishing an independent commission to review governance structures. The Services are capable of working directly with OSD to address these types of issues. Additionally, some of the additional reporting requirement recommendations do not add value. There is value in the recommendations to strengthen both the acquisition and the "core" determination processes. However, we must be mindful of increasing reporting requirements, rather than improving the reporting requirements which are already present.

76. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, do you believe Congress needs to clarify what the report called "an ambiguous statutory framework for depot maintenance, including a definition that is subject to interpretation"?

General STEVENSON. We agree that the statutory framework (title 10, U.S.C., section 2460) could be improved to clarify the definition of software maintenance and the reporting exceptions for 50/50.

Title 10, U.S.C., section 2460, which defines depot maintenance, provides an ambiguous definition of depot-level software maintenance, stating that the term depot maintenance "includes (1) all aspects of software maintenance classified by DOD as of July 1, 1995". As reported in the recently published LMI Future Depot Capability Study, there is no source documentation dated July 1, 1995. Thus, we support LMI's recommendation that Section 2460 be amended to include a comprehensive definition of depot-level software maintenance for use by all of the military services. The Office of the Deputy Assistant Secretary of Defense for Maintenance Policy & Programs (ODASD(MP&P)) has recently developed a DOD-wide definition of depot maintenance software.

Section 2460 also provides the following exceptions to the definition of depot maintenance: "(b) Exceptions. - (1) The term does not include the procurement of major modifications or upgrades of weapon systems that are designed to improve program performance or the nuclear refueling of an aircraft carrier. A major upgrade program covered by this exception could continue to be performed by private or public sector activities. (2) The term also does not include the procurement of parts for safety modifications. However, the term does include the installation of parts for that purpose."

We support the definition of depot-level maintenance as amended in HR 1540 as follows:

> "(a) In General.-In this chapter, the term "depot-level maintenance and repair" means (except as provided in subsection (b)) the processes of material maintenance or repair involving the overhaul, upgrading, rebuilding, testing, inspection, and reclamation (as necessary) of weapon systems, equipment end items, parts, components, assemblies, and subassemblies. The term includes—
>
> (1) all aspects of software maintenance;
> (2) the installation of parts or components for modifications; and
> (3) associated technical assistance to intermediate maintenance organizations, operational units, and other activities.
>
> (b) Exception.-The term does not include the nuclear refueling of an aircraft carrier."

The above definition is adopted from DOD Instructions (DODI) 4151.20, titled "Depot Maintenance Core Capabilities Determination Process".

General PANTER. The current Title 10, Section 2464 definition of depot maintenance, as well as the definition of depot software maintenance, is open to interpreta-

tion. Although it allows flexibility in recording and reporting, it also creates inconsistency in how and what the Services consider depot maintenance and depot software maintenance.

General RENO. The Air Force agrees with the Logistics Management Institute's (LMI) recommendation that Congress and DOD should reexamine all the depot-related statutes and guidance to determine what revisions are required. The Air Force looks forward to working with Congress and DOD to help strengthen the statutory framework for depot maintenance.

Admiral BURKE. The Navy does not have challenges interpreting the statutory framework for depot maintenance. However, efforts to better define depot maintenance should consider Service unique requirements. For example, the nuclear refueling of aircraft carriers is currently excluded from the statutory definition of depot-level maintenance (10 U.S.C. 2460). This exclusion should be sustained, given that a large single project, which can only be accomplished at a single yard (Huntington Ingalls), can cause an unintended imbalance in the mix of workload between the public and private sector, and impact Navy's ability to comply with public vs. private sector workload requirements.

77. Senator AYOTTE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, do you believe that acquisition decisions could be better connected to considerations of the organic depot system? If so, how are you incorporating life cycle maintenance and depot considerations into acquisitions decisions?

General STEVENSON. The Army has made great strides over the past several years developing policy and processes that better link the acquisition decisions with the organic depot system and future life-cycle support. Our assessment of the necessary linkages is an evolving process and not yet complete.

Current Army policy requires that fleet management and sustainment strategies be integrated early in the acquisition development process to ensure DOD organic depots and industry are considered as sources of repair. This is called the depot source of repair (DSOR) or source of repair analysis decision process.

We have taken several steps in the past 2 years to ensure acquisition decisions are better connected to our organic depots. These steps include:

- Strengthened emphasis on Program Manager (PM), initiation and completion of the DSOR process, working closely with Army Materiel Command (AMC) Life Cycle Management Command (LCMC) Integrated Materiel Management Center (IMMC) and Depot logisticians. The DSOR decision serves as the critical component of the future sustainment strategy for the weapons system and is made at or before Milestone C in the acquisition process.
- Emphasized the need to complete CLAs NLT Milestone B ((i.e., by the end of the Technology Development Phase) and CDAs NLT Milestone C. The CLA and CDA identifies the weapon system and component core requirements, the technical data and plant and equipment needed to conduct depot level repair. Core requirements are those depot support requirements measured in annual DLHs performed at our organic depots that are necessary to sustain warfighting weapon systems.

The Army has implemented an integrated acquisition process that considers the Army depots early in the life-cycle. This is done through coordination between the AMC LCMC IMMC and Depot logisticians and the PM's staff. AMC logisticians are now assisting PMs in completing their CLA, CDA, and DSOR analyses as required.

General PANTER. The Marine Corps recognizes and normally acts in accordance with the Integrated Defense Acquisition, Technology, and Logistics Life Cycle Management System, which calls for the consideration of organic depot capabilities during the Technology Development Strategy portion of the acquisition process. This is done prior to the Milestone A decision; however, due to the rapid acquisition of some of our major weapon systems such as the MRAP and LVSR, the maintenance considerations have been deferred and the gap filled by the use of Contractor Logistics Services and Warranties.

General RENO. The Air Force requires a core analysis at Milestone A to facilitate the linkage between the acquisition community and the logistics community. This core analysis is part of the depot source of repair process incorporating 10 U.S.C. § 2464 (Core) and 10 U.S.C. § 2466 (50/50) and provides the program office with a point of contact at the Air Force-assigned organic depot. This process links the subject matter expertise at the Air Logistics Centers to the program office to ensure depot considerations are incorporated in the life cycle sustainment plan.

Admiral BURKE. The Navy does believe that acquisition decisions could be better connected to both life cycle maintenance and organic depot system considerations. An enabler would be a clear and accurate Maintenance Plan developed earlier in the acquisition lifecycle.

To promote the need for early planning, the Navy has developed Strategic Planning Imperatives for Industrial Depot Maintenance (SPI for IDM). The SPI for IDM identifies key planning activities to help Program Managers develop the industrial depot maintenance portion of their overall sustainment plan.

The main focus of the planning effort, in accordance with DODI 5000.02, is initiation of the industrial depot maintenance planning processes and procedures early in the acquisition lifecycle. The continuous analysis will result in actual decisions being made as early as possible in the lifecycle. When the program becomes stable and available information has matured to the appropriate level, the final Core Determination (Title 10 U.S.C. 2464) and Depot Source of Repair decision processes can be performed.

CHANGES TO NAVY FLEET MAINTENANCE OPERATIONS

78. Senator AYOTTE. Vice Admiral Burke, in a recent interview, the Secretary of the Navy, Ray Mabus, signaled that the Navy needs to steer away from the fleet response plan, with its short-notice "surge" deployments, in favor of a more predictable schedule with enough down-time for maintenance and personnel. Yet, in your written testimony, you state that: "the fleet response plan remains the foundation for Navy force generation, and has proven to optimize returns on training and maintenance investments." You go on to admit that the high intensity of operations has increased the risk of nondeployed forces being ready for new assignments on short notice, such as the recent operation in Libya. How is the Navy steering away from the fleet response plan?

Admiral BURKE. While Navy remains committed to the principles of the Fleet Response Plan (FRP), the current pace of deployed operations is not sustainable. FRP was designed to provide surge capacity to respond to emergencies. The use of that extra capacity has become common and many battle groups have deployed twice in the same operational cycle stressing ships and crews.

Navy is working with OSD to develop a more sustainable balance between training, maintenance and PERSTEMPO versus the worldwide demand for our forces, to ensure we can both meet demand and reach expected service life for our platforms.

Navy global presence will remain important as current operations wind down, but returning to a more predictable deployment schedule will be essential to resetting the material condition of our Fleet.

79. Senator AYOTTE. Vice Admiral Burke, what is the Navy doing to establish a more predictable schedule for ship maintenance?

Admiral BURKE. The Navy's maintenance schedules are driven first by operational schedules and then by the availability and capacity of the industrial base to complete the work, when the ships are available. Ship maintenance schedules are developed years in advance working in conjunction with operational planners. The vast majority of scheduled depot availabilities occur as scheduled. The Navy is working closely with the combatant commanders to ensure maintenance issues are considered as part of the Request for Forces process that should limit churn and provide even more predictability to the ship maintenance schedules.

AFLOAT MAINTENANCE AND READINESS

80. Senator AYOTTE. Vice Admiral Burke, the Navy has proposed an efficiency initiative to move 2,200 sailors from ashore jobs to afloat jobs to perform ship maintenance. Secretary Mabus described it as: "some of the preventive maintenance you can do afloat." As the top logistician for the Navy, how efficient is it for the Navy to perform ship maintenance while afloat?

Admiral BURKE. Having Sailors perform maintenance that is within organization level capability is both efficient and effective. When sailors perform routine preventative and corrective maintenance, they gain greater in-depth knowledge of their equipment, develop a stronger sense of ownership and pride in its condition and appearance, and maintain their equipment in better working order. The increased skill level and sense of ownership directly impacts the readiness of deployed ships and submarines operating far from intermediate and depot repair facilities by enabling the crew to perform critical at-sea repairs when needed, in lieu of returning to port,

and reduces reliance on overseas maintenance organizations or fly away repair teams.

It is also more efficient for intermediate and depot repair facilities to conduct the more complex maintenance for which they are better suited instead of performing organizational level preventative and corrective maintenance; organizational level maintenance does not require the same level of experience, controls or oversight that intermediate and depot repair facilities are designed to provide.

Additionally, by conducting maintenance when needed by sailors afloat, ships are in better operational condition when arriving for depot availabilities, thereby reducing the net maintenance requirement and ultimately the cost of maintaining the Fleet.

81. Senator AYOTTE. Vice Admiral Burke, wouldn't it be more efficient and effective for ashore crews or the shipyards to accomplish all maintenance items at one time as opposed to requiring a ship's crew to assume responsibility for certain items?

Admiral BURKE. No, sailors must perform preventive and corrective maintenance while deployed in order to maximize their ship's operational readiness.

When sailors perform routine preventative and corrective maintenance they gain a greater in-depth knowledge of their equipment, develop a stronger sense of ownership and pride in its condition and appearance, and maintain their equipment in better working order. The increased skill level and sense of ownership directly impacts the readiness of deployed ships and submarines operating far from intermediate and depot repair facilities by enabling the crew to perform critical at-sea repairs when needed, in lieu of returning to port, and reduces reliance on overseas maintenance organizations or fly-away repair teams.

It is also more efficient for intermediate and depot repair facilities to conduct the more complex maintenance for which they are better suited instead of performing organizational level preventative and corrective maintenance; organizational level maintenance does not require the same level of experience, controls or oversight that intermediate and depot repair facilities are designed to provide.

Additionally, by conducting maintenance when needed by sailors afloat, ships are in better operational condition when arriving for depot availabilities, thereby reducing the net maintenance requirement and ultimately the cost of maintaining the Fleet.

82. Senator AYOTTE. Vice Admiral Burke, isn't the Navy just transferring workload from an ashore force to a ship's crew?

Admiral BURKE. Workload is not being transferred from ashore to ship's crew. Increased shipboard manpower is being provided to improve damage control/firefighting readiness, safety of navigation, preservation, material readiness, and underway watch standing. These additional personnel will perform preventive and corrective maintenance and more efficiently distribute the workload.

83. Senator AYOTTE. Vice Admiral Burke, how does this affect the ship's readiness and effectiveness while deployed?

Admiral BURKE. Increasing the billets on ships will restore the workforce necessary to support damage control/firefighting readiness, safety of navigation, preservation, material readiness, and underway watch standing for the ship's crew, both while deployed and in homeport. When sailors perform preventative and corrective maintenance assigned to them, they gain a greater in-depth knowledge of their equipment, develop a stronger sense of ownership and pride in its condition and appearance, and thereby maintain the equipment in better working order. The increased skill level and sense of ownership directly impacts the readiness of deployed ships and submarines by enabling the crew to perform critical at-sea repairs while operating far from intermediate and depot repair facilities, in lieu of returning to port. This in turn reduces reliance on overseas maintenance organizations, contracted facilities, and fly away repair teams.

84. Senator AYOTTE. Vice Admiral Burke, does this mean that ships will deploy without the full maintenance schedule being accomplished, thus reducing ship readiness?

Admiral BURKE. No, prior to deployment, Navy vessels are given a pier-side availability period to prepare for deployment. During that availability, emphasis is given to clearing corrective maintenance items and grooming communications, combat systems, engineering, electronic and aviation systems, in order to ensure the highest possible reliability during deployment.

AIR FORCE WEAPONS SYSTEM SUSTAINMENT

85. Senator AYOTTE. Lieutenant General Reno, in the area of aircraft maintenance and sustainment, the Air Force realized during preparation of the 2012 budget that it was $7 billion short through the next 5 years. In response, Air Force leaders approved a $4 billion increase to sustain 400 new airframes and existing legacy weapon systems, while looking for efficiencies to address the remaining $3.0 billion. The Air Force then initiated an end to end analysis to more accurately define aircraft maintenance requirements and link them to a readiness metric. The result of these changes is that the fiscal year 2012 funding will support 84 percent of validated requirements vice an originally planned 80 percent of requirements. Have any of the efficiencies proposed by the Air Force actually resulted in a validated savings? If not, what confidence do you have that they will?

General RENO. WSS savings have been identified and validated for fiscal year 2012. In fiscal year 2012, $605 million in WSS efficiencies were identified and submitted in the fiscal year President's budget cycle. The Air Force is committed to providing the warfighter with the same capability levels while achieving these efficiencies. To this end, metrics have been developed to track efficiencies as they are realized during the year of execution.

86. Senator AYOTTE. Lieutenant General Reno, since the requirements to safely maintain an aircraft over its lifespan are a matter of engineering and physics, which are difficult to reduce through efficiencies, is the Air Force in reality reducing maintenance efforts on each aircraft in order to respond to decreased funding levels?

General RENO. For fiscal year 2012, WSS efficiencies represent $605 million of the $3 billion WSS FYDP bogey. These efficiencies were identified via a thorough review of sustainment requirements using a three-pronged approach. First, there was a review of Aircraft and Missile Requirements where savings were realized from hour reductions for organic Programmed Depot Maintenance (PDM) packages. Second, a deep dive scrub of over 5000 sustainment tasks for WSS was accomplished resulting in the consolidation of mishap/battle damage funding management and reductions in PDM schedules based on a transition from hours/calendar driven inspections to requirements driven inspections. Lastly, a review of depot and supply chain processes was accomplished. Overall, these actions did result in minor reductions to maintenance efforts for some aircraft; however, they also included increased maintenance efforts for other aircraft. Finally, and most importantly, all recommended changes in maintenance efforts were only accepted after thorough engineering analysis and safety risk assessments.

87. Senator AYOTTE. Lieutenant General Reno, in the past 5 years, what has historically been the percentage of aircraft maintenance requirements funded each year?

General RENO. Prior to 2007, there was no Centralized Asset Management office serving as the Executive Agent for WSS programming and execution. Therefore there is no consolidated WSS requirements data available prior to that period. In fiscal year 2007, WSS was funded at 76 percent of the total requirement with baseline funding and 95 percent including OCO funding. In fiscal year 2008, WSS was funded at 73 percent of the total requirement with baseline funding and 90 percent including OCO funding. In fiscal year 2009, WSS was funded at 72 percent of the total requirement with baseline funding and 92 percent including OCO funding. In fiscal year 2010, WSS was funded at 69 percent of the total requirement with baseline funding and 84 percent including OCO funding. In fiscal year 2011, WSS was funded at 65 percent of the total requirement with baseline funding and 82 percent including OCO funding. For fiscal year 2012, WSS is programmed at 70 percent of the total requirement with baseline funding and 85 percent including OCO funding.

88. Senator AYOTTE. Lieutenant General Reno, are we taking a risk for the 16 percent of maintenance requirements that go unfunded each year?

General RENO. The 16 percent unfunded requirement risk is primarily being assumed in areas with limited impact to near-term readiness, such as software, sustaining engineering and technical orders. This risk is further mitigated by the annual, enterprise-wide prioritization of requirements to ensure the highest priority systems are funded in the year of execution. For our currently defined force structure, historic funding levels including OCO funds, have proven sufficient in meeting combatant commander mission requirements; however, sustained WSS funding at less than these levels, or loss of OCO funds, may lead to increased risk of aircraft groundings.

89. Senator AYOTTE. Lieutenant General Reno, is this risk compounded each year?

General RENO. Without careful management and oversight, the risk associated with unfunded WSS requirements can grow significantly from year to year. The Air Force, however, strives to minimize and mitigate this risk by assuming it in areas with limited impact to near-term readiness, such as software, sustaining engineering and technical orders. This risk is then further mitigated by the annual, enterprise-wide prioritization of requirements to ensure the highest priority systems are funded in the year of execution. Any remaining unfunded requirements are then revalidated and reprioritized before being included in the following year's Program Objective Memorandum requirements.

AIR FORCE COMPETITION FOR ENGINE REPAIRS

90. Senator AYOTTE. Lieutenant General Reno, the Air Force recently saved maintenance funds by increasing competition in the KC–10 Extender Logistics Support program for engine spare and repair parts at Port San Antonio, TX. Given the Weapons Systems Acquisition Reform Act (WSARA) of 2009, section 805 of the 2010 NDAA, and the evolving DOD efficiencies initiatives, what else is the Air Force doing to help facilitate competition in the sustainment of major weapons systems?

General RENO. The Air Force is more conscientious given reduced budgets and long-term sustainment of weapons system platforms. As such, the Air Force is taking a cohesive approach that looks at both our legacy platforms and our new platforms in terms of data rights and ownership. Where our legacy platforms did not include full ownership of data rights, thus limiting competition, the Air Force has initiated a business case analysis. The analysis will determine which data rights are required to organically support the sustainment of our legacy major weapons systems. Where new platforms are established, the Air Force is taking a proactive planning approach by determining what type of data rights are required for both acquisition and sustainment. This approach will lend itself to greater competition at various milestones throughout the acquisition and sustainment lifecycles.

91. Senator AYOTTE. Lieutenant General Reno, can the lessons learned of lowering O&M costs through competition with the KC–10 Extender be applied to other airframes and engines?

General RENO. Yes, the KC–10 engine overhaul is an example where competition realized cost savings. The KC–10 engine program was able to do so because of two key conditions. First, the KC–10 engine is a commercial derivative. This condition typically ensures a robust industrial base with several vendors capable of performing the overhaul work. The second is that the Air Force owned the data rights to the necessary maintenance overhaul manuals. Government ownership of this data enabled the Air Force to broadly compete the overhaul work. The combination of a robust industrial base and government ownership of the maintenance data created the opportunity to realize cost savings. The Air Force is committed to open competition, and in cases where these conditions exist, the Air Force actively pursues this strategy and the opportunity to achieve cost savings.

92. Senator AYOTTE. Lieutenant General Reno, what options are available to the Air Force to expand or increase competition in life cycle sustainment costs?

General RENO. The Air Force requires the use of a competitive strategy prior to each milestone for each Acquisition Category program. Each competitive strategy is included in the Life Cycle Management Plan and addresses how the program will obtain technical data, computer software and documentation, and associated intellectual property rights necessary for operation, maintenance, long-term sustainment and competition. In order to reduce lifecycle costs, the Air Force conducts should-cost analyses and continues to pursue open architecture initiatives to achieve design stability, mature technologies, and affordable solutions. The Air Force is also requiring more frequent re-competes of knowledge-based services, and service contracts valued at more than $1 billion are required to include productivity improvements and cost efficiency objectives. The Air Force is committed to utilizing competition to the greatest extent possible to maximize savings for the taxpayer.

READINESS OF NONDEPLOYED UNITS

93. Senator AYOTTE. Lieutenant General Panter, Marine Corps readiness for nondeployed units continues to erode year-to-year even though Congress has authorized an expansion of Marine Corps end strength to the current 202,000 level and has funded billions of dollars for equipment reset, consistent with the President's and

the Marine Corps' requests. Despite these substantial investments, the Marine Corps has not seen the erosion of nondeployed readiness stabilize or start to improve. Since the Marine Corps considers themselves America's September 11 force, this is a matter of great concern. In recent weeks, we have seen unanticipated, early deployment of the Marine Corps in support of Libyan operations, as well as for humanitarian and recovery operations for Japan. In some cases, full combat readiness across the entire spectrum of conflict is not essential such as for operations in support of a humanitarian mission in Japan. But in other cases, such as in support of the Libyan operations, exactly what combat skills may be called for is much harder to judge. Why have Marine Corps readiness rates for nondeployed forces not started to level off and then improve given the investment in end strength and equipment?

General PANTER. Despite significant investment in both end strength and equipment, the Marine Corps has not realized significant improvement in the readiness of nondeployed forces because of a steady increase in Marine Corps global commitments since 2005.

In June 2005, the Marine Corps active duty end strength was approximately 177,000. At that time, the Marine Corps had approximately 25 percent of its operating forces forward-deployed in support of OIF and other combatant commander requirements. With a deployment-to-dwell ratio for many Marine units less than 1:1, sustaining that level of commitment came at a tremendous cost to the individual and collective readiness and welfare of Marines and their families. Marine units were in a constant cycle of "deploy-train-deploy" within a highly compressed time period. Today, the Marine Corps active duty end strength is approximately 202,000 with around 25 percent of the operating forces consistently deployed. This represents an aggregate increase in combatant commander demand for Marine forces. Simply put, the Marine Corps is "doing more with more [resources]". A critical difference between now and 2005 is that with a larger force and more resources, the Marine Corps is able to better sustain current commitments based on increasing combatant commander demand, which is greater than is was 5 years ago. In 2005, the deployment-to-dwell ratio was often less than 1:1, now the deployment-to-dwell ratio for most units is approaching 1:2.

94. Senator AYOTTE. Lieutenant General Panter, if the current pace of combat operations in Afghanistan continues, how much lower do you expect nondeployed unit readiness rates to decline?

General PANTER. It is difficult to precisely forecast future readiness based on current conditions; however, after nearly 10 years of combat operations, we can draw some basic conclusions. Sustaining current operations around the globe has reduced the aggregate readiness of the nondeployed force. A generally consistent figure is that anywhere from 60–65 percent of the nondeployed force—Active and Reserve—report degraded levels of readiness. This figure fluctuates based on scheduled rotations of units to and from Afghanistan. It is also affected by the extent to which the Marine Corps must commit forces to new requirements, such as crisis response. Another consistent figure is that the Marine Corps has approximately 24–28 percent of its operating forces end strength deployed at any given time. To sustain such a large forward-deployed presence, the Marine Corps must commit most of the nondeployed force to training to relieve those forces which are deployed. The Marine Corps can sustain this commitment under current conditions for as long as the Nation requires, acknowledging that the readiness of the nondeployed force will not significantly improve until reconstitution of the force is well underway (post-OEF).

Equipment supply is a resource area of particular concern and is the primary readiness detractor for the nondeployed force. Lack of equipment due to sustainment of current operations impacts the ability of nondeployed forces to respond to potential contingencies. Equipment shortfalls also make it more difficult for nondeployed units to train to core skills earlier in their predeployment training cycle in preparation for OEF or other combatant commander requirements. The commitment of a seventh infantry battalion and its associated equipment to Afghanistan earlier this year has further strained the ground equipment available to nondeployed forces.

95. Senator AYOTTE. Lieutenant General Panter, how would you describe the level of risk for operations other than those in Afghanistan?

General PANTER. The Marine Corps is responding to the Nation's demands with a unique combination of expeditionary land-based and amphibious forces, but such commitment comes at a cost to the readiness of nondeployed units. Sustaining current operations has reduced the aggregate readiness of the nondeployed force. Strategically, low levels of readiness for the nondeployed force increases risk in the timely and successful execution of crisis response and major contingency operations (war

plans). If the Marine Corps were required to respond to a second major contingency, the Marine Corps could respond, but would face significant challenges in forming a fully resourced and cohesive MEF-level MAGTF to meet war plan timelines. For a smaller scale crisis or contingency, readiness levels of the nondeployed force would affect the Marine Corps' ability to respond, but to a lesser degree. For example, over the past 18 months, the Marine Corps had successfully responded to crises in Haiti, Pakistan, Korea, Egypt, Libya, Japan, and Yemen. It would be inherently more difficult to respond to a second major contingency while sustaining current global and OEF requirements.

RESET COSTS AND DEFERRED EXPENSES

96. Senator AYOTTE. Lieutenant General Panter, the Commandant has testified that the bill for reset of Marine Corps units will be about $10.6 billion. Whether OCO wartime funding will be available after our withdrawal from Afghanistan as planned in 2014 is not known at this time. If such wartime funds are not available, substantial amounts of funding for war-related expenses may be required from within the base budget for DOD. Yet, the amount requested for reset of Marine Corps equipment in fiscal year 2012 is only $2.5 billion, less than the $3.1 billion requested for fiscal year 2011. The Commandant has said that there will be about $5 billion in additional reset costs that won't be addressed until after marines have withdrawn from Afghanistan. Isn't there something Congress can do to get ahead of this reset curve now, while wartime funds are available?

General PANTER. Fiscal year 2012 funding is adequate to support depot maintenance and WSS for deployed and nondeployed units. The Marine Corps' $2.5 billion request in fiscal year 2012 for reset is directly related to the repair and replacement costs of OCOs in Iraq and Afghanistan. In many ways our ability to conduct reset in fiscal year 2012 is constrained by the lack of equipment that has returned for reset actions. The equipment redeployed from Iraq to Afghanistan in support of the 2009 surge included most of our deployed medium tactical fleet, the majority of our Mine Resistant Armor Protected (MRAP) fleet, light armored reconnaissance vehicles, other hard-to-move equipment items, and many theater-specific items. This same equipment comprises a significant portion of the Marine Corps' total reset liability. Thus much of our reset requirement will remain deferred as long as this equipment continues to be employed in Afghanistan. Moreover, as long as the war continues, our future costs for reset will grow accordingly.

97. Senator AYOTTE. Lieutenant General Panter, is there no more capacity left in either civilian industry or the Marine Corps depot system that would allow us to repair or replace more war-damaged equipment now?

General PANTER. Our organic maintenance depots have the flexibility to expand with the needs of the Marine Corps. We are able to increase capacity at our depots, as well as contract with commercial sources to rapidly repair war-damaged equipment. The Marine Corps is capitalizing on this capability with the Principal End Item (PEI) Rotation program to cycle war-damaged equipment through the depots, and return fully mission capable equipment to the warfighter. However, because the Marine Corps transferred large quantities of equipment retrograded from Iraq to support the increased footprint in Afghanistan; most of the equipment in need of depot repair is still in theater. Our ongoing operational requirements and the transit times associated with cycling equipment have allowed the depots to operate at a steady state, without huge surges in demand.

When the Marine Corps withdraws from Afghanistan, we must quickly return mission capable equipment sets to operating forces and strategic programs in order to ensure our ability to decisively respond to future missions. This will require the full use of our organic depots, as well as the strategic use of commercial repair sources to rapidly reset the equipment that has sustained significant wear throughout the war.

RECONSTITUTION

98. Senator AYOTTE. Lieutenant General Panter, separate and apart from reset needs, the Marine Corps has discovered through nearly a decade of combat that its unit specific Tables of Equipment needed major revisions for today's decentralized combat. This has meant, for example, far more radio equipment and ground combat vehicles for each unit than had been authorized in the Tables of Equipment that existed prior to September 11. These reconstitution costs for modernized equipment sets are currently estimated to be at least $5 billion in addition to the $10.6 billion

in reset costs. Yet, in the fiscal year 2012 budget, equipment reconstitution is funded at only $253 million. At that rate, it would take 20 years to buy $5 billion in new equipment, drawing the time out for so long that it is almost certain the equipment bought at the start of the process would have to be replaced due to obsolescence before completing the updates to all Marine Corps units. Why are such pressing needs for new equipment funded at so low a rate?

General PANTER. The reconstitution requirement of $5 billion is an amount entirely separate from our reset costs. This requirement is specifically related to table of equipment shortfalls; therefore, if funded, it will directly contribute to increased nondeployed readiness levels. While we have begun to address our reconstitution shortfall by requesting $253 million in fiscal year 2012 for equipment procurement, the Marine Corps has many equipment deficiencies (as evidenced by the degraded state of nondeployed Marine Corps unit readiness) that additional funding could be applied against immediately. However, the Marine Corps will responsibly execute only the funds necessary to reconstitute the force to meet projected future operational requirements.

Efforts to Close the Gap: to close this reconstitution gap, we are developing the core capabilities of a Middleweight Force in the post-OEF era. The results of these efforts (including our Force Structure Review Group, Lighten the MAGTF initiative, Table of Equipment reviews, and others) will shape the decisions on what equipment to reset and how best to reconstitute the force so that we are postured to respond across the range of military operations. The processes in motion to define our post-OEF force will inform our decisions to smartly program our acquisitions to modernize the force in the near future.

99. Senator AYOTTE. Lieutenant General Panter, how does the Marine Corp plan to get ahead of the curve for modernization of its Tables of Equipment since clearly units can't wait 20 years for new gear that we know will be needed in combat based on the experiences of the last 10 years?

General PANTER. Our OCO experiences have shown us that our legacy 20th century tables of equipment (T/E) have become simply inadequate with the demands of the modern battlefield. The projected estimate for reconstituting our T/E—as previously stated—is $5 billion over fiscal year 2012–fiscal year 2015. As the force structure review is implemented, we will continue with a deliberate assessment of the modernization requirements for equipment that optimizes our post-Afghanistan posture. Our Service Reconstitution Strategy will guide the identification of emerging requirements for refining the capabilities of the Middleweight Force, our support to the combatant commanders, our Service level prioritization, and resource allocation decisions. We will continue to satisfy equipment requirements across the Enterprise with both reset actions and needed investments in reconstituting T/Es.

LPD–17 CLASS-WIDE PROBLEMS

100. Senator AYOTTE. Lieutenant General Panter, the Navy's LPD–17, *San Antonio* class, has been plagued with materiel readiness problems throughout its history such that the lead ship has spent far more time being repaired since its delivery to the Navy than it has spent deployed with embarked marines. Is the Marine Corps satisfied with the progress that is being made to correct the materiel readiness problems with the *San Antonio* class LPDs?

General PANTER. The materiel readiness issues confronting the LPD–17 class are significant; however, all indications are that the resources and policy changes that the Navy has implemented to address these issues are producing good results. The positive results of San Antonio's recent sea trials demonstrate that the changes the Navy has instituted are working, and should soon restore the ship to full operational status.

Efforts to remediate problems with the LPD–17 class have addressed other factors which contributed to the obvious materiel shortcomings. These efforts include significant, program-wide changes in oversight, training, and quality assurance means that will enable the class to achieve combat readiness as quickly and safely as possible. We anticipate that San Antonio, and the sister ships of her class, will prove valuable and dependable additions to the amphibious fleet.

101. Senator AYOTTE. Lieutenant General Panter, what is the level of risk to the Marine Corps if the LPD–17s continue to have class-wide problems that make them unreliable or unable to deploy to support operational missions?

General PANTER. Persistent non-availability of the LPD–17 class vessels may have a significant impact on the Marine Corps' ability to perform its amphibious mission

and satisfy global demand for Marine Forces. LSD–17 non-availability, coupled with the planned decommissioning of older LPD class vessels, will result in a net aggregate shortfall in the number of ships that are available to perform missions globally. As currently planned, the older LPD class vessels, including USS *Cleveland* and USS *Ponce*, will decommission prior to a replacement ship being commissioned. Delayed delivery schedules and class-wide materiel issues with the LPD–17 class ships, coupled with a continued aggressive decommissioning schedule, jeopardize our ability to support the demand of combatant commanders.

COORDINATION WITH SPECIAL OPERATIONS COMMAND

102. Senator AYOTTE. Lieutenant General Stevenson, Special Operations Forces (SOF) are heavily dependent on enabling support from the Army to conduct operations around the world. As U.S. forces draw down from Iraq and eventually Afghanistan, the demand for SOF is likely to remain steady. As such, U.S. Special Operations Command (SOCOM) is in the initial stages of creating a force generation model based on the ARFORGEN cycle to increase predictability in deployments as well as improve coordination between the Army and SOCOM for joint pre-deployment training and the provision of materiel support. What role is the Army playing in assisting SOCOM to develop this new force generation model to ensure enabling personnel and equipment are available and properly synchronized?

General STEVENSON. The Army continues to support the development of SOCOM's force generation model, also known as SOFORGEN, by coordinating with SOCOM to incorporate the tiered support construct and create SOCOM requirements in the Global Force Management process. The tiered support construct accounts for organic growth to Special Operations Forces (Tier I), specific support of enablers under operational control to SOCOM (Tier II), and general support enablers allocated to the theater commanders (Tier III).

The Army and SOCOM are composing a memorandum of agreement that will formalize the alignment of SOFORGEN and ARFORGEN for enablers in support of SOF current demands for OEF, OND, and future emerging events. Future planning is on going with Total Army Analysis (TAA) and Rules of Allocation (ROA) to establish regionally aligned brigades with an understanding of SOF requirements in support of Geographic Combatant Commanders.

NAVY SURFACE SHIPS READINESS

103. Senator AYOTTE. Vice Admiral Burke, I understand that the Navy recognizes that it needs to improve maintenance on its surface ships to repair problems that have developed over the last several years in surface ship materiel readiness. However, the Navy's budget request shows funding for ship maintenance declining from 100 percent of projected requirements in 2010 to 97 percent in the 2011 request and 94 percent in the 2012 budget request. The total amount of ship maintenance funding is going down, from $7.5 billion in 2010, to $7.3 billion in the 2011 request, and $7.2 billion in the 2012 request. Equally troubling is the amount of annual deferred maintenance is increasing from $0 in 2010 to $172 million in 2011, and $367 million in the 2012 budget request.

Since funding for maintenance on submarines and aircraft carriers is traditionally protected, this downward trend in funding looks like it could fall more heavily on the Navy's surface combatants. Why does the Navy's budget not reverse the upward trend of deferred maintenance?

Admiral BURKE. Even though the percentage of the Ship Maintenance requirement funded has fallen, the baseline maintenance budget request has actually increased from $4.3 billion in fiscal year 2010 to $4.9 billion in fiscal year 2012. This increase is a reflection of the Navy's commitment to funding the surface ship maintenance requirement. Additionally, investments being made in the Surface Maintenance Engineering Planning Program (SURFMEPP), and enhanced assessments of our surface ships provides us with more insight on how to best manage risk and ensures that deferred work will be properly documented and tracked for completion in future availabilities. Navy remains committed to sustaining the force structure required to implement the Maritime Strategy.

The Navy's total budget submission reflects the best balance of risk and available resources across the Navy portfolio.

104. Senator AYOTTE. Vice Admiral Burke, is the Navy's 2012 budget request consistent with its goals of improving surface ship readiness?

Admiral BURKE. Navy's combined fiscal year 2012 baseline and OCO budget submissions fund 94 percent of the projected depot ship maintenance requirements necessary to sustain global presence requirements, and continue to improve overall surface ship readiness. This represents the best balance of risk and available resources across the Navy portfolio.

105. Senator AYOTTE. Vice Admiral Burke, how much risk is the Navy taking on in terms of surface ship readiness with its current year budget submission?

Admiral BURKE. Navy's combined fiscal year 2012 baseline and OCO budget submissions fund 94 percent of the projected depot ship maintenance requirements necessary to sustain global presence requirements. The resultant shortfall of $367 million equates to deferral of surface ship availabilities in order of priority. First deferred would be 34 surface ship non-docking availabilities, followed by 3 surface ship docking availabilities, and lastly by the private sector portion of seven Carrier Incremental Availabilities. This represents the best balance of risk and available resources across the Navy portfolio.

Additionally, Navy has made investments in the past several budget cycles in the SURFMEPP and enhanced assessments of our surface ships. These investments have provided additional insights on how to best manage risk and ensure deferred work is properly documented and completed in future availabilities.

NAVY EXPEDITIONARY FORCES

106. Senator AYOTTE. Vice Admiral Burke, your statement makes mention of Navy Expeditionary Forces—a unique naval capability whose forces have been around since World War II. Expeditionary Navy forces support global missions that expand and enhance combatant commander's capabilities by deploying security, construction, logistics, explosive ordnance disposal (EOD), divers, and riverine forces. Your statement describes Navy Expeditionary Combat Command's (NECC) cost effective capabilities and force structure as an "enduring mission" which is heavily engaged in today's wars and there is a growing requirement for them in the future. Given that, would you please describe why nearly 60 percent of NECC's budget is in the supplemental OCO budget and not in the baseline budget which is preferred by Congress and this committee?

Admiral BURKE. Navy Expeditionary Combat Command (NECC) has been heavily involved in support of operations in both Iraq and Afghanistan, exceeding programmed baseline levels of support. NECC's force is comprised of 51 percent mobilized reservists on a rotational basis to support the war effort. NECC's mission is clearly enduring, but due to the high operational tempo in theater, it requires significant amounts of OCO funding. Congress recognized this by moving $192.8 million from the NECC baseline budget to OCO in the fiscal year 2011 DOD Appropriations Bill.

NAVAL READINESS

107. Senator AYOTTE. Vice Admiral Burke, as you recall, the only priority that the Chief of Naval Operations (CNO) identified as unfunded in last year's budget submission was ship depot maintenance. Recently, there have been several amphibious and other combatant ships which have needed additional time and funding while they were undergoing shipyard maintenance—in some cases, keeping them from meeting their operational deployments. What is the Navy doing to ensure we get our ships through their shipyard periods on cost and on time?

Admiral BURKE. The investments made in the past several budget cycles in surface ship life cycle maintenance include enhanced assessments to improve our understanding of ship material condition, and establishment of the SURFMEPP to provide the Navy with centralized surface ship life cycle maintenance management, including engineered class maintenance plans, availability planning, and a formal work deferral process.

The combination of enhanced assessments and a disciplined availability planning and execution process will minimize the impacts associated with discovery of unplanned repairs during execution, and result in better use of available maintenance funding to achieve surface ship expected service life and long-term readiness.

108. Senator AYOTTE. Vice Admiral Burke, to what extent does the 2012 budget request fully fund the Navy's current requirement for ship depot maintenance?

Admiral BURKE. Navy's combined fiscal year 2012 baseline and OCO budget submissions fund 94 percent of the projected depot ship maintenance requirements. This will defer $367 million of maintenance, primarily in the Surface Force.

109. Senator AYOTTE. Vice Admiral Burke, to what extent does the 2012 budget capture depot maintenance volume that has accumulated from chronic underfunding over time?

Admiral BURKE. The fiscal year 2012 budget (including OCO) resources the ship maintenance account to 94 percent of the total requirement. This includes all known deferrals from prior scheduled availabilities for ships that are scheduled for a maintenance availability during fiscal year 2012. This funding level represents the best balance between current force readiness and building the future force within available top line funding.

MODERNIZING THE SURFACE FLEET AND FLEET READINESS

110. Senator AYOTTE. Vice Admiral Burke, without going into specific ship readiness levels, which gets into a classified area, there have been recent press reports describing Service-wide problems with preventive maintenance, surface-ship firefighting systems, corrosion, hull cracking, communication systems failures, steering and anchoring issues that made the ship unfit, and in some cases prevented ships from getting underway on time. In your view, how is ship readiness trending over the past 5 years, and what specific problems have been found?

Admiral BURKE. Recent indications are that the negative trend in ship readiness has been arrested and we may be starting to see some improvement. Data from the Board of Inspection and Survey shows failure rates hovering around 10 percent for most of the last 5 years, but in 2010, the rate was reduced to 4 percent. Since a single year of performance does not represent a trend, Navy will continue to monitor surface ship readiness into the future.

Specific problems identified included surface ship and intermediate maintenance center manning, accuracy of the class maintenance plans and material condition assessments, and formality of the maintenance planning and execution process. Corrective actions have been initiated for each identified problem, including increasing shipboard and Regional Maintenance Center (RMC) billets to improve organic shipboard and intermediate maintenance capability and capacity, and provide valuable sailor skill training. In addition, the Intermediate Maintenance Facility in Mayport is being reopened to provide waterfront maintenance support.

Navy has partnered with the American Bureau of Shipping (ABS) to conduct detailed surveys of all surface ship classes using ABS standards. Navy also established the Surface Warfare Enterprise Assessment Program, supported by technical experts from the RMCs, to conduct ship material condition assessments.

The SURFMEPP was established to provide centralized surface ship life cycle maintenance planning. Most surface ship Class Maintenance Plans have been updated and significant resources have been added to annual ship maintenance budgets, specifically targeted at surface ship maintenance. To ensure those resources are effectively used, SURFMEPP prepares Baseline Availability Work Packages for scheduled availabilities and then tracks the completion of all required maintenance actions.

Navy also established the Senior Leadership Oversight Council to provide executive level control over surface force readiness concerns, and is confident that the steps taken will ultimately improve surface ship readiness.

111. Senator AYOTTE. Vice Admiral Burke, what is the Navy doing to correct these deficiencies and reverse this trend?

Admiral BURKE. Initiatives are currently underway to reverse negative surface ship readiness trends, including increasing shipboard and RMC billets to improve organic shipboard and intermediate maintenance capability and capacity and valuable sailor skill training. In addition, the Intermediate Maintenance Facility in Mayport is being reopened to provide waterfront maintenance support.

Navy has partnered with the ABS to conduct detailed surveys of all surface ship classes, using ABS standards. Navy also established the Surface Warfare Enterprise Assessment Program, supported by technical experts from the RMCs, to conduct ship material condition assessments.

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effectively used, SURFMEPP prepares Baseline Availability Work Packages for scheduled availabilities and then tracks the completion of all required maintenance actions.

OPERATIONS AND SUPPORT AND JOINT STRIKE FIGHTER

112. Senator AYOTTE. Lieutenant General Reno, last year U.S. Navy Naval Air Systems Command (NAVAIR) effectively determined that the Marine Corps and the Navy's versions of the Joint Strike Fighter (JSF) may end up being too expensive to operate. Specifically, it found that, with each flight-hour possibly costing about $31,000 in 2029, compared with about $19,000 per flight hour for current F/A–18 Hornets and AV–8B Harriers, the operating cost associated with the Navy's versions of the JSF may be considerably higher than the costs to operate the legacy aircraft they are intended to replace. Has the Air Force reviewed and independently validated NAVAIR's analysis. If so, do you agree with its finding on the expected operating costs of the JSF? If so, what is your sense of what this could mean for the viability of the Air Force's JSF program and the kind of mix we can expect in terms of the Air Force's future strike fighter force?

General RENO. The Air Force has reviewed NAVAIR's analysis and determined that the operating costs for all three of the JSF variants are higher than originally estimated. OSD CAPE also conducted an O&S cost estimate for JSF and their estimate is consistent with the previous Air Force and Navy cost estimates. These estimates also demonstrated that the operating costs of the Air Force's F–35A Conventional Take-Off and Land variant will be less than the Short Take-Off and Vertical Land and Carrier JSF variants. The Air Force is currently working with our Sister services, the JSF Joint Program Office, and the prime contractor, Lockheed Martin, in an aggressive effort to review the JSF sustainment strategy in order to assess means to reduce total life cycle costs. This should result in recommendations to reduce costs by the end of the year.

While the Air Force expects the operating costs for our F–35A fleet to be higher than our legacy F–16 fleet it is intended to replace, the 5th generation capabilities of the JSF will allow our warfighters to operate and succeed in Anti-Access/Area Denied environments, which our legacy fleet will not be able to do against tomorrow's advanced threats. Because of these fifth generation capabilities, the F–35 remains a key enabler to guarantee and maintain air dominance for the foreseeable future.

113. Senator AYOTTE. Lieutenant General Reno, to what extent is NAVAIR's assessment (and the Air Force's validation of that assessment) reflected in the Air Force's current budget proposal?

General RENO. The Air Force's fiscal year 2012 budget proposal is in line with the NAVAIR assessment and is consistent with OSD guidance to fund the program to the OSD CAPE estimate.

F–22 RAPTOR SUSTAINMENT STRATEGY

114. Senator AYOTTE. Lieutenant General Reno, this committee has concerns about the cost associated with operating and sustaining the F–22 Raptor. I understand that we just signed a cost-reimbursable contract with Lockheed Martin that will get us 1 year of sustainment for the F–22 for about $1.2 billion. What is the overall sustainment strategy for the F–22 program going forward and, in particular, to what extent will that strategy use competition (or the option of competition) to drive down costs?

General RENO. The F–22 sustainment strategy is based on the Performance Based Logistics concept/contract mechanism in which the prime contractor is incentivized to maximize fleet availability while reducing ownership costs across the life cycle of the aircraft. This support strategy includes all elements of support for the aircraft, trainers, and engines. It includes base and depot level maintenance, product support, support engineering, field support, configuration control and technical data, and training services. Adjustments to this methodology are made as the weapon system matures.

The F–22 Program Office is currently surveying its portfolio of sustainment programs—both products and services—to determine the most cost effective options for future product and support services, including organic, open competition, or sole source basis from the original equipment manufacturer to avoid additional "pass through or markup" costs by a single prime integrator. The program office will conduct a cost-benefit analysis on candidate projects to determine whether the net savings associated with in-sourcing, competing, and/or procuring directly from the origi-

nal equipment manufacturer justify accepting the additional risks associated with pursuing the new procurement strategy.

115. Senator AYOTTE. Lieutenant General Reno, I understand that a preponderance of F–22 Raptors came out of production with structural defects that are significantly limiting its service life. That as a result, the Air Force has initiated a Structures Retrofit Program (SRP) that is intended to extend the service life of those aircraft—163 of them, in total—to reach 8,000 flight hours (their original intended service life). Can you give me a sense of what kind of items need to be retrofitted to help extend the F–22's service life to 8,000 flight hours?

General RENO. You are correct. During production, ongoing analysis identified a number of structural retrofits required to meet the full 8,000 hour design life. The SRP performs structural treatments and installs structural modifications to bring the F–22 up to its full service design life of 8,000 hours.

The SRP will modify internal F–22 structural components such as lugs, bushings, line pass-through holes, spars, attachment flanges, and hinges. These SRP modifications are being made to reduce or more effectively distribute internal stresses in the F–22 structure in order to meet design life.

The wing attachment lugs are a prime example of an item modified by the SRP. The attachment points are subject to high stress and usage analysis and testing showed they were prone to crack, limiting aircraft service life. The SRP program treated these locations with glass bead peening and laser shock wave peening to prevent crack initiation in the structure, which extended the service life.

116. Senator AYOTTE. Lieutenant General Reno, what is the total cost of this retrofit program?

General RENO. The total funding for the SRP is $343.7 million. The SRP began in fiscal year 2006 and is planned to complete in 2016.

117. Senator AYOTTE. Lieutenant General Reno, what effect will this disturbing development have on maintaining the operational availability of these aircraft?

General RENO. The impact of the SRP on operational availability is minimal and the SRP is carefully managed to minimize impact to the fleet. Each aircraft is individually managed for insertion into SRP modifications to ensure the flying hour restrictions are not over-flown. Additionally, SRP modifications are scheduled concurrently with other ongoing scheduled maintenance at the depot level to minimize downtime and the maintenance burden on operational wings.

118. Senator AYOTTE. Lieutenant General Reno, what is the inspection and installation burden of the retrofit program on the legacy fleet of F–22s?

General RENO. The inspection and installation burden for the SRP on operational F–22 wings is minimal. SRP modifications are scheduled concurrently with other ongoing scheduled maintenance at the depot level to minimize downtime and the maintenance burden on operational wings. SRP actually decreases the long-term inspection burden on the F–22 fleet by repairing structures that previously required inspections.

SERVICE LIFE EXTENSION PROGRAM

119. Senator AYOTTE. Lieutenant General Reno, last year, General Schwartz told this committee about the plan to survey the F–16 fleet in detail to determine what kind of service life extension program (SLEP) might be necessary, especially given the delays in the F–35A.Where does that effort stand?

General RENO. The details of F–16 SLEP are still being refined. In April 2011, the Air Force awarded a contract for a Full Scale Durability Test on an F–16 Block 50, the results of which will inform us on how to proceed with our SLEP efforts. Additionally the fiscal year 2012 President's budget commits Research, Development, Test, and Evaluation funds for the Air Force to study both structural SLEP requirements as well as avionics enhancements, including an Active Electronically Scanned Array radar, new Center Display Unit, Integrated Broadcast System and new ALQ–213 electronic warfare suite. Finally, we expect continued refinement of F–16 SLEP details in response to F–35A program performance.

120. Senator AYOTTE. Lieutenant General Reno, what have you learned so far about the health of the F–16 fleet?

General RENO. The Air Force aggressively manages the F–16 fleet, incorporating information from the Fleet Viability Board, baseline engineering design, Full-Scale

Durability Tests, and the latest recorded flight data to ensure maximum F–16 sustainability and viability. The Air Force plans to sustain the F–16 Block 25–32 fleet to a planned 10,800 Equivalent Flying Hours (EHF) and the F–16 Block 40/50s are expected to remain structurally viable though 8,000 EFH. Improved structural analysis techniques indicate the F–16 is experiencing lower flight stresses than originally estimated. This will allow them to reach higher actual flight hours within their certified service life limit before structural modifications are required. To ensure the Air Force addresses structural unknowns in the F–16 fleet, we will fund a 5-year Full Scale Durability Test on the F–16 Block 40/50 fleet beginning fiscal year 2012 to identify structural issues that might limit service life. Actionable results from this testing will be available in fiscal year 2016.

121. Senator AYOTTE. Lieutenant General Reno, is there a similar program planned for the A–10 Warthog?

General RENO. The A–10 has gone through several Service Life Extension Programs (SLEPs) starting in 2002. Along with SLEP, the A–10 is replacing the thin-skin wings with new wings starting this year. The Air Force is also investigating the need to replace the remaining thick-skin fleet with new wings in order to sustain the aircraft to the 2040 timeframe.

Most recently, the A–10C Aircraft Scheduled Structural Inspection 2014 (SSI 2014) was developed. In order to satisfy extended service life goals of the A–10 fleet, a restructure of critical components within the fuselage is necessary. SSI 2014 includes the following repairs: upper longeron strap replacement, crown skin and turtle deck skin modification, upper longeron modification at Fuselage Station (FS) 268, lower auxiliary longeron modification at FS 405, electrical trough reinforcement at FS 365, and fuel cell drain hole modification. This will start in fiscal year 2014 using Air Force Operations and Maintenance (3400) funding and will give the A–10 the capability to reach Required Service Life projections of 16,000 flying hours.

FULL SPECTRUM TRAINING MILE

122. Senator AYOTTE. Lieutenant General Stevenson, in its fiscal year 2012 budget request, the Army began using a new metric to budget for its training activity to conduct Full Spectrum Operations. According to the Army, the Full Spectrum Training Mile, vice the Tank Mile, provides the "right representative sample size of units and equipment that more accurately measures training activity across the Army." Will you please explain how the Army arrived at the Full Spectrum Training Mile and how this metric will increase its ability to more accurately capture training requirements and program funding and equipment accordingly?

General STEVENSON. To prepare soldiers for deployments in various operational environments, the Army transitioned its combined arms training strategies, ground and air, from training for major combat operations to training for full spectrum operations in fiscal year 2012. Full spectrum operations training prepares Army forces to conduct offense, defense, and stability or civil support operations simultaneously for assigned missions at any point along the spectrum of conflict from stable peace to general war.

In support of full spectrum operations training, Army executed a full spectrum training mile pilot program in fiscal year 2011 with the goal of transitioning away from the tank mile in fiscal year 2012. The full spectrum training mile measures training activity in terms of a composite average of miles driven by select equipment and type of unit in accordance with ARFORGEN. The tank mile was a good indicator of the training activity required to prepare soldiers for major combat operations, but the full spectrum training mile metric more accurately captures variable requirements that are due to changes in the training strategy, force structure, and adjustments made for deployed units. The full spectrum training mile is more representative of the key units and equipment that conduct full spectrum operations training and consume operational tempo (OPTEMPO) resources.

123. Senator AYOTTE. Lieutenant General Stevenson, do you anticipate this new metric will lead to changes in resourcing requirements?

General STEVENSON. Changing the metric alone does not change the resource requirement. Requirements that are reflected in the new metric change based on changes to the Army's force structure, training strategy, or unit deployments.

124. Senator AYOTTE. Lieutenant General Stevenson, how will this metric address and measure the unique missions of ARNG units, particularly in support of State missions?

General STEVENSON. The full spectrum training mile metric addresses a broader mission set that includes civil support operations training, which supports the State missions conducted by the ARNG. In part, the full spectrum training mile is used to describe the level of training activity in approved unit-level training strategies. The training strategies are designed to enable units to train on fundamental tasks associated with full spectrum operations, i.e., offense, defense, and stability operations (or civil support operations if the unit is to be employed in the continental United States (CONUS)). The level of training activity in approved unit-level training strategies is sufficient to enable ARNG units to prepare for civil support operations that include riot control, law enforcement and emergency (incident) response.

ARMY BODY ARMOR ACQUISITION

125. Senator AYOTTE. Lieutenant General Stevenson, there have been several reports over the last couple of years conducted by the DOD Inspector General (IG) and the GAO that have been critical on issues relating to quality control and testing of body armor by the Army—including most recently a January 2011 DOD IG report that stated the Army did not consistently enforce ballistic testing requirements for several contracts to produce interceptor body armor and vest components. What steps has the Army taken in response to these reports to improve testing and quality assurance protocols to ensure our soldiers have safe and reliable personal protective equipment?

General STEVENSON. The recent DOD IG and GAO recommendations support the Army's efforts to improve testing and quality assurance to ensure soldiers receive safe and reliable protective equipment. Some of the key changes the Army has instituted in body armor testing are as follows:

- To verify that there is no degradation in body armor performance over time, beginning in 2008, Program Executive Office (PEO) soldier developed and deployed Nondestructive Test Equipment (NDTE) systems to detect internal cracks to body armor plates. The December 2009, All Army Activities Message 358–2009, requires that ballistic plates are scanned prior to deployment and rescanned during a soldier's mid-tour leave. The plates identified as having cracks or internal flaws are removed from inventory.
- In 2009, the Army made the decision to move body armor testing from National Institute of Justice (NIJ) Ballistic Laboratories to the Army Test and Evaluation Command (ATEC). The testing at ATEC provides direct governmental oversight of all aspects of body armor testing.
- A common standard in body armor testing is now in place across the DOD. The Office of the Director, Operational Test and Evaluation (DOT&E) standardized First Article Testing (FAT) for hard body armor by issuing a standard protocol for ballistic testing on April 27, 2010. The protocol establishes statistically-derived test methods and standard testing references, protocols, and procedures. The Army began using this protocol on May 4, 2010.

126. Senator AYOTTE. Lieutenant General Stevenson, are you confident that the Army has appropriate measures in place to ensure the safety and reliability of its body armor inventory?

General STEVENSON. Yes, I am confident that body armor issued to our soldiers and in our current inventory is safe and reliable. The U.S. Army, based on the DOT&E body armor standard test protocol, conducts rigorous and extensive testing of body armor to ensure that it meets U.S. Army standards and contractual requirements, and is safe for use by soldiers in combat. The U.S. Army developed and performs a comprehensive test strategy which encompasses FAT and Lot Acceptance Testing (LAT). During FAT, the plates are subjected to and must pass tests in various extreme operating environments, and must also pass both Ballistic Limit testing (provides an indication of safety margin in the protection) and Resistance to Penetration test (no penetration of a selected threat round). Resistance to Penetration testing is also performed during LAT to verify that the product which passed FAT maintains its demonstrated quality level.

Beginning in 2008, PEO soldier developed and deployed Nondestructive Test Equipment (NDTE) systems to detect internal cracks to body armor plates to verify that there is no degradation in body armor performance over time. It is Army policy that all ballistic plates be scanned prior to deployment and rescanned during a soldier's mid-tour leave. As of 30 April 2011, 2.7 million plates had been through the NDTE scanning process and 5.0 percent (135,010 plates) failed the inspection proc-

ess due to wear and tear of soldiers' using the plates in combat. Plates identified as having cracks or internal flaws are removed from inventory.

QUESTIONS SUBMITTED BY SENATOR JAMES M. INHOFE

SPARE PARTS SUPPLY CHAIN

127. Senator INHOFE. Lieutenant General Reno, consider the following points regarding spare parts:

- Our ALCs are suffering from a lack of spare parts;
- A missing or delayed part creates delays, drives up costs, and impacts readiness;
- Up to 4,000 spare parts are always identified as being critical but on back order up to 6 months; and
- The transfer of supply chain management to the DLA is the source of some of the spare-parts shortfalls. How well is the DLA adapting to its role as the manager of the Air Force's supply chain?

General RENO. DLA is adapting to their new role-better now than at the start. Though nearly 92 percent of all orders are filled immediately from DLA stock, there is still room to improve on this performance. Production and demand have increased over the past 2 years. There are process changes required on both the Air Force and DLA sides to get proper support of the Air Force's supply chain. Through collaborative demand and supply chain processes, I believe DLA has the ability to use both demand based and non-demand based models to accommodate the full spectrum of Air Logistics Center requirements.

The Air Force and DLA must work to synchronize our demand and supply chains. Where possible, the Air Force must stabilize its ALC production requirements to allow for improved demand planning. Where the requirement is inherently unstable, we need DLA's help to define and source requirements to minimize acquisition lead times.

Finally, I believe Air Force and DLA should work together to develop customer-facing metrics and measure all process, policy, and procedural improvement initiatives based on their impact to retail customer support, and we are.

128. Senator INHOFE. Lieutenant General Reno, how is ineffective supply chain management affecting the ability of Air Force depots to maintain our fleet?

General RENO. We see impacts in several ways. First, the lack of spare parts causes delays in maintenance work, which ultimately means the aircraft owners have to wait longer to get an aircraft back from depot. A secondary effect is that maintenance managers have to shuffle work assignments and move mechanics to supportable work. Then managers must backtrack to complete tasks that were delayed for parts. Next, part shortages force our maintainers to take parts from one aircraft and reinstall them on another to meet availability targets—an act we call cannibalization. This adds lead time, creates waste, and increases wear/tear to our parts—ultimately decreasing the reliability of our spares. It also frustrates our mechanics because they see the act as doing twice the work for one task. During the delay, there is an increased administrative workload for determining why the parts were not available, attempting to procure the required parts as quickly as possible, and attempting to prevent future stock-outs on critical items. This administrative work detracts from employees' primary responsibilities and makes our organizations less efficient and effective.

129. Senator INHOFE. Lieutenant General Reno, what fleets are most impacted by this shortfall?

General RENO. We see significant impact on all organic supported weapon systems, but specifically the A–10, B–1, B–52, C–5, F–15, F–15E, and F–16 at our operational bases and the C–130, F–15/F–15E, F–16, and the KC–135 at our depots. We have not seen the trend in contractor supported weapon systems that are not bound to buy consumables through the DLA. Additionally, we have felt the impact in landing gear and the F108, F101, T33, F100, and F110 engines.

130. Senator INHOFE. Lieutenant General Reno, what programs are being piloted to help our Air Force work through this challenge?

General RENO. The Air Force Global Logistics Support Center's Long-Term Strategic Plan has three focus areas that we believe will help the Air Force work through the spare parts challenge and significantly improve the supply chain as a whole. The first focuses on supply and demand planning by improving our require-

ments and forecast activities, increasing asset availability and ensuring collaboration with the DLA.

The second focus area addresses efforts to improve sourcing. Through implementation of our Commodity Sourcing Program and the use of Strategic Sourcing, we will continue to leverage spending across commodity groups, reducing lead times, and become more responsive to changes in customer requirements. In addition, our Supplier Relations Management Program is aimed at improving collaboration and communication between us and our Top 10 commercial suppliers. This program affords us the opportunity to make joint process improvements, where both the Air Force and the supplier see reduced cost and improved performance.

Finally, our Depot Supply Chain Management focus area looks at improving supply support to depot maintenance. By implementing a supportability process that looks ahead of need, we can identify impacts and begin to work mitigation actions well ahead of an actual parts impact to depot production. Additionally, our teams are looking to identify root causes and implement solutions for many of the recurring parts problems facing the supply chain through our Continuous Process Improvement programs. We continually pursue and collaborate with DLA to ensure our initiatives are aligned to improve supply chain support.

CORE AND 50/50 DEPOT MAINTENANCE

131. Senator INHOFE. Lieutenant General Reno, consider the following points regarding depot maintenance:

- Depot maintenance involves the repair, overhaul, and upgrade of military systems and equipment as well as the subsystems and reparable components that make up these systems;
- It is performed in either military depots or contractor facilities but is sometimes performed at military bases by government civilians or contractor personnel.
- The amount of depot maintenance work done by the public and private sectors is governed by 10 U.S.C. 2466;
- The statute states that not more than 50 percent of the funds made available in a fiscal year to a military department or a defense agency for depot-level maintenance and repair can be used by the private sector;
- Core refers to a depot maintenance capability that is government-owned and operated (including government personnel and government-owned and government-operated equipment and facilities maintained by DOD) to ensure a ready and controlled source of technical competence and resources necessary for effective and timely response to a mobilization, national defense contingencies, or other emergency requirements; and
- Non-core workload is workload that is not needed to support core capability requirements and therefore can be performed by either the public or private sector.

What role do core and 50/50 play in maintaining our national security?

General RENO. The core statute is in place to ensure that during a time of crisis, if needed, the government can maintain tasked weapons systems without private sector help. The 50/50 statute's main role is to ensure a strong and robust OIB while preserving both the private and public sectors.

CONTRACTOR MAINTENANCE

132. Senator INHOFE. Lieutenant General Reno, budget pressures have pushed some in DOD to hedge towards contractor maintenance in a search for savings and efficiencies. How would you quantify any kind of efficiencies that the Air Force might gain by transitioning to more contractor maintenance?

General RENO. Each weapon system Life Cycle Management and Product Support plan is considered on a case-by-case basis. Depending on the size or complexity of the program, the Program Executive Officer or the Milestone Decision Authority is ultimately responsible for deciding on the best business case to support a weapon system.

The Air Force has not used sustainment strategy as a platform to claim efficiency savings. The Air Force conducts Business Case Analysis (BCA) in accordance with 10 U.S.C. and the OSD guidance contained in the April 2011 DOD Product Support BCA Guidebook. The decisions are based on best value derived from the BCA. The Depot Source of Repair decisions are validated every 3 years in accordance with Air Force Instruction 63–101, Acquisition and Sustainment Life Cycle Management. The only consideration that impacts making the best value decision is meeting the re-

quirement contained in the 10 U.S.C. § 2466, which limits the depot-level workload awarded to non-government entities to no more than 50 percent of the entire workload.

133. Senator INHOFE. Lieutenant General Reno, how would you quantify the increased risk of doing so?

General RENO. Having sole source contractor supported systems without a competitive market or the ability to compete is not desirable. Having the ability to compete does reduce risk. In most cases, neither the organic nor commercial industry base possesses all the resources, infrastructure, nor the skills to accomplish the sustainment functions for most defense systems. A Product Support BCA typically considers both all organic or all contract alternatives, as well as, alternative analysis focusing on using the best blend of organic and industry capabilities to arrive at a best value solution and reduce risks.

When performing a BCA, program offices are required to compare the identified risks associated with each potential support strategy. The risks are prioritized according to their potential implications for meeting the program's objectives.

134. Senator INHOFE. Lieutenant General Reno, what is the cost-benefit analysis?

General RENO. A Product Support BCA typically considers both an all organic or all contractor alternative. In addition, for each of the product elements required for sustainment, the alternative analysis focuses on using the best blend of organic and industry capabilities to arrive at a best value solution.

When performing a BCA, program offices are required to compare the identified risks associated with each potential support strategy. The risks are prioritized according to their potential implications for meeting the program's objectives. The Program Manager considers risk associated with both contract and organic maintenance when assessing the weapon system support strategy.

WEAPON SYSTEM SUSTAINMENT EFFICIENCIES

135. Senator INHOFE. Lieutenant General Reno, the Air Force has identified a $7 billion shortfall in WSS. It was made up by a $4 billion plus-up and a $3 billion efficiency bogey. The Air Force says the savings gained through efficiencies enable it to fund 85 percent of the requirements in fiscal year 2012. First, I am concerned about funding our requirements at 85 percent. Second, I am concerned about some of the things we are calling efficiencies such as postponing or realigning PDMs or postponing aircraft upgrades. This all comes down to risk management—we do not have enough money to do all the things we need to do; therefore, we need to manage risk. What is the risk level of funding sustainment requirements at 85 percent?

General RENO. The unfunded requirement risk is primarily being assumed in areas with limited impact to near-term readiness, such as software, sustaining engineering and technical orders. This risk is further mitigated by the annual, enterprise-wide prioritization of requirements to ensure the highest priority systems are funded in the year of execution.

136. Senator INHOFE. Lieutenant General Reno, what percentage of funding makes weapons system sustainment unsustainable?

General RENO. For our currently defined force structure, historic funding levels including OCO funds have proven sufficient in meeting combatant commander mission requirements; however, sustained Weapon System Sustainment funding at less than these levels, or loss of OCO funds, may lead to increased risk of aircraft groundings.

DEFERRING MAINTENANCE

137. Senator INHOFE. Vice Admiral Burke, the Navy is deferring $367 million of maintenance in order to mitigate risk by ensuring you are able to complete the most critical maintenance in fiscal year 2012. The Secretary of Defense is placing six Maritime Prepositioning Force (MPF) ships in Reduced Operating Status (ROS) beginning in fiscal year 2013 to save $500 million over the FYDP. When do we get to the point where these cost-savings measures begin to impact our readiness?

Admiral BURKE. The President's fiscal year 2012 budget provides the balanced funding necessary for the Navy to support today's force, while developing the future capabilities and capacity necessary to continue to execute Navy mission in support of the National Military Strategy. The funding requested for Navy readiness ac-

counts represents the best balance between current force readiness and building the future force within available top line funding.

Based on recommendations from the Fleet Review Panel for Surface Readiness, investments we have made in the past several budget cycles in SURFMEPP Activity and enhanced assessments of our surface ships, the Navy has more insight on how to manage the risk and ensure the deferred work is properly documented and completed in future availabilities.

We believe that placing the six MPF ships in ROS starting in fiscal year 2013 is reasonable, based on the change in war-time planning and the future security environment.

The Navy carefully monitors readiness trends and will adjust readiness funding in future budget submissions, if the scope of operations is different than predicted, or if ship material condition does not continue to improve.

138. Senator INHOFE. Vice Admiral Burke, how much maintenance can we defer?

Admiral BURKE. The cumulative amount of maintenance that can be deferred without impacting current operations or the expected service life of the platform varies from year to year based on the age and individual materiel condition of the ships, current operations and the next available opportunity to conduct the maintenance. The recent stand up of the SURFMEPP has improved the Navy's ability to assess the risk of individual ship maintenance deferrals, track deferred work to ensure it gets completed, and optimize deferral decisions in a budget constrained environment.

139. Senator INHOFE. Vice Admiral Burke, how many MPF ships can we do without?

Admiral BURKE. All 20 MPF ships in the DOD-approved restructuring plan are required, based on risk assessment and analysis from the Maritime Preposition Study. The Under Secretary of Navy directed a Department of the Navy Maritime Prepositioning Study, as part of Secretary of Defense (SECDEF) POM–12 Efficiency Initiative, using current operation plans and Defense Planning Scenarios. The changes to the status and composition of the Maritime Prepositioning Squadrons do not reflect a diminution of Navy and Marine Corps valuation of prepositioning.

140. Senator INHOFE. Vice Admiral Burke, where does the money come from after we again kick the can down the road?

Admiral BURKE. The President's fiscal year 2012 budget provides the balanced funding necessary for the Navy to support today's force, while developing the future capabilities and capacity necessary to continue to execute the Navy's mission in support of the National Military Strategy. The funding requested for the Navy's ship maintenance account represents the best balance possible in fiscal year 2012 between current force readiness and building the future force within available top line funding.

Future budgets will be balanced based on the then current knowledge of Fleet condition and required future capabilities and capacity in support of updates to the National Military Strategy. The Navy is confident that surface ship in-service engineering program improvements, taken in response to the Fleet Review Panel of Surface Force Readiness, will provide better life cycle management and discipline in defining future maintenance requirements, specifically including the impact of deferred maintenance, to inform future programming and budgeting decisions.

141. Senator INHOFE. Vice Admiral Burke, is there some large increase in defense spending on the horizon that will enable all the Services to recap, reset, and modernize?

Admiral BURKE. Navy does not anticipate any large increase in defense spending in the near future.

END STRENGTH

142. Senator INHOFE. Lieutenant General Stevenson and Lieutenant General Panter, I am concerned by Marine Corps and Army plans for reductions in end-strength. The Army plans to reduce by 49,000 soldiers, and the Marine Corps plans to reduce by as many as 20,000 marines. In the meantime, operations tempo has remained steady. Forces removed from Iraq by the Marines Corps have been deployed to Afghanistan. The Marines Corps has added a battalion landing team stationed off of the coast of Libya. Despite plans to the contrary, most people predict

that we will have a requirement for tens of thousands of boots-on-the-ground (BOG) in Iraq and Afghanistan for at least the next 10 years.

The Army announced that they have achieved their 2:1 dwell-to-BOG ratio, but have also announced that their final goal is 3:1. The Marine Corps has not yet reached a 2:1 dwell-to-BOG ratio, and their training readiness for their designed mission has suffered because of it. We have spent billions of dollars to shore up Marine Corps readiness, but their overall readiness has dropped every year. Afghanistan is acknowledged as the reason why the Marine Corps cannot maintain equipment readiness and also the reason that they cannot maintain training readiness for their preferred mission as a middle-weight contingency force. Are your Services' current end strengths adequate to simultaneously sustain current operations and maintain your desired readiness level?

General STEVENSON. The Army's current end strength is adequate to sustain current operations while maintaining requisite readiness levels. As we face anticipated budget reductions and direction to plan for personnel reductions, the Army will plan to reduce its end-strength and restructure its force mix consistent with reductions in OCO commitments and in conjunction with the needs of the Department and the combatant commanders. Our intent is to arrive at the right mix of capabilities to meet current demands as well as future challenges, within budgetary constraints. Based on the current strategic guidance and projected future requirements, the Army can maintain its 2:1 dwell to boots-on-the-ground ratio and have sufficient troops to respond to unforeseen events. The adoption of more positive ratios and shorter BOG/deployment periods remain the Army's goals and can be achieved for current and projected force demand consistent with current strategic guidance. We are conducting deliberate analysis now to develop a plan to meet the proposed 27,000 reductions to ensure that our operational capability is minimally affected. We are also working closely with the Joint Staff in their strategic review to ensure our analysis is consistent with their ongoing efforts. As part of this plan, and throughout this process, we will continuously monitor our readiness levels to ensure we remain able to meet the Nation's and our soldiers' needs.

General PANTER. The Marine Corps' current end strength is adequate to sustain current operations, under current conditions, for as long as the Nation requires, acknowledging such a commitment comes at a cost to the readiness of its nondeployed forces. The Marine Corps does not intend to begin reduction of overall end strength until after the drawdown of our current footprint of approximately 22,000 marines in Afghanistan. Therefore, the Service will remain prepared to respond to crises and maintain its commitment to Afghanistan between now and 2014. After drawdown from Afghanistan begins, the nearly 22,000 troops that the Service recovers will be sufficient to offset an end strength reduction of 15,000 personnel and enable the Marine Corps to remain prepared to respond to emergent crises.

143. Senator INHOFE. Lieutenant General Stevenson and Lieutenant General Panter, General Chiarelli said at an AUSA conference that: "I believe we have to have a balance in our equipment accounts and our personnel accounts to make sure that we have an Army that we need, but that Army must be well-equipped." Are we cutting end strength because there is no requirement for the additional forces or are we cutting end strength because there isn't enough in the budget to recap and modernize our forces given the current force levels?

General STEVENSON. The Army's plan to reduce its end-strength is consistent with reductions in OCO commitments and in conjunction with the needs of the Department and the combatant commanders. We are conducting deliberate analysis and developing a plan that ensures the proposed reductions have minimal impact on our operational capability. We are working closely with the Joint Staff to ensure our analysis is consistent with their ongoing efforts. As part of this plan, and throughout this process, we will continuously monitor our readiness levels to ensure we remain able to meet our mission requirements.

General PANTER. The Marine Corps is meeting and will meet those requirements validated through DOD's global force management process and approved by the Secretary of Defense. In the fall of 2010, the Marine Corps conducted a Force Structure Review (FSR) to evaluate and refine the organization, posture, and capabilities required of the Marine Corps as America's Expeditionary Force in Readiness in a post-OEF security environment. The FSR convened to develop the optimum organization, posture, and capabilities of the Marine Corps and to affirm its role within the joint force in a complex and uncertain post-OEF–Afghanistan security environment that is going to be further challenged by fiscal constraints. The post-OEF Marine Corps will continue to provide the "best value" in terms of capability, cost, and readiness relative to the operational requirements of the combatant commanders. The FSR addressed 21st century challenges confronting the Nation and built on the Marine

Corps' historic role as the Nation's crisis response force. The results of that effort provide for a strategically mobile force optimized for forward-presence and rapid crisis response, with the capability and capacity to operate across the range of military of military operations.

COST OF AGING EQUIPMENT

144. Senator INHOFE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, OCO funding for equipment reset (fixing and replacing damage and wear from war) is being pushed into the base budget. This has two detrimental effects: (1) it hides the cost of the war; and (2) it pushes force research and development (R&D) and modernization out of the base budget. This puts us in the position where we will reach a capability gap when we will have to retire systems in order to pay to develop and procure their replacements.

Our fleets are significantly older based on when they were first designed and fielded with some dating back to the 1950s. The inventory of Abrams, Palidins, and Bradleys, designed some 30 years ago, are on their 4th and 5th modernization program. Marine Corps aviation average an age of 22 years, bombers 34 years old, Air Force fighters 27 years old, tanker 46 yrs old, etc. The Air Force is flying the oldest fleet of aircraft in its history. What impact does sustaining aging equipment have on our ability to procure new equipment?

General STEVENSON. Reset of equipment that has been operating as part of OIF/OND/OEF is a true cost of war. The Army has and will continue to request Reset funding for that equipment as part of supplemental or OCO requests, not our base budget. We will continue to need Reset funding for 2 to 3 years after hostilities cease.

The Army's fiscal year 2012 budget request strikes a balance between current and future needs and provides the basis for an affordable equipping strategy over time. In support of the overall effort to develop the right force design and force mix, the Army must develop and field a versatile and affordable mix of equipment to enable soldiers and units to execute full-spectrum operations and to maintain our decisive advantage over any enemy may encounter. To do this, we must continually examine whether it makes more sense to sustain aging equipment, or to invest in new, on a case-by-case basis, because in the end, we know that the Nation can only afford to devote a finite amount of its resources on its Army. To help get at this very complex question, the Secretary of the Army directed Capability Portfolio Reviews to holistically examine the requirements that drive capability development, acquisition and sustainment to determine if current and proposed programs were aligned to meet key national and defense strategies and Army plans.

The Army uses incremental modernization to deliver new and improved capabilities to the force by leveraging mature technologies, shortening development times, planning growth potential and integrating increments of those capabilities that give us the greatest advantage in the future while hedging against uncertainty. In addition to expanding or improving capabilities by developing and fielding new technologies, the Army will continue to upgrade, improve and recapitalize existing capabilities while simultaneously divesting those capabilities deemed redundant, not cost-effective or no longer required. By modernizing in an incremental manner, instead of purchasing equipment in quantities large enough to equip the entire force, the Army is able to provide the most relevant versions of capabilities available to units prior to deployment and then provide units in follow-on rotational cycles improved or more relevant versions, once available.

General PANTER. The impact of sustaining aging equipment on our ability to procure new equipment varies depending on the type of equipment.

Intelligence:

The majority of our intelligence acquisition programs of record are comprised of commercial off-the-shelf (COTS) and government off-the-shelf (GOTS) equipment and software. Refreshing and maintaining this equipment is critical, due to technology quickly becoming obsolescent and due to the harsh operational environment in which this equipment is employed. Likewise, it is critical that funds be available for the modernization of intelligence equipment. This is particularly relevant in the fields of signals intelligence electronic warfare (SIGINT/EW), Counter-Intelligence, and the processing/analysis of large volumes of data and intelligence. Efforts to sustain aging intel equipment tend to have a negative impact on our ability to procure new equipment because less funds are then available for the new equipment. Also, intel equipment becomes obsolescent fairly quickly vis-a-vis other types of equip-

ment. Thus, investment in new procurement is generally preferred over sustainment.

Tactical Communications:

Tactical Communication Modernization (TCM) maintenance costs have been covered mostly under OCO for the past several years. As OCO funding diminishes, the TCM base budget OMMC must increase from approx $2 million per year to approx $10 million per year. So far, requests for increased OMMC have been denied for TCM. This will lead to OMMC shortfalls starting in fiscal year 2013 which will negatively impact our ability to maintain radio AAOs. The impact of maintenance costs on Research and Development (R&D) is minimal. The Joint Tactical Radio System (JTRS) program is already conducting all R&D for service radio requirements through fiscal year 2025.

The impact of sustainment costs on the Marine Corps' ability to procure new equipment is significant. If additional OMMC is not approved, the TCM line will have OMMC deficits of $7-$10 million per year through the FYDP. These OMMC deficits will slow the procurement of new systems to replace over 130,000 radios, many of which reach end of life cycle starting in fiscal year 2018. The effect of reduced AAO's due to Force Structure Review (FSR) results on system life cycle is not yet determined. We will likely be able to dispose of older systems first and gain a year in life cycle deadlines for AAOs.

Vehicles:

The Marine Corps' inventory of medium and heavy tactical vehicles is relatively new. With the planned quantity reductions currently in place, the Marine Corps should see minimal impact in those fleets. The light armored vehicles (LAVs) and Abrams have retained relevance and extended services life through OCO funded upgrades and modifications; thus, the impact to these vehicles has been limited.

The Amphibious Assault Vehicle (AAV) fleet requires consistent and aggressive Inspect and Repair Only As Needed (IROAN), in combination with a Service Life Extension program (SLEP), to maintain relevance and readiness into the next decade. This platform did not benefit from OCO resourced upgrades. The IROAN costs run about $425,000 per vehicle and running 100 vehicles per year through the process would cover the fleet in 10 years. The planned SLEP is budgeted to extend 392 vehicles at $1.5 million per vehicle and is needed to sustain the fleet. These investments impact modernization and have been accounted for in our plans.

The light tactical vehicle fleet will also need selective but consistent IROAN to maintain readiness into the next decade as we reduce our quantities by roughly 20 percent to 19,000 vehicles. Our HMMWV A2s have are an average of 9 years; selective IROAN at ~$85,000/vehicle would extend that fleets life to 2020. The Expanded Capacity HMMWVs (ECV), with kits and upgrades partially resourced through OCO, have an average age of 4 years. Selective IROAN of that fleet at $115k each would extend that fleet's life to 2025. In conjunction with the Army we are evaluating the utility and return on investment associated with a HMMWV Recap. The results of that evaluation will inform our plans to modernize portions of the light fleet through the Joint Light Tactical Vehicle program.

General RENO. In the constrained fiscal environment we operate in, requirements for new equipment must be balanced against the sustainment of our existing equipment. Continuing to maintain the legacy systems necessary to support our current mission is essential. However, continuing to pay for sustainment of systems that are no longer essential to mission execution reduces available funds for equipment recapitalization, modernization, and new development. For example sustainment costs for the MRAP vehicle are estimated at $457 million across the FYDP. The long-term Air Force need for MRAP is still under review. The associated funding could be better applied to updating the existing Air Force tactical vehicle fleet.

Admiral BURKE. To the extent that ships and aircraft are maintained and operated as planned to meet their Expected Service Lives (ESLs), there is no impact on the Navy's ability to procure new equipment. Recent experience with surface ships, however, has shown that not performing the necessary planned maintenance increases costs over time and impacts achievement of platform ESL.

145. Senator INHOFE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, have we reached the point with any of our current equipment that the BCA recommends we procure new equipment but, due to a lack of funds, we are forced to sustain the existing equipment?

General STEVENSON. Yes, the following three programs are examples where BCA suggests the procurement of new equipment, but for which we will instead sustain existing equipment given funding constraints and higher priorities. First example

is engineering equipment. Without current fiscal constraints and higher priorities, the Army would replace our 621B Scrapers, Deployable Universal Combat Earthmovers, Airborne Graders, D7 Dozers, and 613B Airborne Water Distributor/Scrapers. However, to keep these older equipment items serviceable, the Army executes a Service Life Extension Program to recondition it to near zero operating hours/miles. The second example is satellite communications terminals. Due to lack of funds to pure fleet the force with Phoenix Terminals, the Army made a conscious decision to reduce cost and upgraded existing AN/TSC–85 and 93s SATCOM terminals, thereby extending the life of these capabilities. The third example is field kitchens, in which the Army is currently procuring the modernized Assault Kitchen (AK) at unit cost of $53,400 to replace the Kitchen, Company Level, Field Feeding (KCLFF). The AKs are funded at minimum sustainment rate and full-fielding across the Army will not be met until 2022. Due to this fielding gap and lack of funds, the Army must sustain the existing KCLFF.

General PANTER. Depending on the size and priorities of future budgets, there is a potential for reaching that point in the near future. For example, some LID transportation programs that will require out-year funding include the MTVR Trailer, PLS Trailer for the LVSR, Flatrack Refueler Capability, and the P–19 Crash Fire Rescue vehicle.

General RENO. Yes, but the Air Force doesn't deliberately keep a tally on equipment in this situation (where a business case says replace versus sustain).

The business case and mission case coexist. Combat mission success and equipment capability are the first measures of merit. Cost is always a factor in decision-making.

An analysis of alternatives is mandatory early in equipment procurement planning and helps to determine the 'mission case' and 'business case' options such as buying commercially available equipment, designing a new military-specific product, modifying existing equipment, or extending the service life of existing equipment.

Much later on in the product life cycle, a fielded piece of equipment in the sustainment phase is condemned if the one-time repair cost reaches 75 percent of the purchase price. Rather than fixing an old piece of equipment at great expense, the Air Force looks for options to replace it with new equipment. If no affordable options exist, we are forced to retain existing equipment with high sustainment cost.

Specific examples where the Air Force is extending the service life of existing equipment, due to mission needs, include flightline air conditioners that cool aircraft during maintenance operations, Materiel Handling Unit (MHU) 196 and 204 Trailers used for loading weapons on aircraft, and MHU 110 and 141 trailers used for transporting munitions.

Admiral BURKE. Navy has not reached the point where equipment is maintained solely due to a lack of funding to procure new equipment.

146. Senator INHOFE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, how will the Services' inability to develop and procure new aircraft and vehicles affect our military readiness 10 years from now?

General STEVENSON. We do have some concerns about some of our older weapons systems, such that the BFV, OH–58D and Paladin, and in each case, are taking appropriate steps to modernize. The Army, on the average, meets or exceeds Army readiness standards for our current fleets, and I anticipate that we will continue to do so, but in order to do that, we will continue to require the generous support of Congress in support of our Reset program. Reset funding will need to continue for 2 to 3 years post conflict, to ensure that we sustain our high readiness levels into the future.

The fiscal year 2012 Army base budget provides funding for new procurement, rebuild, overhaul, and upgrade of the current fleets, and grows future capabilities through research and development efforts. This budget enables the Army to continue its efforts to balance the force with the most modern capabilities available, integrating new materiel capability to ensure our soldiers always enter a fight overmatching any enemy, while remaining fiscally judicious and responsible to the Nation's current economic requirements.

Regardless of new procurement programs, the Army continuously addresses the materiel capability gaps and safety concerns of the existing fleets through upgrade programs and modernization efforts. These are often developed as solutions to issues identified during the current combat operations and maintain the technological superiority of our existing fleets.

Recognizing the significance of Army Aviation and the effects of the high operational tempo in current combat operations, we are modernizing three of the four primary helicopters: the CH–47 Chinook, UH–60 Blackhawk, and AH–64 Apache,

and continue to sustain and upgrade the Army's fourth helicopter, the OH–58D Kiowa Warrior, while we complete an analysis of alternatives for the Armed Aerial Scout, intended as the Kiowa Warrior's replacement. The combination of remanufacturing and new procurement of our existing helicopter fleet is the most cost effective modernization strategy. This will have a positive effect on future readiness by decreasing the average aircraft age (both years and flight hours).

General PANTER. The Marine Corps has successful procured new vehicles for a portion of its tactical vehicle fleet, and has extended and upgraded a portion of its combat vehicle fleet.

The Marine Corps fully fielded the Marine Tactical Vehicle Replacement system and is in the process of fielding the Logistic Vehicle System Replacement. Each program has a service life of 22 years.

The LAVs and Abrahams have been upgraded and modified, thereby retaining relevance while extending the economic service life out to at least 2025; thus, there would likely be no impact to readiness if our planned ongoing depot activities are resourced. We face challenges in two areas of our fleet, which could impact readiness if the challenges are not properly addressed.

First, the Amphibious Assault Vehicle fleet will need a consistent and aggressive IROAN program, in combination with a Service Life Extension program, to maintain relevance and readiness into the next decade. The planned SLEP is budgeted to extend 392 vehicles at $1.5m per vehicle and is needed to sustain the fleet out to 2026. These investments impact modernization, but have been balanced with readiness in our investment planning.

Second, the light tactical vehicle fleet will need selective but consistent IROAN to maintain readiness into the next decade. The technical challenge is maintaining readiness for the up-armored half of the light fleet (Expanded Capacity HMMWVs) that must operate over its design rating of 12,100 lbs gross vehicle weight, reducing readiness. The ECV, with kits and upgrades partially resourced through OCO, have an average age of 4 years. Selective IROAN of that fleet at $115,000 each will extend that fleet's life to 2025. To maintain readiness in the long term we are working with the Army to evaluate the utility and return on investment associated with a HMMWV Recap program. The results of that evaluation will inform our plans to maintain readiness while modernizing portions of the light fleet through the Joint Light Tactical Vehicle program.

The V–22 Osprey is on the last year of its first 5-year multi-year procurement plan, culminating in the procurement of 245 of the 360 aircraft in the program of record by fiscal year 2012. 215 have been procured to date. A second multi-year procurement plan is in work with the Assistant Secretary of the Navy for Research, Development, and Acquisition to buy out the program of record. The Marine Corps is taking delivery of over 30 aircraft per year, with nearly 130 currently active in the Fleet. The Marine Corps has 10 active tiltrotor squadrons, 7 of whom have completed their transition from CH–46E to MV–22B. The East Coast tiltrotor squadrons have 10 highly successful V–22 deployments to their credit—3 to Iraq, 3 to Afghanistan, and 4 on amphibious shipping as Marine Expeditionary Units. Deployments to Afghanistan and the MEUs continue to date.

The H–1 Upgrades program is also in the midst of delivering new aircraft to the fleet. fiscal year 2011 inclusive, 131 of the 349 (program of record) H–1 Upgrades aircraft are on contract, and to date the Marine Corps has accepted delivery of 43 UH–1Ys and 16 AH–1Zs. Procurement of these aircraft continues at a consistent rate through fiscal year 2019. Five operational squadrons have converted to the UH–1Y and the first squadron transition to the AH–1Z is well underway. Delivered aircraft are already in the fight; the UH–1Y has conducted sustained combat operations in OEF since November 2009, and both the AH–1Z and UH–1Y deploy with the 11th Marine Expeditionary Unit in fall 2011. Readiness of H–1 Upgrades aircraft has been high.

The CH–53K program, currently in development, has been meeting and/or exceeding OSD benchmarks since fiscal year 2007. Assembly of the program's Ground Test Vehicle began in January 2011, and the program's first flight is on schedule for CY 2013. The program has been a model for aircraft development.

General RENO. The deferred procurement of new aircraft has the potential to impact military readiness 10 years from now. There have been acquisition and modernization delays in several aircraft programs. These delays will result in a postponed acquisition of improved capabilities and an increase in aircraft age for the affected mission systems. Increased aircraft age has the potential to impact aircraft availability and drive higher sustainment cost. Required warfighting capacity will be maintained through selective modernization and service life extension of current platforms. Potential effects of aircraft aging have been thoroughly studied and can

be mitigated through regular operations and maintenance activities and modification programs.

Admiral BURKE. Navy development and procurement plans are focused on sustaining readiness to deliver required forces and capabilities for the long term. For the Navy, the long service life of our capital assets requires a balance between proper life-cycle maintenance of current assets, procurement of new platforms, and investing in capability modernization of existing platforms. The budget submission for fiscal year 2012 and the FYDP provides the most effective current and future readiness balance considering each of these elements. If sustained, Navy development and procurement programs will support future readiness requirements.

STRATEGIC READINESS

147. Senator INHOFE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, our military has been continuously engaged in combat operations for a decade. Our forces are operating near the limits of their capacity to meet the demands of ongoing major operations in Iraq, Afghanistan, Libya, and Japan, in addition to operations to maintain peace and deterrence ashore, afloat, and in the skies worldwide. While fighting the immediate conflicts, we face strategic risks elsewhere from Iran, North Korea, and others. Defense spending, while growing, has not kept pace with our conflicts. In 1962, total defense spending made up 9.0 percent of gross domestic product (GDP).

In 2010, total defense spending, including OCO, made up 4.7 percent of GDP. Current conflicts have, understandably, impacted our readiness. The cost of the war in terms of readiness is reflected in the Services' budgets:

- The Army budget contains $967 million to replenish their prepositioned stocks;
- Budgets for the Air Force contain money for extending the life of aircraft that are accumulating flight hours faster than expected; and
- The Marine Corps will need more than $10 billion to repair war-damaged equipment.

In the meantime, we have failed to modernize our forces:

- Air Force bombers—34 years old on average;
- Air Force fighters—27 years old on average;
- Surveillance aircraft—30 years old on average;
- Abrams tanks, Paladin artillery, and Bradley Fight Vehicles—designed some 30 years ago, are on their fourth and fifth modernization program; and
- Marine Corps aviation—22 years old on average.

What is the overall trajectory of the readiness of your Services?

General STEVENSON. The Army is in better shape today than we have been in a long time. Through the strong, unwavering support of Congress, we have received the funding we need for Reset—and this eliminates a lot of our risk. Having Reset fully funded enables us to not only ensure our equipment is brought back to the Army "10/20" maintenance standard, but also allows us to take the necessary maintenance actions to eliminate "delayed desert damage." Since 2002, our investment in Reset has had a dramatic impact on operational readiness rates of equipment on-hand, enabling the Army to maintain rates at 90 percent and 75 percent for ground and aviation equipment, respectively. Having said that, we do have concerns. With regard to Reset, we will need Reset to continue to be fully funded, for 2 to 3 years beyond the end of major OCOs, and we know that is getting increasingly difficult to assure. Another concern is whether or not we will get the support of Congress in funding our Combat Vehicle Modernization Strategy. This strategy consists of a comprehensive modernization plan for our entire fleet of combat vehicles, and features as its centerpiece the development, production and fielding of the Ground Combat Vehicle to replace the Bradley Infantry Fighting Vehicle. A companion need, equally as important, is the need to invest in The Network. We have thought thru our modernization requirements deliberately, and through a series of Capability Portfolio Reviews, chaired by the VCSA and overseen by the Under Secretary of the Army, across the entirety of the Army's hardware requirements, thru the FYDP, and beyond. We will continue to submit the requirements we need in our investment accounts, and in the meanwhile, ensure that that equipment that we do have is maintained in a high a state of readiness as possible, to ensure we can respond to the Nation's needs. With the drawdown in Iraq, and eventual lessening of the commitment of forces in Afghanistan, following a rigorous Reset, this will only get better.

General PANTER. The overall trajectory of Marine Corps readiness is that the readiness of deployed forces is and will remain high, while the overall readiness of the nondeployed force is degraded and will remain so for as long as the Marine Corps sustains current requirements.

OCO in Iraq, Afghanistan, and elsewhere have placed an unprecedented demand on ground weapons systems, aviation assets, and support equipment. Marine Corps equipment has experienced accelerated wear due to many years of sustained combat operations in exceedingly harsh operating environments. In many cases, the result is that operational demand has far exceeded peacetime equipment usage rates or items have been destroyed or damaged beyond economical repair. Marine Corps legacy aircraft supporting operational missions are consuming service life at a rate up to three times faster than scheduled. Averaged across the entire aviation inventory, the Marine Corps is consuming aircraft service life at a rate 1.85 times faster than planned. This means the majority of the Marine Corps' legacy aviation platforms are nearing the end of their service lives.

It is vital the Marine Corps reset its equipment to serviceable condition and modernize legacy platforms to achieve the necessary levels of readiness to posture itself for the future. The Marine Corps' experiences in combat operations over the last decade have shown legacy 20th century ground tables of equipment are inadequate for the modern battlefield. With regard to aviation, new and modern aircraft with low average ages and robust service life projections will be critical to supporting future Marine Corps and joint operations. Reset and modernization of ground equipment and aviation platforms will be absolutely essential to reversing what has been an overall downward trajectory of MAGTF readiness for the nondeployed force. Congress' continued support and investment is needed to reset equipment and reconstitute/modernize the force to meet combatant commander requirements and correctly posture the Marine Corps for the future security environment. This will require multi-year support beyond the completion of combat operations.

General RENO. Readiness for full spectrum military operations is a challenge for our combat air forces and some other limited-supply/high-demand aviation units. Since 2003, there has been a slow but steady decline in reported readiness indicators. Air Force operations tempo since 2001 has produced lower dwell-to-deploy ratios for high-demand skills. At present, 19 enlisted and 9 officer career fields are "stressed." We have improved funding to weapons systems sustainment; however, sustainment challenges continue as we field new weapon systems and balance contract versus organic (blue-suit Air Force) sources of repair. To address these readiness issues, we must keep aircraft recapitalization and procurement programs on track and continue managing our force to ensure the right numbers and mix of skills in our highly tasked and highest priority mission areas. Our ability to project Global Vigilance, Reach, and Power is constrained by the increasing costs to design and build platforms in a particularly challenging budget environment. Our fiscal year 2012 President's budget request reflects the difficult choices that will allow the Air Force to provide the necessary capability, capacity, and versatility required to prevail in today's wars, prevent and deter conflict, prepare to defeat adversaries and succeed across the range of potential military operations-while preserving and enhancing the All-Volunteer Force. The Air Force must continue to modernize and recapitalize our aircraft inventory to remain effective against global and regional competitors as they continue to modernize and improve their own air defense capabilities and harden valued targets.

Admiral BURKE. The overall readiness trajectory of the Navy has been on a slight downward trend since 2007. Since the Navy is a traditional rotational force, the standing practice of reset-in-stride has resulted in a more steady readiness profile. However, the overall pace of operations has impacted both Navy personnel and equipment, reduced the readiness of nondeployed forces, and driven mission-tailored training for some deploying forces. Navy is addressing deficiencies in surface ship maintenance planning, crew size, and training now, but to achieve the expected service life of ships and aircraft over the long-term, operational demand and force structure must be rebalanced.

148. Senator INHOFE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, how would you quantify the readiness risks that your Services are accepting by operating under the current top-line budget?

General STEVENSON. Operating under the current top-line budget impacts our Nation's strategic flexibility but does not create undue risk to current operations. Our current equipment readiness rates, over 90 percent for ground and 75 percent for aviation in theater, are a good indicator that we are meeting our requirements. As we go forward, we will smartly manage the reduction and change in size and com-

position as the demand for OCO changes. The Army conducted comprehensive capability portfolio reviews and terminated, reduced, or deferred training and equipment programs that represented the lowest priority requirements or had declining relevance or unneeded redundancy. We will sustain our warfighting capabilities to prevail, even as we increase our ability to prevent conflict. The Army continues to ensure forces retain their full spectrum operational readiness and important modernization programs as we apply efficiency efforts across our equipping, training, manning, and other title 10 functions.

General PANTER. The Marine Corps is responding to the Nation's demands with a unique combination of expeditionary land-based and amphibious forces, but such commitment comes at a cost to the readiness of its nondeployed units. Sustaining current operations has reduced the aggregate readiness of the nondeployed force. Strategically, low levels of readiness for the nondeployed force increases risk in the timely and successful execution of crisis response and major contingency operations (war plans). If the Marine Corps were asked to respond to a second major contingency, the Marine Corps could respond, but would face significant challenges in forming a fully resourced and cohesive MEF-level MAGTF without delays to war plan timelines. For a smaller scale crisis or contingency, readiness levels of the nondeployed force would affect the Marine Corps' ability to respond, but to a lesser degree. For example, over the past 18 months the Marine Corps has successfully responded to crises in Haiti, Pakistan, Korea, Egypt, Libya, Japan, and Yemen. It would be much more difficult to respond to a second major contingency while sustaining current global and OEF requirements.

The reality is that the Marine Corps is heavily reliant on OCO funding to sustain current operations in Afghanistan and around the globe. The Marine Corps will need this funding until reset is well underway, post-conflict. Lack of sufficient resources to repair and recapitalize equipment used after years of sustained combat operations could jeopardize long-term readiness of force. Accomplishing reset from the Marine Corps' top-line budget, in a time of fiscal austerity, will likely put Marine Corps modernization programs at risk.

General RENO. Sir, the Air Force is meeting current requirements and committed to future readiness. We employ a number of analytical tools to target resources at key readiness requirements. Current Air Force readiness assessment is based on the Global Status of Resources and Training System for resources, Air Expeditionary Force Reporting Tool for individual and unit readiness, and the Defense Readiness Reporting System for capabilities-based assessment. When looking at data collected over the past decade regarding our equipment, training, as well as our personnel's readiness to perform the Nation's full-spectrum of missions, we see that our overall readiness has been trending downward since 2003. Our long-term readiness concerns focus on aging weapon systems and high operations tempo. Although we continue to meet combatant commander requirements, operations tempo continues to take a toll and many of our aircraft are increasingly unavailable due to required maintenance. Consequently, modernization and recapitalization remain priorities. A unit's readiness to conduct all title 10 missions decreases during deployment. Units preparing to deploy focus training on expected theater wartime missions. The requirement to focus on the specific mission tasks for Iraq and Afghanistan creates strategic risk in terms of units' readiness, availability, and proficiency to perform other types of full-spectrum missions. We assume increased strategic risk with high deploy-to-dwell units and personnel serving in career fields frequently deployed. Short nondeployed windows reduce training opportunities. While we remain fully committed to winning today's fight as our top priority, we continually monitor and assess our resources so that we implement decisions necessary to mitigate strategic risks to readiness.

Because of budgetary constraints for the foreseeable future, the rapid expansion and proliferation of advanced technology and weapon systems, and the anti-access and area-denial strategies that those weapons counter, we face a reality requiring more disciplined spending, efficiency, innovation, and inter-service integration and interoperability. In the short term, we will continue to see greater demand for Air Force capabilities in relatively uncontested environments. In the future, however, we are more likely to encounter the global proliferation of precision weapons, coupled with an increasing requirement for long-range strike and intelligence, surveillance, and reconnaissance (ISR) in areas guarded by increasingly capable, agile defenses.

While our current plans mainly focus on near-term threats, to hold risk at acceptable levels we must work hard at developing and refining longer-term capabilities, and be mindful of the likelihood of more challenging budgetary constraints. For example, to reduce risk while conducting operations in opposed-network environments, we must improve our approach to electronic warfare. We have to acknowledge the

challenges of long distance operations and the proliferation of sophisticated defenses, and advance our capability to conduct long-range penetrating strike and persistent ISR.

The growing threat of precision ballistic and cruise missiles compels us to increase the resilience of our bases and logistics, and explore ways to reduce logistics demand. To lower risk in the space and cyber domains, we need to continue to pursue space situational awareness and the space protection program to ensure access and attribution in that increasingly contested, congested, and competitive domain; and to continue actions that ensure security and freedom of action within the cyber domain.

Admiral BURKE. The readiness risks that the Navy is accepting are quantified and reported in the Quarterly Readiness Report to Congress (QRRC), submitted by OSD. The Navy's submission to the QRRC contains a general risk assessment, overall readiness ratings for the Navy, and specific readiness data for personnel, equipment, supply, training, and ordnance. Also, the Navy's submission describes specific risks in meeting mission essential tasks that are coordinated with Navy component commanders in the various COCOMs. The specific data and risk assessments in the QRRC, and other briefings, are classified.

The aforementioned data is also a component of the Navy's input to the annual Chairman's Risk Assessment, submitted by the Chairman of the Joint Chief of Staff in February of each year.

ALTERNATIVE ENERGY SOURCES

149. Senator INHOFE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, all the Services are actively pursuing ways to reduce reliance on fossil fuel from foreign countries through greater conservation, efficiencies, and use of alternative energy sources. The initiatives range from continuing the certification of all military aircraft to fly on a 50/50 blend of fuel—a project I started back in 2002 as an advanced concept technology development program. The Services are also working with wind generation, photovoltaic, landfill gas, flex fuel, and hybrid engines. Have the Services looked at the BCA of the cost of different energy sources based on location of their installation vice one-size-fits-all for a mandated energy policy?

General STEVENSON. While preliminary studies do exist as to what technologies are feasible in certain geographic locations, the Army does not have detailed BCA of the cost of different energy sources based on installation location. The Army does not have one-size-fits-all policy for developing renewable energy projects that requires the use of one technology over another. Appropriate due diligence is necessary before making decisions about where to develop and deploy potential renewable energy projects. Key considerations include the cost of the project, return on investment, states with good policy and demand for renewable power, sufficient land, state incentives, economics of state utility market and any potential effects the project would have on the installations mission. In an era of constrained budgets it is critical that renewable energy projects developed by the Army and its partners provide the greatest possible benefit at an appropriate cost. Like the other Services, the Army is certifying our mainline air platforms to operate on the 50/50 bio fuel blend. The goal of completion is scheduled for the end of fiscal year 2013. The Army's tactical/combat ground platforms will complete certification by the end of fiscal year 2014.

General PANTER. Absolutely. All major consumers of energy, which certainly includes the DOD and the Marine Corps, have a role to play in supporting the development and utilization of alternative sources of energy to offset the traditional forms of energy they currently consume. As established in the recently signed U.S. Marine Corps Expeditionary Energy Strategy and Implementation Plan, the Marine Corps is committed to pursuing alternative energy solutions for our installations/facilities, our vehicle fleets, and our contingency operations, consistent with the Secretary of the Navy's goals.[1]

On our installations, we evaluate each and every project on a case-by-case basis and carefully assess the projects with respect to:

(1) mission execution,

[1] Per page 23 of the Expeditionary Energy Strategy and Implementation Plan: "By 2020, we will increase the amount of alternative energy consumed at installations to 50 percent of total energy consumption. Through the combination of aggressive demand reduction and on-installation renewable energy production, we will transform half of our installations into net-zero energy consumers."

(2) real estate and encroachment issues,
(3) environmental and cultural resource requirements, as well as
(4) economics and costs.

As directed by the Energy Policy Act of 2005[2] and the NDAA of 2007,[3] the Marine Corps has actively taken steps to identify and implement viable renewable energy projects.[4] Of note is a project at MCLB Albany which will utilize landfill gas located two miles away from the Base to produce 1.9 MWs of "renewable" electricity to support the Maintenance Center, where we rebuild and repair ground combat/support equipment. This is being accomplished through an $18.8 million Energy Savings Performance Contract (ESPC) with Chevron Energy Solutions to install the needed infrastructure and equipment.

At this time, the Marine Corps is involved in multiple initiatives with the Naval Facilities Engineering Command and Department of Energy National Laboratories to identify and assess opportunities that offer the best potential in-terms of utilizing cost effective renewable generation technologies on our installations.

General RENO. The Air Force uses an enterprise perspective to meet its energy policy goals based on the location and requirements of its installations. To ensure it makes the best use of taxpayer funds, the Air Force invests its available energy dollars primarily in energy efficiencies due to the better savings to investment ratios and the high cost of renewable energy.

The Air Force is taking a balanced approach between Air Force-focused investments to reduce energy intensity and leveraging the renewable energy market through third party investment to increase energy resiliency and redundancies. This approach enables the Air Force to identify, prioritize, and develop renewable energy projects before working with private industry using third party investments to develop the projects. The Air Force has a Renewable Energy Game Plan which identifies approximately 40 projects for fiscal years 2011–2013 totaling more than 1,000 megawatts. A key factor in making decisions regarding a project relates to the cost

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[2] Energy Policy Act 2005 (EPAct 2005):

- Defines "renewable energy" as electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.
- Requires the Secretary of Energy to ensure that, to the extent economically feasible and technically practicable, the following amounts of the total electricity consumed by the Federal Government come from renewable energy:
  - Not less than 3 percent in fiscal years 2007–2009
  - Not less than 5 percent in fiscal years 2010–2012
  - Not less than 7.5 percent in fiscal year 2013 and thereafter
- Provides a bonus to Federal agencies by allowing them to double count renewable energy if it is produced onsite and used at a Federal facility.

[3] NDAA of 2007;

- Produce or procure not less than 25 percent of the total quantity of electric energy it consumes within its facilities and in its activities during fiscal year 2025 and each fiscal year thereafter from renewable energy sources (as defined in section 203(b) of the Energy Policy Act of 2005).
- Produce or procure electric energy from renewable energy sources whenever the use of such renewable energy sources is consistent with the considerations specified in Title 10 Section 2911.

[4] Current onsite facilities renewable energy generation capacity:

- Current Production (over 1 MW):
  - Twentynine Palms: 2.5 MW Photovoltaic
  - Camp Pendleton: 2.2 MW Photovoltaic
  - Barstow: 1 MW Wind Turbine
- Under Construction/Planned (over 1 MW):
  - Albany: 1.9 MW Landfill Gas Turbine
  - Camp Pendleton: 8.4 MW Photovoltaic
  - Camp Lejeune: 8.1 MW Photovoltaic
  - Twentynine Palms: 6.3 MW Photovoltaic
  - San Diego: 1.3 MW Photovoltaic
  - Miramar: 3.0 MW Landfill Gas Power Purchase Agreement

Potential advantages of renewable energy sources such as biomass, geothermal, solar, wind, and ocean include:

- Reliable power supplies and fuel diversification, which enhance energy security for individual facilities.
- Supplementary power for peak-use periods.
- Reduced greenhouse gas emissions associated with energy use.
- Lower risk of fuel spills in environmentally sensitive locations.
- Increased price stability in an uncertain energy economy.

of energy at that particular installation, as state or Federal initiatives can enhance the financial viability of the project.

Admiral BURKE. The Navy does not use a one-size-fits-all approach for mandated energy policy. As an example, in fiscal year 2012, the Navy will invest $579 million in a portfolio of more than 150 unique facility recapitalization, research, and process improvement projects across our installations that were selected using a comprehensive energy Return on Investment (ROI) framework and analytical tool. This holistic portfolio will enable the Navy's achievement of the multitude of shore energy legal mandates and DOD/Navy goals, while balancing the financial and non-financial benefits of the energy projects.

In 2009, the Navy analyzed our energy consumption and facility data at the enterprise, installation, building, and component level, based on asset class, interdependencies, age, size, accessibility, and other relevant attributes. Our analysis validated each Navy installation has a specific set of opportunities and challenges related to energy supply and consumption. These challenges and opportunities are driven by a number of factors, including mission requirements, energy costs, availability, and reliability of energy supply, environmental conditions, as well as state and local regulations.

As a part of the Navy's Shore Energy Strategy, each installation will have individual energy goals and a tailored plan to achieve them, based on an iterative, rigorous modeling process using industry benchmarks. This approach allows installations to scope projects multiple ways: by building, building type/mission, and/or technologies. Coupled with the ROI analytical tool, this will allow for the prioritization of investment of projects to meet the goals.

150. Senator INHOFE. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, we know the cost of diesel, gas, and JP–8 has increased dramatically over the past 3 years which has impacted all of your operating budgets. How has the cost of using alternative fuels and energy sources impacted your operating budgets?

General STEVENSON. The Army uses ES5 and bio-diesel (B20) on our installations to support our Non-Tactical Vehicle (NTV) fleets, where available. Using ES5 and bio-diesel has not increased our costs any more than standard fuel costs have increased. The standard price paid from the operations account for ES5 and bio-diesel is about the same as we pay for standard gasoline or diesel fuel.

The Army has made significant progress to improve the Army NTV fleet of more than 80,000 vehicles by reducing the number of large vehicles, transitioning the fleet to hybrid, plug-in hybrids and all-electric vehicles. These efforts will result in the reduced reliance on foreign sources of oil. Currently, over 40 percent of the NTVs in the Army fleet are clean and green.

The Army is in the process of qualifying tactical equipment to operate on alternative jet fuels, both hydro-treated renewable and synthetic based. This effort is in the RDT&E phase so the significant cost of developmental fuels has not impacted operating budgets.

General PANTER. Consistent with the information we reported in the Federal Automotive Statistical Tool (FAST), which is a Department of Energy and Office of Management and Budget web database designed to facilitate Federal agencies to meet all non-tactical motor vehicle fleet management data reporting requirements, the Marine Corps spent $93,975 more on E85 than it would have on gasoline in fiscal year 2010. However, compared to diesel fuel, we realized savings of $39,950 and $1,081,998 on Compressed Natural Gas and B20 biodiesel, respectively.

This calculation is based on gas gallon equivalents and factors out variations between fuels such as energy content per gallon. The Marine Corps considers the extra money spent on E85 to be an acceptable expense in order to comply with Executive Orders 13423 and 13514, as well as the Energy Independence and Security Act of 2007 and Energy Policy Acts of 1992 and 2005.

In order to achieve these petroleum reduction and alternative fuel use increase mandates, the Marine Corps must reduce petroleum consumption in light duty vehicles in addition to the medium and heavy duty vehicles. The only affordable alternative fuel light duty vehicles available in appropriate quantities are Flex Fuel vehicles that operate on gasoline or ethanol. As a result, the Marine Corps intends to continue its investments in ethanol infrastructure and ethanol fuels.

General RENO. At this time, the Air Force is not using alternative aviation fuel on an operational basis. The alternative aviation fuel we purchased has been for test and evaluation purposes only. Once the fleet is certified for unrestricted operations using an alternative fuel blend, the Air Force is committed to ensuring any alternative aviation fuel purchasers are cost competitive with traditional JP–8.

Admiral BURKE. The cost of alternative fuels is not currently impacting Navy operations accounts given the fuels are still in development and only being used for small scale testing and certification of biofuels which are primarily funded by R&D. The Navy's first major use of alternative fuels will come in 2016 with the sailing of the great green fleet which will require 80K barrels of fuel.

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

SUPPLY CHAIN MANAGEMENT

151. Senator CHAMBLISS. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, GAO produced a number of reports in recent years about the cost to the DOD of problems with its supply chain management system. A January 7, 2011, GAO report stated: "Since 1990, we have identified DOD supply chain management as a high risk area due in part to ineffective and inefficient inventory management practices and procedures, weaknesses in accurately forecasting demand for spare parts, and challenges in achieving widespread implementation of key technologies aimed at improving asset visibility. These factors have contributed to the accumulation of billions of dollars in spare parts that are excess to current requirements." The DOD, in both its 2006 and 2010 Quadrennial Defense Review (QDR) reports, has also spoken of the need to address this challenge. The 2006 report said that "the use of active and passive radio frequency identification (RFID) technologies will play a key role in achieving DOD's vision for implementing knowledge-enabled logistics support to the warfighter through automated asset visibility and management." What actions is DOD taking to improve asset visibility, reduce costs, and improve accuracy and efficiency in delivery of needed supplies to warfighters?

General STEVENSON. The Department has recently developed the DOD Comprehensive Inventory Management Improvement Plan (CIMP) which addresses the 7 January 2011 GAO report findings and recommendations. The Army worked closely with the Office of the Deputy Assistant Secretary of Defense for Supply Chain Integration in the development of the CIMP and we are well underway in implementing the various initiatives outlined in the plan to improve our inventory management practices, enhance spare parts demand forecasting and improve asset visibility. I will highlight a few.

The Army is pursing multiple efforts to improve inventory management practices. One is a reduction of excess stocks through a detailed review process by eliminating those items with no demands in the past 2 years. This effort will reduce our storage costs and inventory management requirements. Another is the centralization of our field level inventory stockage determination processes under the Army Materiel Command, who will ensure those items stocked in our Supply Support Activities (SSAs) are the right demand supported readiness enablers, in the right quantities, to keep combat systems operational and in the fight. Third, the Army Materiel Command is aggressively working to reduce excess procurements on-order before they are delivered from industry which prevents us from building up unnecessary inventory.

To improve spare parts demand forecasting accuracy, we are working with the DLA to develop a new Demand Data Exchange process to improve the accuracy of Army repair depot parts forecasts. This will reduce repair lead-times and more quickly provide critical assets to the warfighter. In addition, the Army is developing national-level forecast accuracy metrics as part of the DOD CIMP implementation effort that will ensure we procure the right repair parts in the right quantities. Finally, in the area of Organizational Clothing and Individual Equipment (OCIE), we are changing our software to incorporate a Reorder Point and Requisition Objective algorithm into our Central Issue Facilities that will streamline what they stock, how many of each item and when the CIF will reorder items. This will enable DLA to be more predictive in Army OCIE requirements as well as improve our own internal Army CIF management processes. Finally, the Army has initiated several studies to address demand forecasting in order to see where we can improve and how. We know we still have work to do in this area and have put a focused level of attention to it.

Finally, the Army is also implementing a number of new technologies to improve asset visibility of those assets in transition and in storage. For example, we are employing active RFID today at our overseas SSAs and piloting use of passive RFID at two of our stateside installation level SSAs. We are also testing the use of commercial satellite technology to provide "real time " and reliable data to identify and track Army cargo—especially in areas such as Afghanistan. We are also imple-

menting Individual Unique Identification (IUID) technologies to track individual items throughout their lifecycle on a worldwide basis. This capability will reside within our new Global Combat Support System-Army, which begins fielding in fiscal year 2014. The Army is also an active participant in the DLA In Storage Visibility (ISV) program which provides inter-service visibility and accessibility of excess spare parts on a localized basis which increases supply chain efficiencies and effectiveness.

These are a few examples of supply chain management initiatives and process changes underway in the Army to ensure we operate more efficiently, improve our demand forecasting and enable asset visibility in order to ensure responsive and efficient support to our warfighters.

General PANTER. The Marine Corps currently uses in-transit visibility (ITV) down to the tactical level in the OEF theater of operations leveraging active RFID and utilizing the Automated Manifest System-Tactical (AMS–TAC), portable RFID interrogators and Warehouse to Warfighter-Last Tactical Mile kits. We are also looking at ways to combine the utility of both RFID and IUID. Blount Island Command is currently utilizing passive RFID in combination with IUID to more accurately and efficiently account for principal end items on board the Maritime Prepositioning Ships and in the maintenance cycle ashore.

The Marine Corps is actively engaged in implementing IUID which will:

(a) Provide improved item accountability and visibility to enhance operational planning,
(b) Lower the total life-cycle costs of items acquired and managed,
(c) Provide item visibility regardless of the weapon system or who owned the item,
(d) Provide item data needed for top-level logistics and engineering analysis,
(e) Facilitate issuance of a clean financial audit opinion as required by the 1990 Chief Financial Officers' Act by providing an accurate data source for determining value and accountability of property and equipment,
(f) Improve access to historical item life cycle information from system design to disposal.

General RENO. The memorandum from the Under Secretary of Defense for Acquisition, Technology, and Logistics, "Lead Proponent for RFID and related Automatic Identification Technology (AIT)," dated September 26, 2006, appointed the U.S. Transportation Command (TRANSCOM) as the functional lead to implement RFID and AIT in the DOD supply chain.

To date, two TRANSCOM working groups, the Supply Chain Operations Team (focused on Distribution) and the In-Transit Team (focused on Materiel Management), have been established to improve asset visibility, reduce costs, and improve accuracy and efficiency in delivering needed supplies to warfighters. The Air Force is actively participating in both working groups as the team develops a centralized approach for using asset visibility technologies.

As part of the overall DOD effort, the Air Force has implemented AIT at key nodes in the supply chain to improve asset visibility and improve accuracy in delivery of supplies. In support of in-transit visibility, the Air Force operates a worldwide network of active RFID readers enabling each shipping function with the capability to commission (write) active RFID tags. We are also using passive RFID in combination with barcodes to provide positive inventory control of key sensitive assets. In conjunction with the TRANSCOM Supply Chain Operations Team, the Air Force is assessing the cost benefit of using passive RFID to trace depot level reparables.

Admiral BURKE. The Department of the Navy (DON) actively employs a multi-faceted approach to leverage various capabilities to support enhanced asset visibility—In Storage Visibility (ISV), item identification, and aid in reducing the total lifecycle cost of ownership. This coordinated approach is based on: (1) the application of the appropriate technology to meet requirements; (2) the use of actionable implementation plans; and (3) the adherence to DON/DOD policy and guidance to ensure standardization within and across the enterprise. The process of improving item identification accuracy begins as items are marked at time of initial acquisition and induction into DON accountability records as required by OUSD(AT&L) RFID Policy dated 3 June 2004 entitled, "RFID Mandatory on All Solicitations for Delivery of Material on/after 01 January 2005." Within the DON supply chain, AIT is being inserted at specific logistics nodes (i.e., warehouse inventory and asset management) and between nodes (i.e., transportation management) to effect a more comprehensive, accurate, and timely end-to-end visibility and accountability trail.

Efforts are jointly coordinated with OSD and TRANSCOM (Distribution Process Owner for DOD AIT). Currently, Navy Logistics initiatives are focused around four key supply chain components:

• Passive RFID (pRFID) enablement of the end-to-end Navy Repairables supply chain - an effort to improve In-Transit and Asset Visibility of the $11 billion Navy Repairables program from the consumption to maintenance induction cycle at the Navy's largest repairables sites.
• 2D Bar Code enablement of Naval Ordnance supply chain to improve In-Transit and Asset Visibility for the Navy's $34 billion conventional ordnance inventory by implementing automated 2D bar code transaction processing at over 1,000 Navy sites worldwide.
• Wireless Bar Code enablement of Navy ERP Warehouse and Inventory Management Operations to wirelessly enable all warehouse and inventory management business processes at sites that are being converted to Navy ERP System in fiscal years 2011 and 2012.
• Navy-wide sustainment of active RFID (aRFID) programs at almost 200 Navy field activities in support of COCOM in-theatre material movement requirements for bulk material shipments (e.g., sea vans, 43L pallets).

152. Senator CHAMBLISS. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, as one example, I understand Tobyhanna Army Depot has instituted asset tracking technologies that are accomplishing these objectives. What steps are being taken system wide to improve asset visibility and supply chain management?

General STEVENSON. The Army has made significant progress towards meeting the 2006 QDR objective to enhance the use of active and passive RFID technologies. Examples of how the Army is currently using automated identification technology (AIT) and an explanation of the Army's enterprise-level solution for expanding and integrating the use of AIT is as follows:

Tobyhanna Army Depot, cited in the question, is a good example of how AIT is being used to track assets and improve resource management at our repair depots. Tobyhanna uses active RFID tags and a network of nearly 100 interrogators and location sensors to track the movement and location of weapon system parts throughout the facility. The depot uses this information, combined with continuous scheduling process improvements, to improve its daily operations. The depot also uses RFID tags for its test, measurement and diagnostic equipment (to quickly locate items for required calibration and loss prevention) and for its materiel handling equipment (to locate and recover equipment that is due for maintenance inspection or to redistribute equipment where needed).

In the field and at the installation level, the Army is implementing several AIT capabilities to enable the automated transfer of data vice relying on manual entry of data—this not only saves time for the soldier, but also reduces the errors associated with the manual entry of data. For example, the Army employs active RFID today in all shipments to its overseas supply support activities (SSAs), and is initiating passive RFID at two stateside installation level SSAs. The Army is also testing the use of commercial satellite technology to provide "real time " and reliable data to identify and track Army cargo—especially in areas such as Afghanistan. Finally, the Army is also implementing IUID technologies to track individual items throughout their lifecycle on a worldwide basis.

Many of these AIT capabilities are being standardized within the Global Combat Support System-Army (GCSS-Army), which begins fielding in fiscal year 2014. GCSS-Army is a state-of-the-art ERP program that links the data, systems and processes within the GCSS–A with those of the Army's operational national level logistics and financial systems.

The Army is also taking system wide steps to improve its supply chain management (SCM) operations by working closely with the Office of the Deputy Assistant Secretary of Defense for Supply Chain Integration in implementing its Comprehensive Inventory Management Plan (CIMP). The plan is focused on improving inventory management practices, enhancing repair parts demand forecasting and improving asset visibility. As part of the CIMP, the Army is reducing excess stocks through a detailed review process by eliminating those items with no demands in the past 2 years—this effort will reduce storage costs and inventory management requirements. Additionally, the Army Materiel Command (AMC) is aggressively working to reduce excess procurements on-order before they are delivered from industry, which prevent the build up of unnecessary inventory. In addition, the Army is developing national-level forecast accuracy metrics as part of the DOD CIMP implementation effort that will ensure procurement of the right repair parts in the right quantities.

The Army also has multiple system-wide SCM improvement initiatives independent of the CIMP effort. One is the centralization of the field level inventory stockage determination process under the AMC, who will ensure those items stocked forward in Supply Support Activities are the right demand supported readiness

enablers, in the right quantities, to keep combat systems operational and in the fight. Another is the work ongoing with the DLA to improve repair parts demand forecasting accuracy by developing a new Demand Data Exchange process to improve the accuracy of Army repair depot parts forecasts. This will reduce repair lead-times and more quickly provide critical assets to the warfighter. In addition, the Army is working closely with DLA to ensure selective stockage of large, heavy or bulky items in DLA forward distribution depots required to responsively sustain our forward deployed forces, with surface replenishment, thus avoiding the transportation costs associated with moving these items by air.

In summary, these are a few of the SCM and asset visibility improvement efforts underway in the Army. The keystone of our holistic approach is completing the integration and fielding of the GCSS–Army, financial, and national level logistics ERP systems. This major systemic improvement is enabling the Army to plan for and implement significant asset visibility and SCM enhancements—these changes will help the Army to reduce overall costs while improving the delivery of needed supplies to the warfighter.

General PANTER. A most recent USMC review of the "Draft DOD AIT Implementation Plan (IP) For Distribution Operations Policy" validates our commitment and contributes to supporting the DOD level integration and synchronization of AIT distribution. This regulation identifies and provides oversight of the proponent activities, supporting agency responsibilities and the affected technologies that support global distribution operations. While systems are not specifically spelled out due to Service AIS architecture, the principle of using IUID and active and passive RFID in support of evolving DOD AIT efforts is a constant. USMC is supporting the use all three practices to achieve an overall goal of obtaining in-transit and total asset visibility and accountability of Marine Corps equipment.

The below provides examples of USMC AIT efforts/actions:

IUID:

The USMC is currently supporting OSD IUID marking requirement by marking applicable equipment. Marine Corps Logistics Command (MCLC) has implemented efforts to inspect all newly procurement items and to place marks/labels on previously procured and legacy equipment.

Passive RFID (pRFID):

MCLC's Automated Information Data Capture (AIDC) initiative is a Congressionally sponsored MARCORSYSCOM supported endeavor to automate the receipt, issue, and inventory all materials/items stored within the USMC wholesale supply activities. This initiative provides real-time visibility and accountability of equipment, thus contributing to supply chain velocity.

Active RFID (aRFID):

The USMC is in full compliance with the DOD employment of active RFID ISO global contingency operations. We employ PDKs, warehouse to warfighter kits, and other fixed interrogators to facilitate DOD-wide ITV/TAV efforts/actions.

GCSS–MC:

The Marine Corps is beginning the total force implementation of Global Combat Support System-Marine Corps which will provide real time demands submission, status and tracking as well as advanced supply chain planning functionality which will facilitate better forecasting and inventory positioning. The system will allow for Service wide visibility of all assets as well as their state of readiness.

General RENO. The DOD has taken the initial steps by identifying TRANSCOM as the lead functional proponent to implement RFID and AIT in the DOD supply chain.

The Air Force is actively participating in the TRANSCOM Supply Chain Operations Team's efforts to develop an enterprise wide approach for using asset visibility and supply chain management technologies.

Within the Air Force, we have implemented several AIT capabilities aimed at automating base supply, transportation, munitions, and maintenance management data. By utilizing mobile wireless hand-held terminals with bar code and RFID capability, we are improving inventory data collection and accuracy, while reducing the time required to complete inventories.

Another example of where the Air Force has used AIT to improve asset visibility and supply chain management is in the Nuclear Weapons Related Materiel area. AIT has improved the visibility and the command and control of these critical assets across the nuclear enterprise.

The Air Force is also partnering with the DLA to develop an AIT pilot project that will enhance visibility of depot level reparables as they move through the supply chain.

Admiral BURKE. Improving asset visibility and the effectiveness of the supply chain is predicated on improving the value of logistical information (i.e., availability, quality, timeliness and integrity). Navy is leveraging the functional strengths of AIT through careful application of the right technology to facilitate improved logistical information management. The implementation of Navy ERP will enhance Navy's ability by integrated business management capability that modernizes and standardizes Navy business operations, provide unprecedented management visibility across the enterprise, and increase the effectiveness and efficiency of the Navy's support for the warfighter with improved forecasting and total asset visibility. The DON challenge is not only to insert AIT into the supply chain, but work in conjunction with numerous supply chain Automated Information Systems (AIS) owners to integrate AIT generated data into the existing supply chain data architecture providing improved logistics situational awareness to warfighters and logisticians alike.

AIS owners (e.g., Navy ERP, Ordnance Information System) support integration of AIT generated information into their organic data streams. Navy works closely with elements of OSD, TRANSCOM, DLA, and the other Services and Agencies to ensure effective communications exist to minimize duplication of effort, wasteful expenditure of resources and improve optimization of the value of resulting AIT enabled logistical information.

To meet these challenges, the Navy has placed greater emphasis on developing an enterprise approach towards AIT insertion into Navy systems. An enterprise approach is designed to better support the DON and DOD end-to-end supply chains and subsequent warfighter support. The Navy approach is focused around four key systems and their respective supply chains:

- eRMS - electronic Retrograde Management System
- TARP - Technical Assistance for Repairables Processing
- OIS - Ordnance Information System
- Navy ERP SAP WM - Systems Application and Products Warehouse Management
- AMS–TAC - Automated Manifest System, Tactical

AIT enablement of these four systems has been placed into production environments in varying degrees of maturity and completion. As these systems continue to mature the Navy may further expand AIT insertions into other Navy systems.

Additionally, section 328 of the NDAA for Fiscal Year 2010 established a formal requirement for the Secretary of Defense to submit "a comprehensive plan for improving the inventory management systems of the Military Departments and the DLA with the objective of reducing the acquisition and storage of secondary item inventory that is excess to requirements." The overall objective of the plan is a prudent reduction in current inventory excesses as well as a reduction in the potential for future excesses without degrading material support to our customers.

Navy is currently coordinating with all services and working directly with the Office of Secretary of Defense (OSD) to develop and fulfill the requirements of the Comprehensive Inventory Plan and detailed sub-plans to fulfill the requirements of Section 328 of the NDAA.

153. Senator CHAMBLISS. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, are there additional actions that can reduce costs, lessen manpower demands, reduce surplus inventories and lost items, and improve delivery to needed supplies to forward deployed forces?

General STEVENSON. Yes, the Army has implemented numerous initiatives to reduce costs, lessen manpower demands, reduce surplus inventories, reduce lost items and improve delivery of needed supplies to our forward deployed forces. I will highlight a few things the Army is doing and pursuing.

In efforts to reduce costs and surplus inventories, we have undertaken an aggressive effort to reduce excess stocks by eliminating those items with no demands in the past 2 years. We have also centralized our field level inventory stockage determination processes under the Army Materiel Command to ensure the repair parts we stock forward in our Supply Support Activities are the right demand supported readiness enablers, in the right quantities, to keep combat systems operational and in the fight. Both these efforts reduce storage costs and handling requirements while enhancing the support we provide to our warfighters. In addition, we are working closely with the DLA to ensure we selectively stock large heavy or bulky items in DLA forward distribution depots required to responsively sustain our for-

ward deployed forces, with surface replenishment, thus avoiding the transportation costs associated with moving these items by air.

To lessen manpower demands, we are implementing several technologies such as IUID and barcode scanners to enable the automated transfer of data vice relying on manual entry of data. This not only saves time for the soldier, but also reduces the errors associated with the manual entry of data. The Army is also employing radio frequency technology to track shipments of supplies and equipment and exploring the use of satellite tracking technology in efforts to reduce pilferage and lost cargo. With regard to accountability, the Army has launched the Army Property Accountability Campaign to ensure that every item is posted to record, thus providing accurate accountability and visibility of supplies and materiel at every level throughout the Army. This campaign applies not only to theater but also to those units who have redeployed to home station. This is being accomplished through the emphasis of the Command Supply Discipline Program at every level of command.

Each of these initiatives are designed to improve the delivery of needed supplies to our forward deployed forces and have reduced customer wait times, lowered air transport expenses, and lessened storage and handling requirements. Also, we are shifting more cargo to the expanded Northern Distribution Network in order to reduce the risk of theft and pilferage that occurs over the Pakistan routes and to ensure we deliver needed supplies to our forward deployed forces.

In summary, these are a few examples of some of the initiatives and actions being taken in the Army to ensure we reduce costs, lessen manpower demands, reduce surplus inventories and lost items, and improve delivery of needed supplies to forward deployed forces.

General PANTER. Yes. An integrated and transparent supply chain will enable the Services to maintain only the inventory they need to operate and maintain a high state of readiness. The Marine Corps implementation of GCSS–MC will allow service wide visibility of inventory availability. We are also working with DLA in more closely aligning their logistics capability with our own. This will have the net effect of reducing Marine Corps inventory on hand, with the associated requirements for personnel and space. We are currently reviewing and revising our policies, training and systems to create a more visible and integrated supply chain to more effectively support the warfighter in a deployed environment.

General RENO. Yes. There are three areas we believe we can expand/exploit across the Services and to DLA. First, the Air Force's inventory optimization technique(s) maximizes weapon system/customer support while minimizing cost. We have seen these "bang for the buck" models reduce cost, inventory, and improve support in our core logistics processes (e.g. repair, procurement, distribution, and inventory).

Next, continued implementation of a Service-led Commodity Sourcing Program, backed up with a comprehensive Spend Analysis, allows a Service to take advantage of price breaks, leverage spend with suppliers, reduce lead times, and be more responsive to changes in customer requirements. It is important to note, these commodity strategies are difficult to develop and are best led by the Service who has engineering control and the experience with the product, commodity, or system to be supported.

Finally, the Services operate in a dynamic environment and need a dynamic, responsive supply chain to deal with the ever-changing priorities and mission requirements. Further development of methods and decision support tools that create "sense and respond" supply chain capabilities—essentially focusing on responsiveness in the face of changing priorities—is critical to our ability to reduce manpower, cost, and footprint while meeting the mission.

Admiral BURKE. The Navy is continually reviewing initiatives that address Total Ownership Costs (TOC) and increase efficiencies. These are addressed within the Navy N4 Strategic Plan and my staff is engaged in efforts such as TRANSCOM's Strategic Network Optimization, Navy Logistics Integration (NLI) efficiencies, the Affordability Initiative Process, and the Stock Positioning Steering Group. Current policy regarding the outfitting of spares for weapons systems utilize validated models to attain readiness goals while minimizing end item stock on hand, and attaining the lowest cost possible. Activities are also using continuous process improvement tools such as Lean 6 Sigma to improve supply and maintenance efficiencies at the unit level, reducing TOC, and lessening the requirement for large amounts of stock on hand.

In addition, a robust maintenance strategy is essential to minimize the TOC of Navy platforms and ensure that these assets meet their expected service life. Crucial to executing any maintenance strategy is a clear understanding of the current condition of each asset and a detailed plan for properly maintaining and logistically supporting the equipment.

RADIO FREQUENCY IDENTIFICATION TECHNOLOGIES

154. Senator CHAMBLISS. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, in the last decade both passive and active RFID technologies have progressed greatly, with many government and nongovernment studies showing great cost savings in asset and personnel management and tracking. What steps are being taken by your agency to incorporate these technologies and/or calculate true overall cost savings that would result from their incorporation?

General STEVENSON. The Army uses RFID as part of a suite of AIT. The use of both active and passive RFID technology provides accountability and visibility benefits in asset tracking. RFID technology enables tracking and management of Army supplies and equipment end-to-end. Army orders mandate the use of active RFID tagging on all containers, aerial pallets, and equipment outside the Continental United States in support of OND and OEF.

The use of the active RFID allows supply chain managers at all levels to know what is inbound. Additionally, historical data obtained from RFID tag reads allows supply chain managers to make decisions on resource allocation to mitigate bottlenecks. Two operational examples include:

(1) tag reads showed that containers were queuing at the entrance to bases in Afghanistan. Theater managers instituted 24 hour entry control point operations, requested additional materiel handling equipment and established secure container holding yards to call forward containers based on capability to handle thereby reducing queuing.
(2) Volume at some supply support activities was too low to rapidly build "unit-pure" containers as units drew down in Iraq. Data obtained from tag reads gave managers the information to direct consolidation of low volume containers, consolidate the containers in theater and onward move them to supply activities.

These actions reduce the volume of inventory in the supply pipeline and increase efficiency.

The Army has initiated use of passive RFID to manage large volumes of like items, specifically body armor and parachutes. This allows commanders to rapidly inventory and segregate items by size without conducting a visual inventory. Additionally, the passive RFID component of the Parachute Tracking System allows commanders to segregate chutes that were packed by a specific parachute rigger in the event of a malfunction. This is a potential life saving capability, exponentially increasing the ability to rapidly and accurately segregate the chutes. Finally, while investment in passive RFID for use in tactical supply activities has been deemed to have an insufficient return on investment, the Army is piloting the use of passive RFID at installation-level supply activities at Forts Bragg and Irwin.

General PANTER. The Marine Corps has implemented and used active RFID for 7 years. We have seen the increased nodal visibility of supplies moving across the transportation pipeline. The benefit to active RFID is cost avoidance; we no longer requisition a supply item multiple times to ensure its delivered within the required timeframe since active RFID allows us to track the item through the supply pipeline. Our ERP solution (GCSS–MC) will also be implementing passive RFID technology as a part of future development efforts. We anticipate that passive RFID will also play a role in increased visibility.

General RENO. The Air Force, along with the other military departments, is actively participating in the AIT governance structure led by the TRANSCOM. The Air Force focus is to work within the governance structure to identify, validate, and implement capabilities that can improve retail and wholesale business processes, meet overarching DOD supply chain objectives, as well as potential methods to determine cost savings.

Additionally, as part of TRANSCOM's Supply Chain Operations Team, we're also partnering with the DLA to develop an AIT pilot project to enhance visibility of depot level reparables as they move through the supply chain.

Admiral BURKE. The TRANSCOM Concept of Operations and the associated Implementation Plan forms the foundation for overall DOD active (aRFID) and passive (pRFID) implementations and operation across the DOD, including the DON. The Navy is fully compliant with the TRANSCOM installation plan to include initial pRFID and aRFID systems installed at multiple locations in CONUS and Hawaii. These sites support new acquisition and repairable supply chains (aRFID and pRFID), contingency operations using Portable Deployment Kits and Early Entry Deployment Support Kits (aRFID), and a personnel tracking pilot at Naval Shipyard Pearl Harbor HI (pRFID). In compliance with TRANSCOM requirements, the Navy has developed a series of strategic level performance metrics designed by

TRANSCOM to support the calculation of Return on Investment (ROI) across the DOD supply chain with ongoing information collection. Current TRANSCOM performance metrics are:

a. pRFID - Percent of total shipments tagged using pRFID
b. pRFID - Percent read rate of pRFID tagged shipments
c. pRFID - Receiving process Productivity improvement
d. pRFID - Time between physical and logical shipment receipt using pRFID
e. pRFID - Logistics Response Time for all Issue Priority groups
f. pRFID - Order Variability (Logistics Response Time segmented by Issue Priority group)
g. pRFID - Discrepancy Handling Time/Frustrated Freight
h. pRFID - Value of shipment losses
i. aRFID - Percent read rate of aRFID tagged shipments
j. aRFID - Percent of aRFID tags reused

155. Senator CHAMBLISS. Lieutenant General Stevenson, Lieutenant General Panter, Lieutenant General Reno, and Vice Admiral Burke, it is my understanding that there are differences in the functionality and cost of active and passive RFID technology. Has the DOD reviewed and compared the value, costs, and benefits of each of these technologies in the management of the DOD's supply chain, and if so, what conclusions have you reached?

General STEVENSON. Yes, the Army has reviewed and compared the value, costs, and benefits of each of these technologies in the management of the Army supply chain. The comparative cost of active and passive RFID tags are significant ($57.00 for active vice $.10 for passive), but the use of both technologies provide benefits to the Army.

Each technology has its own pros and cons. Active RFID tags hold relatively large amounts of data; are continuously powered, and are normally used when a longer tag read distance is desired. Passive RFID requires strong Radio Frequency signals from an interrogator, and the signal strength equates to a shorter range for passive tags than for active tags. Both technologies are beneficial depending on the type of function needed. Due to the volume of activity at Army tactical Supply Support Activities (SSA), instrumenting them for use of passive RFID has not been found to be cost effective; however, at the installation SSA, there may be sufficient volume to provide an appropriate return on investment—in order to prove that out, two Army installation SSAs are currently piloting the use of passive RFID. Additionally, use of passive RFID appears to show promise with tracking the Army's parachute inventory.

With the natural progression of new technology on the commercial market, the Army is exploring the use and benefits of satellite technology to provide 'real time' and reliable data to identify and track Army cargo. The integrated capability of satellite and RFID technology with sensor and security monitoring capabilities will provide a single source of data sharing across all DOD logistics systems. In July 2011, the Army, in coordination with TRANSCOM, will test the use of satellite tags on over 200 unit containers moving from a CONUS installation to a theater of operation.

General PANTER. Yes we have. Within the DOD supply chain, we see the value of both. Since implementing active RFID 7 years ago, we have increased the visibility of supplies in the transportation/distribution pipeline. With the DOD migration to a commercial standard for active RFID technology, increased competition will reduce our overall costs while continuing to maintain nodal visibility. We also see the value of passive RFID technology. Once our ERP solution is fully developed and fielded, we believe passive RFID technology will also increase visibility.

General RENO. The DOD has taken the initial steps by identifying TRANSCOM as the lead functional proponent to implement RFID and AIT in the DOD supply chain. As result, TRANSCOM has established two working groups to determine how and where to implement the available technology and balance efficiencies with mission effectiveness. The Air Force is an active participant in this effort.

Admiral BURKE. The measured insertion of AIT into the DON supply chain is valuable in enhancing the quality of support to COCOMs. The Navy has worked in cooperation with TRANSCOM, as the DOD Distribution Process Owner, and other component services to optimize the use of both active and passive RFID (aRFID and pRFID) by standardizing how each is used throughout the DOD supply chain. The result is a cost effective blending of aRFID and pRFID technology across item, package, container and vehicular levels in support of COCOM Total Asset Visibility and ITV requirements. Essentially, pRFID has been effective at the Package, Transport Unit and Unit Load Levels while aRFID has been effective at the Container Level.

The Navy has effectively applied aRFID at sites such as FISC Norfolk Ocean Terminal Container Freight Station, Navy Non-Self Deployers (Unit Movers), the aircraft engine community, the ordnance community, and Navy Exchange Command. The Navy's aRFID use is in compliance with TRANSCOM concept of operations and associated implementation plan, and as directed by COCOMs to meet ITV requirements for sea vans, engine containers, 463L air cargo pallets, and prepositioned material. pRFID is effectively applied at the package, case, and pallet levels where inexpensive passive tags satisfy asset visibility demand requirements. This combination provides a cost effective solution to logistics challenges presented by today's environment and those anticipated in the future.

Analysis of pRFID metric data such as Logistics Response Time indicates the supply chain benefits from the insertion of pRFID through improved asset identification and visibility. Additional causative research is required to quantify the degree of impact such insertion has had and is anticipated to have in the future. Comprehensive cost/benefit analysis for aRFID and pRFID is dependent upon continued RFID implementations to more fully enable larger segments of the DON supply chain with RFID technology. Implementations continue toward achieving that goal. Expected quantified benefits include labor savings related to improvements in automating inventory reporting and potential inventory cost avoidance related to reductions in lost or misidentified material.

The Navy considers the continued deployment of AIT into the supply chain to be cost effective and valuable.

[Whereupon, at 11:50 a.m., the subcommittee adjourned.]

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