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HEARING
ON
NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2012
AND
OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS
BEFORE THE
COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED TWELFTH CONGRESS
FIRST SESSION
—
SUBCOMMITTEE ON READINESS HEARING
ON
**BUDGET REQUEST FOR MILITARY
CONSTRUCTION, BASE CLOSURE,
ENVIRONMENT, FACILITIES OPERATION
AND MAINTENANCE**
—

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FISCAL YEAR 2012 NATIONAL DEFENSE AUTHORIZATION BUDGET REQUEST FOR MILITARY CONSTRUCTION, BASE CLOSURE, ENVIRONMENT, FACILITIES OPERATION AND MAINTENANCE

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON READINESS,
Washington, DC, Wednesday, April 13, 2011.

The subcommittee met, pursuant to call, at 3:30 p.m. in room 2212, Rayburn House Office Building, Hon. J. Randy Forbes (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. J. RANDY FORBES, A REPRESENTATIVE FROM VIRGINIA, CHAIRMAN, SUBCOMMITTEE ON READINESS

Mr. FORBES. Well, I want to welcome all our Members and our distinguished panel of experts to today's hearing that will focus on how our military construction program is aligned with our Nation's priorities.

Fundamentally, our Nation is at war with an aggressive adversary. Our forces have been successful in engaging this war on the doorsteps of foreign nations, and I am grateful that the underpinnings of our security have kept our citizens safe and ensured our free-market economy thrives.

However, we have seen changes in this dynamic recently with the crisis in several Arab nations, with the rise of a rapidly developing China, and even with the sustaining of combat operations in Iraq and Afghanistan. I am not confident that the Department of Defense has the necessary infrastructure and strategic partnerships that are necessary to confront these diverse and dynamic challenges.

I believe that our force structure needs to be better aligned with emerging threats. A good example of this realignment effort is located in my Ranking Member's home of Guam. I believe that this location will serve to enhance our forces in Eastern Asia against those who believe that we are not committed to freedom and prosperity in this strategic region.

In addition to Guam, I believe that it is critical that we expand our basing structure in the Western Pacific to encompass nontraditional partners that are aligned with our strategic interest.

On the other hand, an example of a strategic misalignment is at Naval Station Mayport, where the Navy has proposed to place a redundant capability that will cost significant funds to support a second carrier homeport on the East Coast. Our strategic investment should be both wise and cost-effective. Unfortunately, the Navy's

support of a second homeport in Mayport is neither and reverses a series of decisions by previous Navy leadership to limit strategic homeport concepts.

As to other issues included in the President's budget request, I am also concerned about financial parameters that drive poor decisionmaking. For example, I was surprised to note that the Navy decided to enter into an energy-efficiency contract where the financial payback was reported as an astounding 447 years. Even after this was pointed out by the inspector general, the Department decided to continue with this project.

I was also surprised that the entire Department of Defense uses construction cost indices that are 25 percent to 40 percent more than similarly commercially built facilities.

My friends, with savings of only 25 percent in the military construction program, which could represent an annual savings of almost \$4 billion, we could build significant capabilities and really provide a result that would correct years of neglect and allow us to make prudent strategic investments in diverse areas around the world. Good enough is not good enough for the fine men and women in uniform.

On a final note, we are in the final year of implementing the BRAC [Base Closure and Realignment] program, and there are many recommendations that contain significant risk in completing by the statutory deadline of September 2011. I want to be very clear that any risk to the mission of the United States in this time of war needs to be properly limited to ensure the success of our efforts.

I will not jeopardize patient care for our wounded warriors if their care will be impacted by a BRAC move. And I look forward to our witnesses' discussing the risk of the BRAC moves to determine if additional time is necessary to properly complete the remaining BRAC recommendations.

Joining us today to discuss these issues are four distinguished individuals. Dr. Dorothy Robyn, Deputy Under Secretary of Defense for Installations and Environment. We also have the Honorable Katherine Hammack, Assistant Secretary of the Army, Installations, Energy, and Environment; the Honorable Jackalyne Pfannenstiel, Assistant Secretary of the Navy, Energy, Installations and Environment; and the Honorable Terry Yonkers, Assistant Secretary of the Air Force, Installations, Environment and Logistics.

Ladies and gentlemen, we thank you all for your service to our country and thank you so much for taking time to share your experience and expertise with us this afternoon. I know our Members are going to appreciate and learn a great deal from your testimony.

And now I would like to recognize the Ranking Member, Ms. Bordallo, for any comments she may have.

Ms. Bordallo.

[The prepared statement of Mr. Forbes can be found in the Appendix on page 29.]

**STATEMENT OF HON. MADELEINE Z. BORDALLO, A DELEGATE
FROM GUAM, RANKING MEMBER, SUBCOMMITTEE ON READ-
INESS**

Ms. BORDALLO. Thank you very much, Mr. Chairman.

And to all our witnesses, I look forward this afternoon to your testimonies.

Today, we are going to discuss a critical component of our military's readiness, which is the Department of Defense's military construction program. The fiscal year 2012 President's budget request for military construction and BRAC is \$14.7 billion. However, this represents a 21-percent reduction in military construction funding over the previous fiscal year.

This amount includes necessary investments to modernize aging facilities, construct new facilities, accommodate the realignment of military forces abroad to bases within the United States, and complete the 2005 base closure recommendations.

I do remain concerned about the 21-percent reduction in military construction funding over the previous year. I recognize that, as BRAC 2005 winds down, the construction requirements will diminish, as well. But we appear to be taking a shortsighted approach to sustaining these new facilities by not funding sustainment to the Department's own standards.

Military construction is a proven jobs creator. In a time of economic downturn, I hope the Department and each of the Services will continue their efforts to modernize their current facilities that warrant such investments.

On Guam, for instance, we are beginning a significant military buildup. Secretary Pfannenstiel, I know that task orders were recently awarded after the signing of the programmatic agreement, and I am pleased to see major construction groundbreaking finally taking place.

The military buildup on Guam is not only a job creator, but is important to our national security interests in the Asia Pacific region. We live on a tough block on the world stage. And having freedom to access from Guam is hard to quantify. Although the military buildup on Guam requires tangible progress in Japan, I believe as Admiral Willard testified to the full committee last week, that we are seeing signs of tangible progress, and there will be a number of milestones along the way.

Further, I would reiterate the Admiral's point that the Japanese, despite the horrific disaster they have experienced, remain committed to the Guam international agreement. As we move forward, I know this committee will continue its strong support for this strategically important move, and we must continue to take steps to ensure that this buildup is done right.

Our hearing is also going to focus on the Department's and each Service's effort to diversify their installation energy demand. It is important to note that our energy conservation and alternative energy development efforts both support our warfighter in an operational capacity, as well as reduce demand on our installations.

But today, we will be focusing only on our installations. It is estimated that our military installations spend nearly \$4 billion per year in energy costs. Finding ways to reduce this cost and diversify our energy portfolio while still protecting readiness will improve

our national security by reducing demand on foreign oil, as well as reducing costs.

I am interested in what efforts as part of the Secretary of Defense's efficiencies initiative have been focused on reducing costs through alternative energy savings. I feel this is something that needs to be continued to be addressed, and I know this committee wants to work with the Department to make these efforts successful.

Finally, I want to hear more from each of the Services about their ability to finalize their plans for completing BRAC moves by the end of this fiscal year, which is a mere 6 months from now. What steps are the Services taking to complete their BRAC moves on schedule and can all of the moves be completed on time without unnecessary cost increases or unwarranted impacts on local communities?

If not, what action is the Department contemplating to ensure that local communities are not overburdened? And what tools is the Department providing the Services to complete their BRAC actions in a timely fashion? We want to know how this committee can help make this effort successful.

So, again, Mr. Chairman, I thank you. And, again, I feel this hearing is very important to the readiness of our forces. Having the facilities needed to complete missions is essential, and I look forward to the questions and the testimonies.

Mr. FORBES. Thank you, Ms. Bordallo.

And we discussed prior to the hearing, I ask unanimous consent that we dispense with the 5-minute rule for this hearing and depart from regular order so that Members may ask questions during the course of the discussion. I think this will provide a roundtable-type forum and will enhance the dialogue on these very important issues.

Without objection, so ordered.

I want to thank all of our witnesses for being here. We are looking forward to your comments.

I think I have explained to each of you privately that we have a little different format. It is a very bipartisan committee. We work very well together. And rather than having the complete staccato kind of questioning you get in a lot of committees, if one of their Members, it is their time to ask a question and somebody has a brief follow-up, we will allow them to do that, even if it is out of turn, just to keep that train of thought.

Also at the end, if there is anything else you want to say or correct that you said, don't think you are in a box and can't do that. We are going to give you plenty of time to do it. If someone says something and you would like to extrapolate on what they said, feel free to let me know and we are happy to recognize you. We hope that this just gets information out that helps us make sure that our forces are ready.

So if you don't have any questions, Secretary Robyn, we are going to let you start off, if you would. And we will give each of you about 5 minutes. Don't hold you hard and fast to that time period, but I know you have given us prepared remarks. We read those, and we have already gotten them. If you can, just talk to us for—take 30 seconds or 5 minutes, whatever you need, and tell us

what you think are the most important things. You don't have to read those prepared remarks. But if it makes you more comfortable, feel free to do it.

Ms. Secretary.

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

Dr. ROBYN. Let me thank you, Chairman Forbes, Congresswoman Bordallo, distinguished subcommittee Members. It is a pleasure to be here today to talk about the President's budget request for military construction and environmental programs.

Let me throw out three numbers, and let me address two crosscutting themes or crosscutting priorities. First number, which Congresswoman Bordallo mentioned, \$14.8 billion. That is our request for MILCON [Military Construction], family housing programs, and BRAC. That is down about \$4 billion from last year. And as you say, that is predominantly due to the fact that we are nearing the end of the BRAC process.

Second number, \$17.9 billion. That is our request for sustainment and recapitalization of existing facilities. That number is up by about \$4 billion, due largely to the efforts by the Army and the Air Force to upgrade their existing facilities.

Third number, \$4.3 billion for environmental programs. That represents steady state, and it is a reflection of the maturity and stability and, I would say, the success of our ongoing efforts in that area.

The two crosscutting themes, priorities that I want to briefly talk about is energy and then technology. In the energy area—and, Mr. Chairman, I know this is a strong interest of yours, and I loved your op-ed, and I think you said it very, very well. In fact, I am going to quote one sentence. "Energy efficiency is often framed as an environmental issue, but it is first and foremost a national security issue." And that is very much how we think about it.

It is important to the Department, the facility energy, for two reasons. The first is cost. We spend \$4 billion a year on facility energy, and even by DOD [Department of Defense] standards, that is real money.

Second is mission assurance. Our installations support combat operations more directly than ever before. We fly UAVs [Unmanned Aerial Vehicles] from our installations. We fly long-range bombers. We analyze battlefield intelligence data in real time. Our installations in turn depend on a commercial electricity grid that is vulnerable to potentially serious disruptions. So that is the mission assurance part of our concern about energy.

We have a multifaceted strategy: reduce demand, expand supply of alternative energy sources, and improve our energy security. These efforts, I just want to reiterate, are not designed—they will green our military installations, but that is not the reason we are doing them. We are doing them because they will achieve significant cost savings and improve our mission assurance.

We believe they are smart, with a couple of exceptions, and we can address the one that you mentioned, Mr. Chairman. These are smart investments that will pay for themselves over time, many times over.

Second, I want to—I want to highlight technology. This is the Department's strong suit. This is why we are able to prevail in an operational setting. And the same is true in an installation setting.

And let me give you two examples. The Department has a \$17 billion bill for cleanup of unexploded ordnance, UXO. That is known ordnance above ground; that is not what is underwater. The reason it is so expensive is because we don't have—we have not had the technology to distinguish between bombs and beer cans. We can't discriminate between unexploded ordnance and scrap metal.

A program that I oversee has spent 10 years investing in industry and universities to develop the technology to—that can distinguish between bombs and beer cans. And we now have that technology. We need to demonstrate it in a lot of different settings in order to get regulatory buy-in, but we think that can save the Department between \$10 billion and \$12 billion. That is the power of technology.

And let me give you another example. The same organization that has been so successfully investing in UXO discrimination technology 2 years ago began a program, a competitive program to—that uses our installations as a virtual test bed for next-generation energy technology. These are technologies that have the potential to dramatically improve our energy performance, but that face major impediments to commercialization because of the unique nature of the building energy industry.

We have been doing this for 2 years. For those technologies that prove—that succeed, that prove out in the demonstration, we can then go on and use our significant buying power as the Department to make a market for those technologies, much as we did with aircraft, electronics and the Internet. We have about 40 projects underway, and we expect to have results beginning this year.

So there is a lot of exciting work going on. And I didn't even mention BRAC, Guam, and construction costs, but I would be delighted to talk with you about those.

[The prepared statement of Dr. Robyn can be found in the Appendix on page 31.]

Mr. FORBES. I think you can rest assured that you will get an opportunity to do that as we move forward.

Secretary Hammack.

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

Secretary HAMMACK. Thank you, Chairman Forbes, Congresswoman Bordallo, and other distinguished Members. Delighted to be here, and I want to thank you for your support of the Army over the years.

Certainly, the three things that I want to talk about are BRAC. Also efficiencies and energy, as you both cited, were critical components, especially of interest to this committee. We are fighting two wars, and we have been working over the last several years to diligently support our forces with the facilities that they need in order to train and then to come back and reset from some of the challenges that they are facing. We are working to reduce our energy

footprint and remain good stewards of the environment. So with all of those coming on at once—and then BRAC, at the same time.

And to the Army, BRAC was an \$18 billion program of which \$13.5 billion was in construction. And doing that at the same time you are rotating the forces, at the same time you are fighting the wars has been an extreme challenge. We are closing 12 bases. We are closing 176 Reserve installations and 211 Guard closures. At the same time, we are creating three new four-star headquarters and eight joint and Army Centers of Excellence, at the same time we have sort of a new concept, which is the Armed Forces Reserve centers, where we have both the Guard and Reserve in the same location. We have 125 of those we have stood up.

And so these BRAC programs that we have been undertaking will return efficiencies and savings over the long term, but right now, we are still in the middle of it. We are coming to closure. And we are on target to meet the deadline.

We have six projects, which we consider high-risk. One of those is Walter Reed Medical Center. And we want to ensure that we don't do anything that would jeopardize a soldier or any military personnel, so we are watching very closely to ensure that the new facilities we need are stood up and properly certified so that we can move our soldiers over and not jeopardize care. So that is probably the most critical to the Army that we are watching right now.

But again, we are on target. The schedules are in place. We are just watching them very carefully.

The efficiencies—I mean, I talked about the efficiencies through BRAC, but there are other efficiencies, one of which is under discussion with Secretary Gates. We deferred \$1.4 billion in MILCON. And I know some have thought that that is a risk, and certainly we looked at it and we feel it—the projects that we deferred are low- and medium-risk to readiness.

And I use the word “deferred” purposefully, because those projects that were deferred will recompile on a basis of need. And we are looking very closely at our facilities strategy to ensure that we are correcting capacity and condition. And those are two reasons to build new, in that you are overcrowded or you have moved a new unit in, and they are in temporary structures, and you need to build the facility, or that the condition is a very poor condition or you have a roof collapsing or there is a real need.

So our—as we go forward, our military construction program is going to be much more closely scrutinized and evaluated with—as Dr. Robyn pointed out—more focus on the restoration and modernization of existing facilities and using what we have now more prudently.

We have had some bid savings in construction. And in those bid savings, we have returned about \$1 billion to the Treasury. We have retained some of the bid savings to help out in areas where there have been challenges or areas that were unanticipated. Some of these reprogramming are to repair storm-damaged facilities, such as at Fort Leonard Wood. We also had some freeze challenges in the Southwestern United States over this winter. Or it can be to unanticipated challenges, and we have a couple of those we can talk about later.

But as I said, we are reviewing our facility standards model, also, what kind of facilities we are using. Is it the most prudent design? We are undertaking several simulations of the buildings to look at energy use. So we are really taking a whole new look at the way we do MILCON in the Army.

Energy is very important to us. Reducing our energy use per square foot, more efficient structures, more efficient power generation, looking at reducing the amount of energy we use first, and then looking at repurposing energy and, last of all generating energy, and doing it in a cost-effective manner is very important.

So I don't want to take up too much time. I look forward to working closely with you and answering any questions you might have.

Thank you.

[The prepared statement of Secretary Hammack can be found in the Appendix on page 51.]

Mr. FORBES. Thank you.

Secretary Pfannenstiel.

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

Secretary PFANNENSTIEL. Thank you, Chairman Forbes, Congresswoman Bordallo, and Members of the committee.

I am pleased to appear before you today to provide an overview of the Department of the Navy's investment in shore infrastructure. I did provide an extensive written statement. I won't go over that. I would just like to highlight a couple points from that statement.

In overview, the Department's fiscal year 2012 budget request includes a \$13.3 billion investment in our installations. That includes military construction, sustainment, restoration and modernization, BRAC, family housing, environment, and base operating support.

The military construction portion of that 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 initiative and a more deliberate pace for the Guam buildup.

The military construction budget, though, does include further investments to relocate the Marines from Okinawa to Guam. The Marine Corps relocation, with other Department of Defense efforts to align forces and capabilities at 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 that we must get right for both the military families and the people of Guam.

I am pleased to share with you that we recently achieved an important milestone in the realignment, the finalization of the programmatic agreement. After 3 years of consultations, we may now move forward with executing military construction associated with the realignment and preparing a record of decision for the training ranges.

Fostering a long-term positive relationship with the people of Guam is essential to the success of the Marine Corps mission in the Pacific. The finalization of the programmatic agreement is evi-

dence that the Government of Guam and the Department of Defense can work closely together on solutions.

This is an important year for the realignment program. As Congresswoman Bordallo pointed out, 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 the fiscal year 2010 and 2011 projects, the projects we are proposing in fiscal year 2012 enable future vertical construction, support the introduction of off-island workers, and support future operations. Further, the Government of Japan's fiscal year 2011 budget includes financing for critical utilities projects that will support relocating Marines in the long run and the ramp-up of construction in the near term.

The Department is on track to implement BRAC 2005 realignments and closures by the statutory deadline of September 15th. Going forward, our fiscal year 2012 budget request of \$26 million enables ongoing environmental restoration, caretaking, and property disposal at BRAC 2005 installations.

The Department has made significant progress in the past year and to date has completed 328 of the 485 realignment and closure actions as specified in our business plans.

Additionally, the Department of the Navy has increased its investment to support President Obama's energy challenge and Secretary Mabus' aggressive energy goals to include energy security, reduce our dependence on fossil fuel, and to promote good stewardship. We have requested \$1.2 billion in fiscal year 2012 and \$4.4 billion across the FYDP [Future Years Defense Program] for shore and operational energy efficiencies.

Members of the committee, your support of the Department's fiscal year 2012 budget request will ensure that we build and maintain the facilities that our sailors and marines need to succeed in their military and humanitarian missions, even as the challenges we face multiply.

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

[The prepared statement of Secretary Pfannenstiel can be found in the Appendix on page 67.]

Mr. FORBES. Thank you.

Secretary Yonkers.

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

Secretary YONKERS. Chairman Forbes, Congresswoman Bordallo, and Members of the House Armed Services Committee, first of all, let me say thanks for the invitation to be here today and have the chance to talk to you about the Air Force's military construction and family housing, environmental, BRAC, and sustainment, restoration, modernization programs.

And I would like to start off by saying thank you, also, for the hard work last week to get us through this critical juncture on the business of shutting down the Government and looking forward to the next critical step, and that is the continuation for the appro-

priations that we are going to need to execute our fiscal year 2011 programs.

The Air Force's fiscal year 2012 budget includes \$2 billion for construction in BRAC; \$1.4 billion of that is for military construction, \$500 million is for family housing, and \$125 million is for legacy BRAC, and most of that is going into environmental cleanup.

BRAC 2005, our most recent BRAC round, as with the Navy, we are on target to hit all of the statutory goals by the September 15th deadline. Out of the 400 or so separate actions that we have in our business plan, we are at about 320 right now, and we don't expect any hiccups in the eventuality of fulfilling all of those. Our budget is \$3.8 billion, and we are staying within that budget for BRAC 2005.

Want to talk a little bit about sustainment, restoration and modernization. Our fiscal year 2012 budget request is for about \$3 billion for SRM; \$2 billion of that is for sustainment; the remainder is for restoration and modernization.

I know there has been some concern about the investment in sustainment, and that is \$300 million less than it was in fiscal year 2011. But I want to tell you, over the course of the last few years, we have taken a look to try to get more efficient and identified requirements more vigilantly with regards to sustainment.

And so we are looking at this from a business point of view. We are looking at it from a return-on-investment point of view. We are looking at it from a better contracting point of view. And we are also infusing dollars into demolition and consolidation that by virtue of reducing our footprint in our facilities, that will also reduce the investment that we need to put into sustainment. At the same time, we are increasing our dollar investment in restoration and modernization.

I want to talk a little bit—as have my cohorts—about efficiencies. We all recognize how critical it is to deal with deficits and debts, and we are all in it with you together here. Congresswoman Bordallo asked about some of the efficiencies, so let me tell you about a few of the ones that the Air Force has implemented. Over the FYDP, for example, through this SRM [Sustainment, Restoration, and Modernization] reduction in the facility sustainment in particular, we are looking at a \$1.6 billion reduction in cost.

As we looked at our weapons system sustainment, we would look at efficiencies on the order of \$3 billion over the FYDP and doing business better in our weapons systems.

In our environmental cleanup program, we have refocused our efforts on closing sites and using innovative contracting mechanisms like performance-based restoration. We are expecting, as has the Army already experienced, somewhere on the order of a 30 percent to 40 percent reduction in our overall cleanup program through the FYDP based on a \$500 million investment that we are using right today.

Likewise, we have also taken a look at our environmental impact analysis process. And we are going to be looking at that from a get-back-to-basics point of view, looking at the Council on Environmental Quality guidelines, and streamlining the process. We are expecting to find somewhere between \$10 million and \$15 million a year from that.

The point I am trying to make is that every day we wake up, we look at, what is it that we need to do to get a bit more efficient than we have in the past? And there is nothing in the portfolio that we are not looking at.

I want to talk a little bit about energy, if you will allow me, as well. We are using the smart tools. And as we have seen across the Department, with regards to finding better efficiencies in our facilities, and have actually achieved a 33 percent reduction in the last 7 or 8 years, even though costs of business have increased. We are utilizing LEED [Leadership in Energy and Environmental Design] silver standards to increase efficiency for all our new buildings.

And in operational energy, ma'am, we are looking at \$700 million savings over the FYDP and looking at better ways of reducing loads in the way we fly, the routes that we fly, and our utilization of jet fuel. Our goal for the Air Force is 10 percent. That will equate to about \$700 million per year, once we are able to achieve that goal.

So I want to stop it at that point in time, and I want to say thank you very much, again, for your strong support of the United States Air Force over the past and what you do for our airmen. And I also look forward to your questions.

[The prepared statement of Secretary Yonkers can be found in the Appendix on page 99.]

Mr. FORBES. Thank you, Secretary Yonkers.

And I want to thank all of you for your testimonies. And I always defer my questions until the end so the Members can ask theirs, and hopefully they have covered everything.

But I am going to start with just one question for you, any of you that want to take it. And I want to begin where Secretary Yonkers left off. He said there is not a day that you don't ask the question, what is it we need to do to be more efficient than we were in the past?

And as all of you know, we are wrestling with budget cuts every place we look and so-called efficiencies and things that are taking place. I saw a story the other day that somebody was telling me about, when somebody opened a fuel tank and they couldn't tell how much fuel that was in there, so they took the top off and lit a match to see. I don't have to tell you, it wasn't a happy ending.

And I remember when they told me, I said, "Tell me that is not true." And they said, "I hate to tell you, it was true."

We are looking—we are going to have some questions later that talks about the fact that when DOD budgets for a facility, it is normally as much as 40 percent more than the private sector would do. That is something we would just say, "Tell us that is not true."

We have a Navy project we are going to talk about in a little while that the I.G. [Inspector General] says has a 447-year return on investment. And we know that may not be totally true, but any one of those parameters, we are going to say, "Tell me that is not true."

But here is the question. Right before I came over here, I got handed some information on the Mark Center down here. You know the albatross we are looking at. We don't have the infrastructure. We might not get in there and be able to use it. And we have got information breaking that we are thinking about spending

\$600,000 for a statue, one of the finalists being a fairy riding a toad.

To the American people, that is just as foolish as if we opened that tank and hold a match over it. I have just got to say: "Tell me that is not true." With all these cuts, we are not spending \$600,000 for a statue in front of that center, especially when one of the—I don't care if it is Ronald Reagan shaking hands with Bill Clinton. I mean, it is still \$600,000 of money that people are going to go livid over.

Can you shed some light on that story? Is it accurate, or—

Secretary HAMMACK. I can certainly shed some light on it. And it is, I think, entertaining to all of us that sometimes the media picks that which will gain the most attention.

Mr. FORBES. That one has.

Secretary HAMMACK. And the fact that it broke on April Fool's Day—

Mr. FORBES. So it is not true?

Secretary HAMMACK [continuing]. Made it much more interesting. That was a submitted entry in a competition run by the city of Alexandria. In the development of the transportation center, which is the public face of the Mark Center, the city of Alexandria said, you need to do something. It is concrete walls. It looks like a bomb shelter. You need to do something. Can you dress it up? And they referenced the GSA [General Services Administration] art initiative, which is half of 1 percent of construction costs goes toward some sort of public art.

So we took a look at it and came up with a much lower figure of not to exceed \$600,000 for some sort of mural and potentially a statue in the transportation center. And a competition was set up.

That was one of the submittals. We are taking a look at all of the submittals. We are also taking a look at some of the offers we have had of more military-themed statuary that could go there, but we are looking at some sort of mural on the wall.

Mr. FORBES. But wasn't that more than just a submittal? Wasn't it one of the four finalists?

Secretary HAMMACK. The artists were demonstrating their capability for artwork, and that was a demonstration of the kind of artwork that that artist—

Mr. FORBES. And I don't want to play this. We have got a lot of other issues. The only thing I just want to let you know, it is—we don't even have the roads to go to that building. We may not be able to occupy it. And when we tell the public—I am just telling you what we are wrestling with. When we tell the public we are going to spend \$600,000, I don't care what we are beautifying—I mean, you know, we could put that to infrastructure to get there—it is a hard sell for us.

And we are over here fighting for you guys. And I am not blaming any of you. I know this is out of your hands. But I am just saying, that is a tough thing for us to have to go back and argue we can't make cuts when we are spending that kind of money for statues.

Ms. Bordallo.

Ms. BORDALLO. Thank you very much, Mr. Chairman. Maybe we can get some private donations for such artwork. I know I just saw it.

First of all, I want to ask a couple of questions here, and I would like to start, Mr. Chairman, by asking a few questions for my good friend, Congresswoman Gabby Giffords. She is a member of the Readiness Committee, and she has consistently been a champion on Capitol Hill for DOD energy efforts. She was also the author of the DOD Energy Security Act.

So this is for any of the witnesses. I think maybe, Dr. Robyn, you might be able to answer this. I know Gabby applauds the Services' proactive development of strategic thought toward energy and how it is used. She would like to ensure the DOD has all the resources and permissions required to continue your efforts.

However, some issues remain. So who and where is the single agency responsible for DOD's operational energy research and development? How does DOD disseminate lessons learned and best practices for operational energy projects? And do you think that if DOD had a formal process that all service members with boots on the ground would be equipped with a solar portable alternative communication energy system or spaces or rucksack enhanced portable power system or REPPS [Rucksack Enhanced Portable Power System]-like capability?

So if you could, just enlighten me on those three. Yes?

Dr. ROBYN. Yes, I met with Congresswoman Giffords last year, a year ago January, and I know that Senator Udall is working with her to reintroduce the Energy Security Act, which I think is terrific. And we worked fairly extensively with her staff over the course of a couple of months last year, one member of whom is here today.

Most of her questions pertain to operational energy, and within—that is actually a separate person in the Department of Defense, Sharon Burke. You all created the position of Assistant Secretary for Operational Energy, and we nominated and the Senate confirmed Sharon Burke. She has been on board about a year now and doing a terrific job of being the OSD [Office of the Secretary of Defense] person who heads up that.

Each of the Services is being very, very active. And so, for example, Jackie can talk about the amazing things that the Marines are doing in their expeditionary—their EXFOB [Experimental Forward Operating Base] at Quantico and the technology they are taking to theater.

But the single point of contact cutting across the Department is Sharon Burke in this newly created office. And it has gotten a lot of visibility. We put on an Energy Awareness Day this year, and Chairman Mullen, among others, came and spoke very, very passionately about it, so it has really—I think it is a very, very high priority for the Department. And I think the Services are working very closely to share lessons learned on it.

I am not sure—I don't think I can speak to the issue of whether there are authorities or resources that we need that we don't have. I will let my colleagues—

Ms. BORDALLO. I think a follow-up question would be, could you explain what fiscal efficiencies would be gained from a department-

level research and development effort similar to the Marine Corps EXFOB, which was what you were talking about, experimental forward operating base?

Dr. ROBYN. I think—let me take—do you want to—

Secretary HAMMACK. And that came out of a joint effort. Out at Fort Irwin, the Services got together, and so it was work on tents, it was work on operational energy, it was work on generators, it was work on power distribution, and the Services got together.

You talk about the rucksack enhanced power system, REPPS, which is called SPACES [Solar Portable Alternative Communication Energy System] in the Marines, it is the same system. We just have two different names. The Army has deployed several hundred of them. The Marines have deployed several of them, as well. It is the same system. It is a shared system that we are both using. So there are some great work, joint work that is going on between the Services on operational energy.

Ms. BORDALLO. Well, thank you. Thank you very much.

Ms. Pfannenstiel.

Secretary PFANNENSTIEL. Yes, let me just add that the—part of this is homegrown within the Services. They find needs. And with the Marines, they have offered a couple rounds now where they have asked for technology providers who might be able to meet their needs in theater to come to Quantico or to Twentynine Palms and demonstrate what they have.

And in a couple of these cases, I think it is really telling that from the first demonstration at Quantico or Twentynine Palms, the Marines then take the technologies that seem the best fit for their needs and try them out in some test form, and then they are in theater in some cases in 6 months or 8 months. I mean, and then they share this across the Services so that they are all understanding the technologies.

Ms. BORDALLO. Thank you.

Dr. Yonkers, did you want to add—

Secretary YONKERS. Yes, ma'am. Thank you for the chance. You probably are well aware of the efforts that we all have underway with regard to alternative fuels, and particularly synthetics and bios and cellulose. And I think it is fair to say that we spend a fair amount of time talking to each other and sharing information about how we can look at alternative fuels and the certification process that we are utilizing right now for our jet aircraft.

I mentioned the \$700 million efficiencies that we have already identified and the \$700 million that we will try to get to. Part of it is hinged on the utility or using biofuels and synthetic fuels as a replacement for fossil fuels in our aircraft.

And Jackie and I have been speaking closely about this, because the Navy and the Marine Corps fly aircraft like we fly aircraft, and also with Katherine, because we have tactical vehicles that could use the same fuel.

Ms. BORDALLO. Thank you. Thank you very much.

And I have another question for another one of my colleagues. This is on behalf of my good friend, Congressman Sam Farr.

Dr. Robyn, can your office assist with joint civilian-military projects which also need coordination between Active and Reserve units who wish to perform an innovative readiness training pro-

gram that will have positive benefits on the environment? Is that a yes or a no?

Dr. ROBYN. Yes.

Ms. BORDALLO. Yes, you can. Well, okay, for example, there is a situation in Congressman Farr's district concerning the removal of the San Clemente Dam and redirecting the Carmel River that would provide a training opportunity for National Guardsmen or reservists. The dam removal project is an effort that seems bogged down in bureaucracy, despite its benefits, such as training for the service members, removal of a hazardous dam, and restoration of key fish habitat.

The land in question is slated to be conveyed to the BLM (Bureau of Land Management) once the dam is gone. It is rare that our service members have this kind of real-life training opportunity, so I know that this type of innovative readiness training has been done in California before, especially along the border with construction of a new fence.

So can you work with me and Congressman Farr to see if there is a way to give our National Guardsmen or reservists the practice and training they need in real life, real time, while at the same time using your expertise on DOD environmental issues to establish civilian-military collaborations like at the San Clemente Dam? And what can be done in this situation or others like it?

Dr. ROBYN. Yes, I would be happy to work with you and Congressman Farr on that.

Ms. BORDALLO. All right. Thank you very much.

Dr. ROBYN. I will take that as a question for the record.

[The information referred to can be found in the Appendix on page 117.]

Ms. BORDALLO. Thank you.

Mr. Chairman, I do have my own questions, but I will wait for the second round.

Mr. FORBES. Thank you, Madeleine. That is kind of you.

I would like to now recognize the gentleman from New Jersey, Mr. LoBiondo, for 5 minutes.

Mr. LOBIONDO. Thank you, Mr. Chairman, very much.

And to our panel, thank you for being here today and for the work you do on behalf of our Nation.

For Dr. Robyn, as you have stated previously, the U.S. Department of Defense has set aggressive goals to procure 7.5 percent of its electricity from renewable energy by 2013 and 25 percent by 2025. As the price of oil continues to skyrocket due to the conflicts in the Middle East and for other reasons, replacing costly fossil fuels with proven and effective renewable energy technologies is a necessary move for the taxpayers for their pocketbook and for our Nation's security. I think it is a big homeland security issue.

As the world's largest consumer of energy, spending over \$20 billion a year as I understand it, DOD has a special responsibility to lead by example when greening the Government. Its enormous purchasing power helped create a new market for renewable energy technology projects, making them more affordable for everything.

However, when the Department makes its renewable energy procurement decisions, are the implications of those purchases on our Nation's energy security considered when those are made?

And there will be one more question here. New Jersey is the sixth-largest solar market in the world and, within the United States, the second-largest, only behind California. A lot of people don't realize that. The solar sector is one of the segments in New Jersey's economy that is growing, bringing with it jobs.

As such, I am interested to know if the DOD is purchasing foreign-manufactured solar panels. And if the answer is yes, were American-manufactured options considered in such instances? If yes, why were they rejected? And also, what efforts, if any, is the Department taking to provide the proper guidance to the energy managers on the ground to at least consider American renewable technology in their procurement portfolios?

Dr. ROBYN. Thank you. Thanks for the question.

We certainly are taking security into account when we think about renewable projects. I am not saying we have not in the past been compliance-oriented. We are. We have got goals. We are trying to meet those goals.

But particularly in the renewable area, we look at them with an eye to, will this enhance the security of an installation when combined with other investments, in particular microgrid technology, where we are doing a lot of fairly cutting-edge work?

The combination of microgrid technology, renewables, and storage capacity, again, that is cutting-edge technology, but will allow us to island, to separate off critical—not necessarily the entire installation, but critical missions on an installation, and we increasingly see that as an important thing to be able to do in order to assure our mission.

You would be surprised how many stories we hear about an installation—yes, I am sorry.

Mr. LOBIONDO. Excuse me for interrupting, and I want to be responsible to the time, and we are winding down.

Dr. ROBYN. I am sorry.

Mr. LOBIONDO. The question—I am interested to know, is DOD purchasing foreign-manufactured solar panels?

Dr. ROBYN. My understanding—there is new legislation, Buy America. I think the reason that legislation was passed was because, without it, most purchases would not be of—

Mr. LOBIONDO. Well, so the answer is—

Dr. ROBYN. It is a cost issue.

Mr. LOBIONDO. Okay. So there were—so we rejected buying American-made solar panels because they were more expensive? Is that what you are telling us?

Dr. ROBYN. Yes, that is my understanding. Can anybody else—

Secretary PFANNENSTIEL. Congressman, I can say that we in the Department of the Navy have looked very carefully, and we will be buying American solar panels. I can't tell you whether there are any that currently have been bought in the past from non-American companies, but going forward, they will all be American-produced.

Secretary HAMMACK. And from the Army's standpoint, I was just out at an installation that is doing a groundbreaking on a one-megawatt power plant. And they are panels that are made in the United States. They are actually made in New Jersey.

Mr. LOBIONDO. Okay.

Mr. Chairman, thank you very much. Thank you again to our panel.

Mr. FORBES. And if we could just ask all of our panelists, if they don't mind, if you could just check and, for the record, submit to the gentleman from New Jersey if we have been purchasing any in the past. Would that make you—

[The information referred to can be found in the Appendix on page 117.]

Mr. LOBIONDO. Yes, thank you, Mr. Chairman. That would be very helpful.

Mr. FORBES. The gentleman from North Carolina, Mr. Kissell.

Mr. KISSELL. Thank you, Mr. Chairman.

And thank you to our panelists for coming, and especially, Dr. Robyn, good to see you again. It would be fair in saying that you have been very forthcoming in working with us and the BRAC operation down at Fort Bragg, where we have two of the four-star commands coming in, and we still face a lot of challenges as we look towards finishing this up and in terms on the base and also within the community. And we probably still have some conversations in that area forthcoming.

A gentleman named Richard Kidd came to my office not long ago, is Deputy Assistant Secretary of the Army for Energy and Sustainability. Where does he fit in the—Secretary Hammack, where does he fit in, in terms of the reporting structure?

Secretary HAMMACK. He works for me.

Mr. KISSELL. Okay. Well, I thought maybe that was the case. And we had good conversations. One of the concerns that I brought to him and had talked to, Mr. Chairman—actually, somebody else—Jamie Lynch, on our committee—is that the fact that there are ideas out there that we think or we may see as congresspeople that we think are pretty good, and we may not know how they compare to others, but we like to be able to show that to our committee staff or to have you guys look at it, because, you know—as good as you are, I doubt that you can see everything.

And just wondering, you know, what might you all's process be for when there are ideas being brought to you, that—maybe that little guy, that they may not have the name or the background that might normally catch your attention real quickly, but they have some pretty good ideas? What is your response? And how does that fit in? And this is something that Mr. Kidd and I spent quite a bit of time talking about.

Secretary HAMMACK. In the Army, we have RDECOM [Research, Development and Engineering Command]. That is up in Aberdeen. And what they do is they do a lot of filtering, that they take in a lot of different technologies and do a look at them and test them in comparison with other things. And if it looks like it is worthwhile, then it might go from their bench testing to a larger scale testing on an installation.

Mr. KISSELL. Well, and I am not going to ask each of the Members, but, you know, as different things might come your way, I do ask that we be open to this process, because we never know where that next best mousetrap may be, because it may not come from the normal way. And sometimes I think we get set in our patterns of purchasing and procurements and where we expect things to

come from, and we may not—you know, gee, maybe I have seen everything I want to see for a while.

You know, and sometimes I guess you reach that point, but please be open to that process, you know, because it is not about selling somebody's—we are not salespeople for businesses. But, you know, when we see ideas, that is what made this Nation great.

And I would like to emphasize the idea of American ideas. So many times, we tend maybe not to recognize and reward those folks in America as much as we should.

Secretary Hammack, you mentioned something about there were five or six things you were watching to make sure that they did happen, and you mentioned one being Walter Reed. I am curious, what are the others?

Secretary HAMMACK. Three of them are National Guard or Reserve facilities. One of those facilities has had unfortunate ground conditions, in that the ground was prepared, and the next morning we went out there and there was a big sinkhole. And so we did additional soil testing and filled that sinkhole and got ready to start again. And I was just informed over the weekend that several more appeared.

So we are not sure what is going on at that site, but it might be a non-buildable site, and we might have to find a new one. We are trying to figure out what is the best thing to do, because we certainly don't want to put up a building that is going to sink.

We have some renovations that are going on over at Fort Belvoir, and those buildings are sort of waiting to be renovated until the group that is there moves to their next location. And so it is sort of the domino effect.

When their facilities are ready, they move in. We renovate their facilities so the next group can move in. And it is a very tight schedule. We are watching it very closely. We think we will make it, but we don't want to do anything that would not make sense, and we want to be prudently watching the dollars and watching the deadlines.

We are watching Mark Center, which is ready for occupancy August 9th, and looking at the move schedule to see how many people can move in there in that time, and that is something that is being handled by the DOD and OSD on the move schedule.

So those are—I think I named all three, then.

Mr. KISSELL. Okay. Well, thanks so much.

Thank you, Mr. Chairman. I yield back.

Mr. FORBES. Thank you, Larry.

The gentlelady from Missouri, Mrs. Hartzler, is recognized for 5 minutes.

Mrs. HARTZLER. Thank you, Mr. Chairman.

First, I wanted to thank you, Secretary Hammack, for your work helping with Fort Leonard Wood after the tornado. That was very, very obviously destructive, and we are very thankful there wasn't any loss of life there. But I have been in close contact with General Quantock, and he has assured me that you all have been working on that and able to supply the funds to help rebuild.

And I know they are going to come back even stronger. I know General Casey has been very supportive of that, and hopefully—are

we still on track, I mean, by the end of this year, having that up and back and running, fully functioning?

Secretary HAMMACK. We are still on track. I won't say everything will be done by the end of the year, but we are working to ensure that we don't sacrifice mission.

Mrs. HARTZLER. I had talked, I know, with General Quantock about building storm shelters. I have a little bit of experience growing up in the Midwest with tornadoes, as my—when I was in high school, my grandparents' entire farm and their house, anyway, was lost in a tornado. Thankfully, they barely made it to the basement.

But I have seen firsthand that devastation. And I was shocked after the tornado to learn that they—all of the housing was on slabs. There was no storm shelters in the community. All the training sites had no storm shelters, and that is the case in other installations I have come to find out.

But I understand that you all are re-looking at that and trying to be proactive, and we can learn from this. What steps are taken now with storm shelter building after the tornado?

Secretary HAMMACK. That is something we are taking a look at. We are taking a look overall at climate change impacts, whether there might be increased risk of storm or increased risk of earthquake or other mitigation strategies we need to implement, but certainly tornado shelters are one of those, and I think it is certainly made us all aware of the need for it.

We do have great training programs on the base, and that is one of the things that helped out in that situation, no loss of life, but we are evaluating if we need to take some other steps there to ensure that we are more protected for the future.

Mrs. HARTZLER. Yes, I would just like to advocate that, and I don't think tornadoes are because of climate change in the Midwest. We have had them forever. But, anyway, I think that is just common sense there.

But I did want to just ask all of the panel about BRAC. I know you are just wrapping up the 2005 BRACs. And do you anticipate—have you heard any move afoot to have any more BRACs in the future?

Dr. ROBYN. We have not asked for authorization for another BRAC. I think we are focused very single-mindedly on trying to get through the current one and meet our current deadlines.

Mrs. HARTZLER. Very good. Okay. Everybody okay with that?

Just in the final question, regarding the 2005 BRAC, the situation there, I know there are 30 BRAC recommendations yet to be completed within 3 months of the completion date, and you all are considering six projects at high risk of being able to complete that. So I just wondered, what steps is the Department taking and what cost to complete all these recommendations by September of this year?

Dr. ROBYN. Katherine just reviewed some of the key ones. We are focusing on trying to meet the deadline in every case. We are determined to satisfy our legal obligation, but we are certainly not going to put patient safety at risk.

So, for example, one of the ones we are watching closely is the move from Walter Reed to Bethesda, and we absolutely will not—we think that we are on schedule on that one, but should some-

thing go wrong—we do have only a small margin—we will absolutely not do anything to jeopardize patient safety.

And as a matter of fact, under the law, we can't do that. We have to certify that Bethesda has the capability to receive the soldiers from Walter Reed before we can move them.

Mrs. HARTZLER. Yes, that is good to know. I mean, wounded warriors obviously are a high priority for all of us, and make sure they have the utmost care.

And being new—I wasn't here in 2005—is there a penalty? I know there is a goal, September 2011, but what happens if you aren't able to—

Dr. ROBYN. It is a legal obligation. We are not concerned about a fine, but it is a legal obligation, and the Department has never missed a BRAC deadline through five rounds.

I will say that this is the biggest one we have had, 222 actions, but I think, more important, there was a conscious decision by the Department around 2006 to move the implementation to the right for budget reasons. So we are implementing this BRAC round systematically later in the 6-year implementation phase or implementation period than we have the earlier BRAC rounds, and so that is why we are coming so close to the deadline on a number of these.

Mrs. HARTZLER. All right. Thank you very much.

Thank you, Mr. Chairman.

Mr. FORBES. Thank you.

Mr. Courtney.

Mr. COURTNEY. Thank you, Mr. Chairman.

And thank you to the witnesses for your service and testimony today. It is nice to see two graduates of the University of Hartford graduate programs doing so well and serving our country.

I actually want to follow up with Congresswoman Hartzler's question, because this is not just sort of an academic question that she asked. There was a speech given in Boston by Senator Kerry, who was telling the audience that New England has to start getting ready for a BRAC round in 2015 or a BRAC process in 2015.

You know, Under Secretary Robyn, you said again that there was nothing that is in the works right now, there is no request. I actually would appreciate it if the other witnesses could just confirm, as well as—again, Secretary Mabus was very strong before the committee a couple of weeks ago, but, again, I just would for the record ask that all of you just indicate whether there is anything happening.

Secretary HAMMACK. There is no Army request. As Dr. Robyn said, we are focused on completing the round that we have right now and would sort of like to take a deep breath after we complete it.

Secretary PFANNENSTIEL. And, Congressman, we have no intention—the Navy has no intention of seeking another BRAC.

Secretary YONKERS. Congressman, the same thing is true for the Air Force. We are focusing on what it is that we need to complete right now, but I will also say that we still have excess infrastructure. So it would be a preferable—I mean, not preferable. It would be of use to us, I think, if we looked down that road farther, a reduction through another Base Realignment and Closure.

Mr. FORBES. Would the gentleman yield?

Mr. COURTNEY. Yes.

Mr. FORBES. Let me suggest you not look too far to this committee, because I don't think we would be very receptive to another round of BRAC, and I think that is what Mrs. Hartzler and Mr. Courtney are trying to convey.

And I yield back to the gentleman.

Mr. COURTNEY. Thank you, Mr. Chairman.

I mean, again, we—again, I have only gotten some sort of updates in terms of the net savings through this process. And, frankly, I think, you know, a lot of us are going to be looking at that very closely.

I mean, in theory, there is probably always excess capacity, but the question is really whether this process is generating much in terms of real savings down the road.

And why don't we just set that subject aside, because I actually have another question for you, Mr. Yonkers, which is that your budget that was submitted for 2012 for Air National Guard has a 40-percent reduction for facilities for Air National Guard. We, again, have a new mission in Connecticut for the C-17s [Boeing Globemaster III military transport aircraft], which is going to require some new facilities. The FYDP at this point is looking at 2015 for those facilities. And they are expecting to get those planes in 2013.

So I can tell from the look on your face I may be hitting you with something a little too unexpected, and if you want to answer for the record. But, frankly, there is some concern about just where your budget is, in terms of the requirements for the C-17 missions, not just in Connecticut, but I believe it is five other states that are slated to get that project from the Air National Guard.

Secretary YONKERS. Well, sir, I am confused, because our budget for the Air Guard this year is actually pretty robust. They are actually getting about 14 percent of the total military construction budget, which is about \$1.4 billion. I am not aware of any detriment or any issues with regards to the C-17 in particular—

Mr. COURTNEY. C-27 [Alenia Spartan military transport aircraft].

Secretary YONKERS. C-27?

Mr. COURTNEY. The cargo—yes, the air cargo.

Secretary YONKERS. Ah, okay. Yes, I would like to take it for the record.

[The information referred to can be found in the Appendix on page 118.]

Mr. COURTNEY. Okay, that is fine. But there is, obviously, some concern about the way the numbers—and, again, if I am wrong, that is even better. But if you could help us with that, that would be much appreciated.

Secretary YONKERS. You bet.

Mr. COURTNEY. And, again, I just would—in terms of some of the prior questions about energy efficiencies, we just cut the ribbon on a new Submarine Learning Center in Groton recently, which had geothermal as part of the installation, which actually everybody was just so excited about it.

But, again, Secretary Mabus testified before committee, again, a couple weeks ago about every \$10 per barrel is a \$300 million price

tab for the Navy. I mean, obviously, no one wants to spend money on that if we don't have to, so those efforts I think are for the taxpayer, you know, setting aside any environmental reasons. So, you know, I just wanted to at least go on the record saying that we are seeing real tangible results with your efforts, so congratulations.

And I would yield back, Mr. Chairman.

Mr. FORBES. Thank you. We are going to have a series of votes. I don't know how our panelists are on time, but Mrs. Bordallo has asked to come back because she has a number of questions. Some of our Members may. Would that be too great—we apologize for that inconvenience. And, unfortunately, it could be as much as 50 minutes. So I just want to—Mr. Schilling, we are going to yield to you for 5 minutes, and then we are going to recess—and we will come back for any Members that want to ask questions after that.

Mr. Schilling.

Mr. SCHILLING. Thank you, Chairman. And I won't need my full 5 minutes, because my colleagues here have already asked the questions on BRAC'ing. I just wanted to delve in a little bit more onto basically the "Made in America" and how we buy product and how we do the pricing.

One of the things that was brought to my attention—and, actually, I am from the district that—we represent the Rock Island Arsenal, so when we hear that we have no plans for BRAC'ing right now, that is music to our ears.

But I had a gentleman that came to me, and he makes tools for a living. He has a firm in Milan, Illinois. And he indicated to me that we had the "Made in USA," and basically the toolbox was made in America, but everything inside of it was not.

And, you know, I am one of those people where I buy everything I can made in America. And, you know, I guess, you know, can you kind of give me an idea of how that works? I am pretty new to this, also, and any help you can give me would be appreciated.

Dr. ROBYN. Well, I don't know that I can give you a definitive answer, but let me say, we have gained an enormous amount as a country from the international trading system. We had done very well in selling our goods overseas, and that requires us in turn to buy goods from other countries. And consumers benefit from that, as well. We have trade laws by which we are bound, which protect us, but require us to buy—to not discriminate in favor of U.S. products.

My understanding is that, in the case of the solar panels, that at least with respect to China, which is where many of them are coming from—and maybe wind turbines, as well—that they have not signed the international agreement under which we said we would buy products from that country. So even trade sticklers would say that there is a—that legally under international trade law we are justified in buying at least non-Chinese products.

Mr. SCHILLING. Okay. That is a good enough answer.

And then lastly I just wanted to thank you, because I know you are all sincerely dedicated to the cause, and I just want to thank you for your service, also.

So with that, I yield back.

Mr. FORBES. Could I just follow up real quickly on what Mr. Schilling said? Would it be possible for you to submit for the

record—we don't expect you to have it—an explanation or perhaps send somebody back to his office to brief him on that policy? And the reason is because we understand with a lot of our agencies, but with DOD, one of the things we are concerned about, if we get in a conflict, we want to make sure that some other country doesn't cut off the supply.

And I think this is what Mr. Schilling is concerned about. So if you need to submit it for the record or contact his office and just have him briefed on that.

[The information referred to can be found in the Appendix on page 118.]

Mr. FORBES. Chris, did you have a quick question?

Mr. GIBSON. Yes, Mr. Chairman, I am just going to submit for the record, because I am not going to be able to come back—

Mr. FORBES. Take 60 seconds, and then we are going to get Mr. Scott.

Mr. GIBSON. Yes, thanks, Mr. Chairman. Apologize for not being here earlier, so I will look forward to reading the transcripts on energy efficiencies, and particularly interested in for modular nuclear reactors, where the Department is going forward, hearing your views on that.

And then the question for the record: I am concerned about the deaths at Fort Bragg. I know that this is partially in your lane, and it cuts across others, but with regard to military construction and environment, 12 deaths there, 3 in one home. And we certainly have great personal experience with Picerne, very responsible I found them in my time that our family lived at Fort Bragg, but I am especially concerned about these deaths and would like to be kept apprised of what the investigations are going forward.

Thank you, Mr. Chairman. I yield back.

[The information referred to can be found in the Appendix on page 118.]

Mr. FORBES. Thank you.

Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman.

Mr. Yonkers, I will not be able to come back after the series of votes, but I represent Robins Air Force Base. And I would appreciate it if we could schedule some time for you to come by. I would like to discuss the 30 percent reduction that is, as I understand it, across the board for the Air Force in energy consumption with the September 30th of 2015, I believe it is, deadline. And I would like to—I would just like more details on that and how that number was derived and how we intend to get there.

Certainly, manufacturing installations are very different than other installations, maybe. I would just appreciate your time, if we could schedule that, and Jim Dolbow of my staff is in the back.

Secretary YONKERS. Congressman Scott, we would be delighted to come by and talk to you some more about that.

Mr. SCOTT. Thank you, sir.

Mr. FORBES. Steve, do you have any questions? Do you want to come back or are you okay? Okay.

Then we are going to have some of our Members submit questions for the record. I am told Ms. Bordallo is still in a markup and will be a while getting back. I have got a number of questions I

am just going to submit to you for the record. Please answer them, you know, because they are things we need for our markup when we get them.

So we will submit those to you. And if you would just be kind enough to submit those for the record, then we don't have to hold you and bring you back. And I know that will be good news to you. Thank you guys so much for taking your time and being with us.

And with that, if no one has any follow-up questions, we are adjourned.

[Whereupon, at 4:45 p.m., the subcommittee was adjourned.]

A P P E N D I X

APRIL 13, 2011

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

APRIL 13, 2011

Statement of Hon. J. Randy Forbes
Chairman, Subcommittee on Readiness
Hearing on
Fiscal Year 2012 National Defense Authorization Budget
Request for Military Construction, Base Closure,
Environment, Facilities Operation and Maintenance
April 13, 2011

I want to welcome all our Members and our distinguished panel of experts to today's hearing that will focus on how our military construction program is aligned with our Nation's priorities. Fundamentally, our Nation is at war with an aggressive adversary. Our forces have been successful in engaging this war on the doorsteps of foreign nations and I am grateful that the underpinnings of our security have kept our citizens safe and ensured our free-market economy thrives.

However, we have seen changes in this dynamic recently. With the crisis in several Arab nations, with the rise of a rapidly developing China, and even with the sustaining of combat operations in Iraq and Afghanistan, I am not confident that the Department of Defense has the necessary infrastructure and strategic partnerships that are necessary to confront these diverse and dynamic challenges.

I believe that our force structure needs to be better aligned with emerging threats. A good example of this realignment effort is located in my Ranking Member's home of Guam. I believe that this location will serve to enhance our forces in Eastern Asia against those who believe that we are not committed to freedom and prosperity in this strategic region. In addition to Guam, I believe that it is critical that we expand our basing structure in the Western Pacific to encompass nontraditional partners that are aligned with our strategic interests. On the other hand, an example of a strategic "misalignment" is at Naval Station Mayport where the Navy has proposed to place a redundant capability that will cost significant funds to support a second carrier homeport on the East Coast. Our strategic investments should be both wise and cost-effective. Unfortunately, the Navy's support of a second homeport in Mayport is neither and reverses a series of decisions by previous Navy leadership to limit strategic homeport concepts.

As to other issues included in the president's budget request, I am also concerned about financial parameters that drive poor decisionmaking. For example, I was surprised to note that the Navy decided to enter into an energy-efficiency contract where the finan-

cial payback was an astounding 447 years. Even after this was pointed out by the Inspector General, the Department decided to continue with this project. I was also surprised that the entire Department of Defense uses construction costs indices that are 25 to 40 percent more than similar commercially built facilities. My friends, with savings of only 25 percent in the military construction program, which could represent an annual savings of almost \$4 billion, we could build significant capabilities and really provide a result that would correct years of neglect and allow us to make prudent strategic investments in diverse areas around the world. Good enough is not good enough for the fine men and women in uniform.

On a final note, we are in the final year of implementing the BRAC program and there are many recommendations that contain significant risk in completing by the statutory deadline of September 2011. I want to be very clear that any risk to the mission of the United States in this time of war needs to be properly limited to ensure the success of our efforts. I will not jeopardize patient care for our wounded warriors if their care will be impacted by a BRAC move. I look forward to our witnesses' discussing the risk of the BRAC moves to determine if additional time is necessary to properly complete the remaining BRAC recommendations.

HOLD UNTIL RELEASED
BY THE COMMITTEE

Statement of
Dr. Dorothy Robyn
Deputy Under Secretary Of Defense
(Installations and Environment)

Before the House Armed Services Committee
Subcommittee on Readiness

April 13, 2011

Chairman Forbes, Representative Bordallo 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 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 Service Members 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 long-standing 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 U.S. 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 FY 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 FY 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 Government of Guam, whose support for the relocation is key. As one indication, Guam last month 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 15th. 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 Service Members 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 FY 2012 budget requests \$14.8 billion for Military Construction (MilCon) and Family Housing—a decrease of approximately \$4.0 billion from the FY 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

(\$ Millions)	FY 2011 Request	FY 2012 Request	Change from FY 2011	
			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 six-year plan to repair or replace all 134 schools that were in poor or failing physical condition. The FY 2012 budget request includes \$550 million to recapitalize 15 of these schools.

Third, the FY 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 Service Members 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 FY 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

(\$ Millions)	FY 2011 Request	FY 2012 Request	Change from FY 2011	
			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 FY 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 FY 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 FY 2012 budget requests \$9.0 billion for recapitalization—\$4.4 billion more than the FY 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 FY 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.

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.

Family and Unaccompanied Housing

Housing is key to quality of life—in the military no less than in the civilian world. The FY 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 FY 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

(\$ Millions)	FY 2011 Request	FY 2012 Request	Change from FY 2011	
			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 FY 2012 budget requests \$374 million to replace or improve 2412 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 Service Members 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 FY 2012 budget request includes about \$1.7 billion for construction of new and replacement projects for nearly 15,000 unaccompanied Service Members.

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 FY 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 manmade 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 \$18 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. As well as relying on their own budgets, the Services are using third-party financing, such as Energy Savings Performance Contracts, to pursue facility sustainment and recapitalization projects.

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

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 LEED (Leadership in Energy and Environmental Design) 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 (ASHRAE) by at least 30 percent.

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 5900 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. Although the Services are using their own budgets for smaller renewable projects, most large projects are privately financed.

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't measure. My office is developing policy guidance that will require 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 Wal-Mart 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 two years. We fell well 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, use of 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). (The key reason for that disparity is that the NDAA criteria allow for inclusion of China Lake, DoD's largest source of renewable energy, whereas the EPACT criteria do not.) See the Appendix for more detail.

FY 2012 Budget Request

Let me highlight two programs in our FY 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 FY 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 \$20 million pilot effort in 2009. 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

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 FY 2012 budget request.

300,000 structures and 2.2 billion square feet of space—three times the footprint of Wal-Mart 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 Wal-Mart, the largest private sector energy consumer in the United States, has its own test bed. Wal-Mart 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), Wal-Mart deploys them in all of its stores. This approach has helped Wal-Mart dramatically reduce its energy consumption. But whereas Wal-Mart'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 two years.⁴ Each year, ESTCP has issued a solicitation inviting private firms, universities and government 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 decision-making 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, 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.

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.

Energy Conservation Investment Program

The second key program to highlight is the Energy Conservation Investment Program (ECIP). The FY 2012 budget requests \$135 million for ECIP, a \$15 million increase compared to our FY 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 the Department of Energy (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' energy 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 ten years, the Department has invested \$42 billion in its environmental programs, and our steady level of expenditure has produced quality results. In FY2012, we are requesting \$4.3 billion to continue this legacy of leadership.

Environmental Program Budget Request, FY 2012 vs. FY 2011

(\$ Millions)	FY 2011 Request	FY 2012 Request	Change from FY 2011	
			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 FY 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 FY 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 Protection 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 FY 2012 to clean up IRP and MMRP sites. (This includes both \$1.5 billion for "Environmental Restoration" and \$521 million for "BRAC Environmental.") The budget request for Environmental Restoration is \$72 million less than it was in FY 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 FY 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 FY 2012, a reduction of \$13 million from our FY 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 FY 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 FY 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 Department'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, ten 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 FY 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 FY 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 FY 2012 budget requests \$54.2 million for REPI, an increase of \$15M over our FY 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, time-consuming, 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 FY 2011 NDAA, 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 (BLM), 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. The Department of Energy 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 to 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 an 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 [Executive Order 13514, October 2009].

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 FY2007 NDAA 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.

RECORD VERSION

STATEMENT BY

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

BEFORE THE

SUBCOMMITTEE ON READINESS,
COMMITTEE ON ARMED SERVICES
UNITED STATES HOUSE OF REPRESENTATIVES

FIRST SESSION, 112TH CONGRESS

ON THE FISCAL YEAR 2012
ARMY MILITARY CONSTRUCTION
POSTURE HEARING

APRIL 13, 2011

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UNTIL RELEASED BY THE
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INTRODUCTION

Good afternoon Chairman Forbes, Representative Bordallo and Members of the Committee. I appreciate the opportunity to explain the Army's FY2012 budget needs and requirements.

The Army's FY 2012 installations management budget request will continue to invest in facilities infrastructure required to support highly visible and synchronized initiatives of Base Realignment and Closure, growth of the force to 45 Brigade Combat Teams 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 military construction program is deeply appreciated. The Army's strength is its Soldiers – and the Families and Army Civilians who support them. They are and will continue to be the centerpiece of our Army.

The level of investment required to complete Grow the Army (GTA), Global Defense Posture Realignment (GDPR) and Base Realignment and Closure (BRAC) is declining. This 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 military construction projects we requested over a year ago – projects that are needed to continue the momentum required to meet our goals. We have approximately \$1.8B of Army military construction 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-advertise projects, shortened construction

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 FY11 appropriation bills.

OVERVIEW

The Army's Fiscal Year (FY) 2012 President's Budget requests \$5.3 billion for Military Construction (MILCON), Army Family Housing (AFH), and BRAC, which is \$2.6 billion less or a 33 percent reduction from the FY 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 Army Family Housing. 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 FY 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/GTA): GDPR construction provides facilities to ensure Army forces are properly positioned worldwide in support of the National Military Strategy. GTA supports the FY2013 Army end strength of 1,111.6K (547K Active Army, 358K Army National Guard, and 206K 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 brigade combat teams and combat support/combat service support (CS/CSS) units activated as part of GTA. The Secretary of Defense recently announced a reduction of 27K 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 FY11 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, pre-positioned stock facilities and transportation infrastructure.

In addition to the \$5.3 billion investment in our military construction programs, the Army is sustaining its existing facilities by requesting \$3.4 billion in the President's budget for Sustainment, Restoration and Modernization (S/RM) and demolition. The request is \$2.5 billion for the Active Army, \$618 million for the Army National Guard and \$255 million for the Army Reserve.

The FY12 Base Operations Support (BOS) program request is \$9.3 billion (Active Army: \$7.7 billion; Army Reserve: \$0.6 billion; Army National Guard: \$1.0 billion), an increase of \$181M over FY11 President's Budget request and a decrease of \$1.5B from FY10 Execution. The Army anticipates lower BOS requirements associated with efficiencies, installation closures associated with BRAC and the missions transferred to other services under Joint Basing. BOS is vital in all aspects of mission readiness and training, provides for operating and maintaining installations that serve as our Nation's power projection platforms, and provides essential services and programs promoting quality of life for Soldiers, Families and Civilians – essentially, the Army Installations equate to the Army's home and workplace for Soldiers, Family members and Civilians.

The Army is executing a tightly woven plan integrating BRAC, GDPR/GTA, and transformation to a modular force as facilitated by MILCON, S/RM, and BOS. The strategy includes aligning facilities to support a US 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 FY 2012 MILCON request is for \$3,236M (for appropriation and authorization of appropriations) to support the Army Imperatives of Sustain, Prepare and Transform.

Grow the Army (\$164M/5%): The GTA request in FY 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 Brigade Combat Team Active Army.

Global Defense Posture Realignment (\$178M/6%): 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 (\$1,165M/36%): The FY 2012 request of \$639 million supports the stationing of units in support of weapons systems, Theater High Altitude Area Defense (THAAD), Joint Land Attack Cruise Missile Defense Elevated Netted Sensor

(JLENS), Combat Aviation Brigades (CABs), and Enhanced Range Multipurpose (ERMP) 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 (\$296M/9%): The FY 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 FY2013 and beneficial occupancy by FY2015. In addition to the barracks modernization program, additional barracks projects are included in the FY2012 request that support *Grow the Army*, *Trans-formation*, and *Modernization* pillars. These projects are located, at Joint Base Lewis-McChord, Forts Bliss, Carson, and Knox, Germany, Honduras, and Korea. The total FY 2012 investment in permanent party barracks is \$562 million.

Training Barracks Modernization (\$59M/2%): The FY 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 *Grow the Army* pillar. The total FY 2012 investment in training barracks is \$82 million.

Modernization: (\$685M/21%): The FY 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 (\$340M/11%): Training Support facilities include training ranges to support multiple weapon systems, land acquisitions, and other Soldier training facilities.

Strategic Readiness (\$74M/2%): FY 2012 represents the first year the Army will invest in industrial base and deployment facilities under the Strategic Readiness initiative. Prior to FY 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 (\$275M/8%): The FY 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.

MILCON EFFICIENCIES

The Army decremented the Active Army program by \$200 million in FY 2012. Although described as an efficiency, the decrement action initiates the Army's relook of its Facilities Investment Strategy – a strategy that will decrease new construction and increase use and maintenance of the current inventory of real property in a manner that best supports the Army's mission.

Over the next months the Army will assess an increased use of the Army's restoration and modernization funding program to complement MILCON in a manner that optimizes scarce investment dollars. If after reassessment, the decremented projects are found to be mission critical MILCON requirements, they will be inserted back into the program at the next opportunity.

MILITARY CONSTRUCTION, ARMY NATIONAL GUARD

The Army National Guard FY 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 (\$101M/14%): The FY 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 (\$198M/25%): 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 United States Property and Fiscal Office, and one Utilities Replacement project that will provide modernized facilities to enhance the Guard's operational readiness.

Transformation (\$198M/25%): 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 ten projects which include three Tactical Unmanned Aircraft System Facilities (TUAS), five Readiness Centers, one Army Aviation Support Facility, and one Field Maintenance Shop.

Training Support (\$245M/32%): In FY 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 (ORTC), seven range projects, one Maneuver Area Training and Equipment Site (MATES), one railhead expansion and container facility, and two deployment processing facilities.

Other Support Programs (\$32M/4%): The FY 2012 Army National Guard budget also contains \$20 million for planning and design of future projects and \$12 million for unspecified minor military construction to address unforeseen critical needs.

MILITARY CONSTRUCTION, ARMY RESERVE

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

Modernization (\$216M/77%): In FY 2012, the Army Reserve will invest \$216 million in facilities that prepare our Soldiers for success in current operations. The construction of ten new Army Reserve Centers and one Armed Forces Reserve center will provide the modernized training classrooms, simulations capabilities, and maintenance platforms that support the Army Force Generation (ARFORGEN) cycle and the ability of the Army Reserve to provide trained and ready soldiers for Army missions when called.

Training Support (\$28M/10%): The budget request of \$28 million provides for three ranges that enable soldiers to hone their combat skills. It also provides for construction of the final phase of a Non-Commissioned Officer (NCO) Academy classroom/training billets complex that, when completed, will allow for a modernized training environment for training.

Strategic Readiness (\$5M/2%): The request includes \$5 million for a containerized loading facility supporting mobilization and demobilization missions of the Reserve Component.

Other Support Programs (\$32M/11%): The FY 2012 Army Reserve budget request includes \$29 million for planning and design of future year projects and \$3 million for unspecified minor military construction to address unforeseen critical needs.

ARMY FAMILY HOUSING

The Army's FY12 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% of its housing assets inside the United States, while overseas we primarily house Families in government-owned and leased quarters.

Residential Communities Initiative (RCI). In 1999 the Army began privatizing housing assets and 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 three to 14-year initial development period, which includes the Army's contribution of close to \$2.0 billion. During the twelve 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 four 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.

AFH Construction (\$186.9M/27%): The Army's FY 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 military construction 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.

AFH Operations (\$494.8M/73%): The Army's FY 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 (\$85.4M): The operations account includes four sub-accounts: management, services, furnishings, and a small miscellaneous account. All operations sub-accounts are considered "must pay accounts" based on actual bills that must be paid to manage and operate the AFH owned inventory.

Utilities (\$73.6M): 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 (\$105.7M): 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 (\$204.4M): The leasing program is another way the Army provides adequate housing for Families. The FY 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 US, and 6,128 leased units overseas.

Privatization (\$25.7M): 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, one Army Reserve installation, 387 National Guard Readiness and Army Reserve Centers, and eight 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 military construction projects, of which 154 have been completed. The Army has initiated 850 of 1,147 actions and completed 393. The Army has closed six Army installations, one 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 FY 2012 budget request for BRAC 2005 is \$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 (O&M) to support facility caretaker requirements. In FY 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 BRAC environmental programs is \$112.3 million, which includes munitions and explosives of concern and hazardous and toxic waste restoration activities. These actions do not occur at the expense of protecting human health and the environment from past activities that may have resulted in contamination. BRAC funds ensure human health and environmental protectiveness first, while also enabling the timely transfer of acreage for productive community re-use..

BRAC 95

The Army is requesting \$70.7 million in FY2012 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 INVESTMENTS

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. An average of two percent of every facilities construction project is invested in increased energy efficiencies.

The Energy Conservation Investment Program (ECIP) FY 2012 program includes ten renewable energy projects and three energy conservation projects for \$51.5 million. The estimated average annual savings is projected at \$4 million dollars or 258 billion British Thermal Units (BTU). Although ECIP is an annual Defense wide appropriation (\$135M), 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

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 has implemented energy efficiency requirement into all new facilities construction, renovation and modernization requirements.

Drive Efficiency Across the Enterprise. The Army is investing 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.

ENVIRONMENT

The Army FY12 budget provides \$1.4 billion for its Environmental Program in support of current and future readiness. This budget ensures an adequate environmental resource base to support mission requirements, while maintaining a sound environmental posture. Additionally, it allows Army to execute environmental aspects of re-stationing, Global Defense Posture Realignment (GDPR) and BRAC while increasing programmatic efficiencies, and addressing the Army's past environmental legacy.

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

SUSTAINMENT/RESTORATION & MODERNIZATION

The Army continues to comply with the Joint Planning Guidance 1 (JPG 1) and has funded sustainment at 90% of the OSD Facilities Sustainment Model (FSM) requirement. The Army views 90% sustainment funding as the absolute bedrock of

proper facilities stewardship, and is an essential objective of the Army Facilities Investment Strategy (FIS). The Army has chosen not to take risk in the sustainment of our facility inventory valued at \$326B. Sustainment is an outward and visible sign of the Army's commitment to providing a quality of life to our Soldiers, Civilians and Families that is consistent with their commitment to our Nation's security.

BASE OPERATIONS SUPPORT

The Army FY12 BOS request, the budget provides \$1.7 billion in support of the Army Family Covenant, which is the Army leadership's commitment to provide a quality of life to the Soldiers and Families that, is commensurate with their service. Other funded Senior Leadership Initiatives are Army Substance Abuse Program, Sexual Harassment/Assault Response and Prevention, Health Promotion, Risk Reduction and Suicide Prevention, and Comprehensive Soldier Fitness.

The Army is committed to developing a cost culture for increasing the capabilities of BOS programs through an enterprise approach. Additionally, the Army will continue to review service delivery of its Soldier, Family and Civilian programs to ensure the most efficient and effective means of delivery are realized.

CONCLUSION

The Army's FY 2012 installations management budget request is balanced program that support our Soldiers, Families, and Civilians; continued re-balancing 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 military construction, 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.

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RELEASED BY THE HOUSE
ARMED SERVICES SUBCOMMITTEE
ON READINESS

STATEMENT OF

MS. JACKALYNE PFANNENSTIEL
ASSISTANT SECRETARY OF NAVY
(ENERGY, INSTALLATIONS AND ENVIRONMENT)

BEFORE THE
HOUSE ARMED SERVICES SUBCOMMITTEE
ON READINESS

13 APRIL 2011

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HOUSE ARMED SERVICES SUBCOMMITTEE ON
READINESS

Chairman Forbes, Representative Bordallo, 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 FY2012 budget request includes a \$13.3 billion investment in our installations, a decrease of more than \$1.6B from last year.

The FY-2012 **military construction** (active + reserve) request is \$2.5 billion. Although significantly less than the FY-2011 request, it represents continued 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 FY-2012 **Family Housing** request of \$469 million represents a fifteen percent decrease from the FY-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 **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 FY2005 through FY2008. Thus, we again seek appropriated funds in FY-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 FY-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 FY-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, 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 FY 2012, and \$4.4 billion across the FYDP, to support Secretary Mabus' aggressive energy goals to increase energy security, reduce dependency on fossil fuels, and promote good stewardship of the environment. The FY 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 FY 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, Virginia; a Steam System Decentralization at Naval Support Activity South Potomac (Indian Head, Maryland); a Steam System Decentralization at Naval Station Great Lakes, Illinois; and an Electrical Distribution System Replacement at Pacific Missile Range Facility, Hawaii.
- **\$128 million** to fund a Bachelor Quarters at Naval Station Norfolk, Virginia in support of the Chief of Naval Operations' Homeport Ashore initiative; and a Fitness Center at Naval Base Coronado, California.
- **\$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, Florida; a MH-60 R/S Rotary Maintenance Hangar at Naval Base Coronado, California; and an E-2D Aircrew Training Facility at Naval Base Ventura County, California.
- **\$15 million** to fund Massey Avenue Corridor Improvements at Naval Station Mayport, Florida 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, Virginia; 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, Washington; a Navy Information Operations Command FES Facility at Naval Station Pearl Harbor, Hawaii; and a Potable Water Plant Modernization at Naval Support Facility Diego Garcia.
- **\$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 29 Palms and Quantico;
- **\$28 million** to construct student billeting for the Basic School in Quantico, Virginia;
- **\$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;
- **\$514 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, 29 Palms, Barstow, and Hawaii;
- **\$127 million** to provide training facilities and ranges at Camp Pendleton, Camp Lejeune, 29 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 MAGTF large-scale training exercises at 29 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, Pennsylvania, and a Marine Corps Reserve Training Center at Memphis, Tennessee. Additionally, \$18M has been realigned to the Department of the Army to construct a Joint Navy, Marine Corps and Army Reserve Complex at Indianapolis, Indiana.

Fully-funded and Incrementally-funded MILCON projects

Our FY 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 FY-2012 request includes \$78 million to support the first increment of a second Explosives Handling Wharf at Naval Base Kitsap, Washington. 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 FY 2012 budget request funds sustainment at 80% and 90% for the Navy and Marine Corps, respectively. To maximize support for warfighting readiness and capabilities, the Navy reduced its facilities

sustainment posture to 81 percent of the Department of Defense (DoD) 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 sustainment and maintenance of unaccompanied housing. As a result, the Navy has minimized operational impacts and ensured the safety of our Sailors and civilians by prioritizing maintenance and repair efforts for facilities that directly affect mission operations such as piers, hangars, and communications facilities as well as unaccompanied housing and family support centers.

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 FY-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 FY10, 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 FY02 mishap rates across DOD by the end of FY12. By the end of FY10, DON exceeded the DOD-wide mishap rate reduction in three of the four mishap categories being tracked by the Office of the Secretary of Defense.

During FY10, 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 FY10, we brought those losses down to just 34, our lowest number ever recorded. While we achieved unprecedented reductions in highway fatalities during FY10, we still find these losses untenable - we can and must do better.

In FY10 DON achieved our best year ever recorded for Total Class A Operational Mishaps¹. While this represents a significant achievement, FY10 was the fourth consecutive FY we achieved, “best year ever recorded” in this category. Additionally, FY10 marked DON’s best year ever recorded for the number of Off-duty/Recreational Fatalities² 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 FY10, the Department had achieved Voluntary Protection Program (VPP) “Star” status, OSHA’s highest level of achievement, at fourteen 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% and 51% 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.

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 non-governmental organizations. For FY2010, the Marine Corps acquired restrictive easements over 8,191 acres. REPI and Marine Corps funds totaled and \$8.7M while the encroachment partners provided \$11Mil. The Navy acquired 1,908 acres with combined REPI and Navy funds of \$9.36M and \$6.4M provided by partners.

¹ An FY10 Class A Mishap is one where the total cost of damages to Government and other property is two million dollars 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.

To date, the Marines have acquired restrictive easements for 32,408 acres of land with \$49M of REPI and Marine Corps funding. Encroachment partners have contributed \$54Mil. The Navy has acquired 9,851 acres to date with \$28.4M of REPI and Navy funding, and \$35.5M 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 Office of the Secretary of Defense, and the Department of Interior to advance the administration's energy strategy. We are poised to coordinate with commercial entities, where feasible, in their exploration and development adjacent to installations and our operating areas along the OCS that are compatible with military operations. However, we must ensure that obstructions to freedom of maneuver or restrictions to tactical action in critical range space do not 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 SECNAV'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 SECNAV'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, SECNAV 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 protect 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 increase 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 SECNAV goals by adopting energy efficient acquisition practices, technologies, and operations.

The Goals are:

- Goal 1 – By 2020, 50% of total DON energy will come from alternative energy resources,
- Goal 2 – By 2020, DON will produce at least 50% 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%,
- Goal 5 – Evaluation of energy factors will be used when awarding contracts for systems and buildings.

As part of these ambitious energy goals, SECNAV 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 FY2012 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 to aggressively pursue the SECNAV'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 - Funds 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 successfully conducted tests on the MH-60 Seahawk helicopter, and ran a Riverine Command Boat on renewable biofuel. These tests represent milestones for the SECNAV'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. And 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. And 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.

And 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 Twenty-Nine 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. And 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.

SECNAV 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) & transferred over to OSD DDR&E in early 2011. And in October of last year, the SECNAV 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 SECNAV 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, 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 service members, married or single, are entitled to quality housing; and
- The housing that we provide to our personnel must be fully sustained over its life.

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

Family Housing

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

- Reliance on the Private Sector. In accordance with longstanding DoD and DoN policy, we rely first on the local community to provide housing for our Sailors, Marines, and their families. Approximately three out of four Navy and Marine Corps families receive a Basic Allowance for Housing (BAH) and own or rent homes in the community. We determine the ability of the private sector to meet our needs through the conduct of housing market analyses that evaluate supply and demand conditions in the areas surrounding our military installations.
- Public/Private Ventures (PPVs). With the strong support from this Committee and others, we have successfully used PPV authorities enacted in 1996 to partner with the private sector to help meet our housing needs through the use of private sector capital. These authorities allow us to leverage our own resources and provide better housing faster to our families. Maintaining the purchasing power of BAH is critical to the success of both privatized and private sector housing.

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

Our FY-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 FY 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 \$1.6 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:

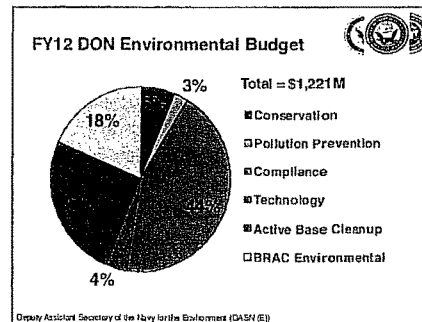
- Provide Homes Ashore for our Shipboard Sailors. The Homeport Ashore initiative seeks to provide a barracks room ashore whenever a single sea duty sailor is in his or her homeport, so they need not live on the ship. The Navy has made considerable progress towards achieving this goal through military 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.
- 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, North Carolina; and Quantico, Virginia. We are also committed to funding the replacement of barracks' furnishings on a seven-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% of the Navy's unaccompanied housing inventory is adequate by FY 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 FY2012, 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: FY2010 - \$1,117M; FY2011 - \$1,094M; FY2012 - \$1,221M. 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 US Fish & 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 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 Watershed Implementation Plans. Our goal is to identify our nutrient and sediment sources, prioritize areas for nutrient and sediment reduction projects, and implement these projects to meet or exceed our

reduction targets. 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 FY-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 the year 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 FY-10, 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 FY-10 was completing site inspections at all 330 MRP sites. We successfully completed 97% of these inspections. The 3% not inspected were because several newly discovered sites were added into the program late in the process. These site inspections will be completed in FY-11. 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 FY-11. DON plans to achieve cleanup or remedies in place at all MRP sites (except Vieques) by FY-20.

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 \$28M in funding for research initiatives, including nearly \$27M to ATSDR and over \$900K to the National Academy of Sciences. This total includes \$3.9M to fund ATSDR for FY-11. 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 \$25M 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 FY-2012 budget request includes \$181 million for facilities in support of the relocation. The projects provide the horizontal infrastructure (utilities, site improvements, etc.) 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 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, seven 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 long-standing 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 long-standing 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 the 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 FY-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' FY 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 FY 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 six 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, five 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.

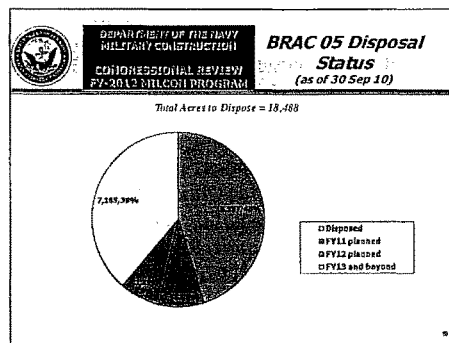
- The Department has invested over \$400 million on construction and outfitting of 11 facilities to establish a state of the art Research, Development, Acquisition, Test and Evaluation center for Integrated Weapon System and Armaments and Fixed Wing Air Platforms at Naval Air Warfare Center China Lake, 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 FY 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 FY 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, thirteen 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 twelve 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

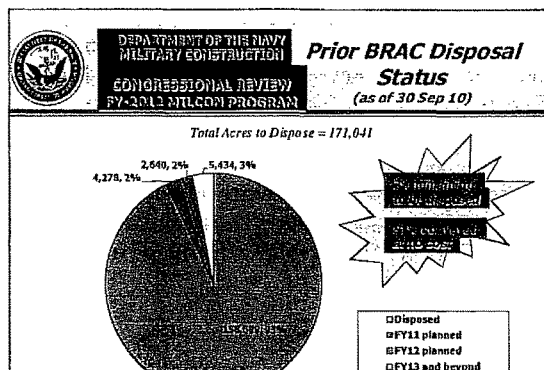
Over the last year, we spent \$16 million in cleanup at BRAC 2005 locations. The majority of this funded environmental activities at Naval Air Station Brunswick, ME, Naval Weapons Station Seal Beach Detachment Concord, CA, and Naval Air Station Joint Reserve Base Willow Grove, PA. Our remaining environmental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

Challenges

Completion of large construction and renovation projects and relocations are planned for the last three to six 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 FY 2011 resulted in rearrangement of implementation plans, leaving little margin for error in meeting the statutory deadline across multiple recommendations.

PRIOR BRAC CLEANUP & 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 FY 2010, for a total of 93 percent of real property disposed in the first four rounds of BRAC. In FY 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 FY 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 FY 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 FY 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 FY 2010. Our remaining environmental cost to complete for FY 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 three 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 FY 2010 National Defense Authorization Act, DON was able to complete negotiation of a profit participation model for the transfer of Treasure Island. In August of 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 environmental 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 re-siding 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 Economic Development Conveyances.

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 re-supply, re-equip, train, and shelter our forces. With your support of the Department's FY-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 war fighting readiness and quality of life for the most formidable expeditionary fighting force in the world.

**DEPARTMENT OF THE AIR FORCE
PRESENTATION TO THE SUBCOMMITTEE ON READINESS
COMMITTEE ON ARMED SERVICES
UNITED STATES HOUSE OF REPRESENTATIVES**

**SUBJECT: FISCAL YEAR 2012 AIR FORCE MILITARY CONSTRUCTION,
FAMILY HOUSING, ENVIRONMENTAL, AND BASE REALIGNMENT
AND CLOSURE PROGRAMS**

**STATEMENT OF: THE HONORABLE TERRY A. YONKERS
ASSISTANT SECRETARY OF THE AIR FORCE
INSTALLATIONS, ENVIRONMENT, AND LOGISTICS
UNITED STATES AIR FORCE**

13 April 2011

**NOT FOR PUBLICATION UNTIL RELEASED
BY THE COMMITTEE ON ARMED SERVICES
UNITED STATES HOUSE OF REPRESENTATIVES**

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 United States 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 \$8.2 billion for military construction, military family housing, Base Realignment and Closure (BRAC), and installations-related operations and maintenance. 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. We also request \$124 million to continue completing our legacy BRAC programs and environmental clean-up. The sustainment, restoration, and modernization request represents the largest portion of facility funding, with \$3.3 billion allocated for sustaining existing facilities, conducting repairs, and demolishing buildings that have reached the end of their usable lives. Finally, the Air Force asks for \$2.9 billion for Facility Operations and Installation Services, which funds the day to day operations at our installations and was formerly known as Base Operation Support.

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 in lieu of 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, North Dakota, and an addition to the Air Force Nuclear Weapons Center at Kirtland AFB, New Mexico. 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 soldier, 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 \$373 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, United States Strategic Command at Offutt AFB, Nebraska 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, Kansas 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, Nevada.
- *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. The three Guam Strike projects are a Clear Water Rinse Facility for \$7.5M; a Fuel Systems Maintenance Hangar for \$128M; and a Conventional Munitions Facility, \$11.7M.

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 new construction dormitory projects totaling \$190 million. These include dorms at Travis AFB, California, Osan AB, Korea, Eielson AFB, Alaska, Minot AFB, North Dakota, Ramstein AB, Germany, Thule AB, Greenland, and Cannon AFB, New Mexico. This investment keeps us on track to meet our 2017 goal to provide adequate dormitories for all unaccompanied Airmen. We are also supporting our partners at Joint Base Elmendorf, Alaska, Joint Base San Antonio, Texas, and Joint Base Langley-Eustis, Virginia, 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 Non-Commissioned 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, Texas, and an Education Center at Vandenberg AFB, California.

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, New Mexico. 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 \$347 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, Nevada, the second training location at Luke Air AFB, Arizona, and the first operational unit at Hill AFB, Utah.
- *Three projects supporting our HC/EC/C-130J fleet.* These projects include a Joint Use Fuel Cell at Davis-Monthan AFB, Arizona, and flight simulators at Davis-Monthan and Pope AFB, North Carolina.
- *Three projects supporting the Pacific Regional Training Center at Andersen AFB, Guam.* This requirement was driven by the re-location 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, New Mexico, and support operations at Barksdale AFB, Louisiana, Fairchild AFB, Washington, the United States Air Force Academy, Colorado, and Cannon AFB, New Mexico.

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

Sustainment, Restoration, and Modernization

There are two programs that complement our military construction program in support of Air Force facilities and infrastructure. The first program, Facilities Sustainment, covers life-cycle maintenance such as replacing mechanical and electrical systems at the end of their service lives and resurfacing airfield and roadway pavements. We request \$2 billion for this program. The Air Force conducts major repairs, renovations, minor construction, and demolition with Facilities Restoration and Modernization funds. Our budget request for this program is \$1.3 billion. With this year's budget request we are increasing our investment in Operations and Maintenance by \$160 million to address our most critical requirements.

Facility Operations and Installation Services

The Facility Operations and Installation Services accounts provide day-to-day municipal services activities such as grounds maintenance and waste management, utilities, and fire and

emergency services. The Fiscal Year 2012 request includes \$2.9 billion for this vital requirement.

Base Realignment and Closure Actions

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.

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 BRAC05 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.

Cleanup

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.

Real Property Transfer

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 decision-making 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.

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 2011, 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.

Environmental

The Air Force is looking for efficiency and process-improvement opportunities in all program areas, to include our environmental programs. A few examples I would like to share with you come from our environmental cleanup program, and our environmental impact analysis process, which implements the National Environmental Policy Act.

After nearly 30 years and \$25B in investments, the Air Force cleanup program has made great advancement in addressing the legacy of a 60-year-old Air Force and our nation's military engagements. Still, in spite of this progress, we have too many sites that have not achieved final environmental cleanup. To move us beyond our current goals of achieving remedies-in-place to address cleanup at various individual sites throughout the Air Force, I issued policy earlier this year that refocuses our environmental program restoration efforts. This policy moves us closer to fully cleaning up contaminated sites through a fence-to-fence, performance-based approach to cleanup that leverages new and available technologies. The goals associated with this policy include accelerated completion of 50% of all active installation sites by the end of FY12, and 75% by the end of 2015. For our Base Realignment and Closure sites, our goals are to accelerate completion of 75% of all sites by the end of 2012; and 90% by the end of 2015. Individual cleanup remedy decisions will be based on a cost/benefit analysis to achieve site completion in a manner that protects human health and the environment, and makes the most sense for the total life-cycle cost of the cleanup, not just the cost to get the remedy installed and operating. While we are only now beginning to implement this new approach, I expect to see

significant savings in the out-years for the lifecycle costs of our cleanup program at our active installations and at our Base Realignment and Closure sites.

Incorporating new technologies to enhance the cleanup program is also high on the Air Forces agenda. For example, we believe new technology can improve military munitions response efforts. By taking advantage of new equipment and methods to distinguish and eliminate false positives at munitions response sites, we believe we can accelerate our mitigation and removal of munitions-associated materials as a part of DoD's efforts to enhance the effectiveness of the Military Munitions Response Program and significantly reduce costs to return these sites to intended purposes.

Making the best use of our airspace access, real property, and natural resources must satisfy the requirements of the National Environmental Policy Act of 1969, to ensure we make informed decisions that are in harmony with the environment. However, these decisions must also be timely to meet mission requirements. To better satisfy both objectives, I issued policy last year that set goals to standardize and incorporate best practices from across the DoD into our analysis process, and improve the timeliness of our processes to accomplish environmental impact analyses for proposed actions within 12 months of initiation, and environmental assessments within 6 months of initiation. To achieve this, the Air Force has taken existing resources and established a center of excellence to provide standardized technical assistance that incorporates identified best practices. I fully expect this approach will also provide cost savings in performing the necessary analyses using centralized, standardized processes to make informed decisions supporting new and changing mission requirements of the Air Force.

Efficiencies

The Air Force is implementing facility sustainment pursuing efficiencies through increased emphasis on the implementation of asset management principles and instituting centralized and a prioritized approach in facility management. By using smarter management practices and instituting Common Output Level Standards (COLS), we ensure the most critical infrastructure needs are met first. In addition, we are working diligently towards a 20% reduction of physical plant and supporting funding by the year 2020. This effort supports both the OSD goal of reducing AF physical plant inventory by 15 million square feet and the President's directive to dispose of unneeded federal real estate. To this end, funding requested for demolition in FY12 increased to \$309M from \$32 M in FY 11.

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.

**WITNESS RESPONSES TO QUESTIONS ASKED DURING
THE HEARING**

APRIL 13, 2011

**RESPONSE TO QUESTION SUBMITTED BY MS. BORDALLO ON BEHALF
OF CONGRESSMAN FARR**

Dr. ROBYN. The Innovative Readiness Training (IRT) program is grounded in 10 USC 2012. Our military personnel and units volunteer to participate in training events in the civilian communities throughout the US and territories. While an underserved community will benefit from the military's presence in the community, the focus of the program is on pre-deployment and post-deployment readiness training.

The Office of the Assistant Secretary of Defense for Reserve Affairs (ASD(RA)) has been in contact with Congressman Farr's office to discuss the San Clemente Dam, and ASD(RA) remains available to answer further questions. [See page 15.]

RESPONSES TO QUESTIONS SUBMITTED BY MR. LOBIONDO

Dr. ROBYN. The specific products on the military construction project being discussed were manufactured in New Jersey. However, existing law specifically authorizes the procurement of photovoltaic devices that are manufactured in other countries. Therefore, the Department of Defense does procure these devices from other countries when doing so is determined to be the best value to the Government, which may include consideration of the lowest price, technically acceptable offer. [See page 17.]

Secretary HAMMACK. The Department of the Army includes the Buy American Act provision in its contracts which requires U.S. made Photo Voltaic (PV) devices and solar cells.

In addition, the FY2011 National Defense Authorization Act further requires that contracts awarded by the Department of Defense (DoD) include a provision requiring PV devices provided under the contract to comply with the Buy American Act to the extent that such contracts result in ownership of PV devices by the Department of Defense.

The Army, including Active, Reserve and National Guard components, has many projects that use U.S. made PV and solar cells. The table below presents a sample of current and proposed projects during the period FY 2009–FY 2012. [See page 17.]

LOCATION	PROJECT TITLE
Sea Girt, NJ	Photovoltaic Electric System, 400 kilowatts (kW)
Pohakuloa Training Area, HI	Solar Water Heaters & Solar Daylighting
Fort Dix, NJ	Photovoltaic Roof System, 500kW
Bethany Beach, DE	Solar PV System, 378kW
Presidio of Monterey, CA	Solar PV System, 378kW
Vicenza, Italy	Photovoltaic Installation, 750kW
Fort Hunter Liggett, CA	Solar Micro Grid, 1 megawatt (MW) (2 systems)
Lawrenceville RC, NJ	Solar PV System, 295kW
Kwajalein Atoll, Marshall Islands	Solar PV System, 468kW
Sacramento, CA	Solar Electric System, 126kW
Wailuku, HI	Solar Electric System, 100kW

Secretary PFANNENSTIEL. It is likely that the Navy has purchased foreign manufactured solar panels in the past. Any foreign manufactured solar panels purchased have been compliant with the Buy American Act (BAA), which permits the purchase of construction materials from certain countries that are signatories of the trade agreements specified in BAA. Designated foreign countries we are allowed to purchase from and remain compliant with the BAA include: a World Trade Organization country, a Free Trade Agreement country, a least developed country, or a Caribbean Basin country, as defined in the BAA language. BAA requirements also allow the Navy to purchase foreign construction material if the cost of the domestic construction material exceeds the cost of the foreign material by more than 6 percent. [See page 17.]

Secretary YONKERS. Section 846 of the National Defense Authorization Act for Fiscal Year 2011 (FY11 NDAA) requires DoD to comply with the Buy American Act in specified solar energy contracts requiring photovoltaic devices. Since the FY11 NDAA was passed, the Air Force has not purchased any solar panels subject to this requirement.

Third party financing, such as Power Purchase Agreements, enable the Air Force to promote the development of renewable energy projects on its installations. These projects, in turn, increase the available amounts of renewable energy and improve the Air Force's energy security posture. Third party financing that does not result in full ownership by the Air Force is not covered under Section 846. The Air Force does not track where panels for such projects are manufactured. [See page 17.]

RESPONSE TO QUESTION SUBMITTED BY MR. COURTNEY

Secretary YONKERS. The Air Force projects a manufacturing/delivery plan for C-27 aircraft that has begun to provide aircraft at some locations, and will continue through fiscal year (FY) 2015. In the time between aircraft delivery and bed down project construction, each Air National Guard unit will prepare

C-27 aircraft for combat deployments and aircrew training using workarounds involving existing capabilities and facilities.

In determining which MILCON projects get funded in a given FY, the Air Force uses an Integrated Priority List (IPL) in which a scoring model is applied to all Active, Guard and Reserve projects. Projects compete based on mission requirements, and those projects that have temporary workarounds tend to score lower (and are sequenced for construction later) than those where no workarounds are available. [See page 21.]

RESPONSE TO QUESTION SUBMITTED BY MR. SCHILLING

Dr. ROBYN. While my organization does not make actual buys, the Department policies comply with Sec 846(a) of the 2011 National Defense Authorization Act (NDAA), H.R. 6523, (P.L. 111-383), which requires the Department to ensure that photovoltaic devices provided under contract comply with the Buy American Act (41 U.S.C. 10a et seq.), subject to the exceptions provided in the Trade Agreements Act of 1979 (19 U.S.C. 2501 et seq.). The restrictions of the Buy American Act (BAA) currently cover the procurement of Photovoltaic Devices, federal supply classification 6117, as implemented in Federal Acquisition Regulation (FAR) Part 25 and Defense Federal Acquisition Regulation Supplement (DFARS) Part 225. With limited exceptions, the procurement of Photovoltaic Devices is required to be a domestic end product when used in the United States. [See page 23.]

RESPONSE TO QUESTION SUBMITTED BY MR. GIBSON

Dr. ROBYN. The infant deaths at Fort Bragg have been fully investigated. The Office of Compliance and Field Operations of the U.S. Consumer Products Safety Commission, on February 7, 2011 reported that the indoor environmental and building systems investigation did not identify any issues or contaminants that would potentially pose a health concern to residents. The Army's Criminal Investigation Command's broader investigation into the possible causes of these deaths has been concluded with a press statement that "after extensive testing and investigating, the review did not discover any evidence of information that points to criminality associated with the deaths, or any identifiable common environmental link." The Medical Command investigation is ongoing, to date they have not discovered any evidence of any potential exposures that could cause or contribute to these deaths. Further

findings indicate a lower infant mortality rate in Fort Bragg housing residents compared to the rates of the United States, the state of North Carolina, and the counties surrounding Fort Bragg. [See page 23.]

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

APRIL 13, 2011

QUESTIONS SUBMITTED BY MR. FORBES

Mr. FORBES. How is the DOD organized to review renewable energy applications in a timely manner and protect DOD equities from encroachment?

Dr. ROBYN. The Department created the DoD Siting Clearinghouse to comply with Section 358 of the National Defense Authorization Act for Fiscal Year 2011, and is publishing a rule for inclusion in the Code of Federal Regulations to provide a process to review applications received from the Federal Aviation Administration (FAA) under its 49 U.S.C. 44718 process.

When renewable energy applications are received from the FAA, the Clearinghouse tasks subject matter experts from the DoD Components to review the applications and ensure that DoD equities in training and readiness, test and evaluation, operations, and homeland defense are protected. If DoD equities are protected, the Clearinghouse recommends that the Deputy Under Secretary of Defense (Installations & Environment) provide a "no objection" to the FAA. However, if the project has a potential to adversely impact the Department, the Clearinghouse tasks a team, comprised of the DoD Components that are potentially affected, to conduct negotiations with the project proponent to mitigate the adverse impacts. If the negotiations are successful, the DoD can then provide a "no objection" comment to the FAA. If the mitigation negotiations are not successful, or the project proponent refuses to discuss mitigation, the Clearinghouse can recommend that the Deputy Secretary of Defense request a determination of hazard from the FAA. If the Deputy Secretary determines the project will present "an unacceptable risk to the national security of the United States," the Clearinghouse will transmit the objection to the FAA.

Mr. FORBES. The President's vision for a secure energy future highlights the Interior Department's commitment to issue permits for a total of 10,000 megawatts of renewable power generated from new projects on public lands and in offshore waters by the end of 2012.

- How is the DOD organized to review renewable energy applications in a timely manner and protect DOD equities from encroachment?
- How is the DOD prepared to mitigate the impact to military ranges, testing, and training activities?

Dr. ROBYN. The Department created the DoD Siting Clearinghouse to ensure that all renewable energy applications are reviewed in a timely matter, while protecting DoD equities in training and readiness, test and evaluation, operations, and homeland defense. When renewable energy applications are received from the Bureau of Land Management (BLM), the Clearinghouse tasks subject matter experts from the DoD Components, such as the Services and the Joint Staff, to review the applications and ensure that DoD equities are protected from encroachment. The Clearinghouse then presents the collective recommendations to its Board of Directors, which is comprised of the Deputy Under Secretary of Defense for Installations and Environment (co-chair); the Deputy Under Secretary of Defense for Readiness (co-chair); the Principal Deputy Director of Operational Test and Evaluation (co-chair); the Assistant Secretary of Defense for Homeland Defense; the Assistant Secretary of the Army for Installations, Energy, and Environment; the Assistant Secretary of the Navy for Energy, Installations, and Environment; the Assistant Secretary of the Air Force for Installations, Environment, and Logistics; and the Joint Staff's Vice Director of Strategy, Plans, and Policy (J-5). After their review of a renewable energy project application, the Directors either approve a statement of "no objection" to the BLM, task a team comprised of the DoD Components most affected by the project to conduct negotiations for mitigation with the project proponent, or recommend to BLM that the project be disapproved.

In cases where mitigation is possible (the vast majority), the negotiation team works in close coordination with the cognizant BLM office and the project proponent to examine a variety of mitigation options. For example, the Clearinghouse, Service representatives, and BLM representatives worked for more than a year to determine suitable routes for a transmission line close to White Sands Missile Range. Additionally, the Department is a cooperating agency in BLM's Solar Programmatic Environmental Impact Statement, and will use forthcoming Air Force and Navy studies to determine acceptable amounts of electromagnetic interference from solar and wind

installations near the Nevada Test and Training Range, Edwards Air Force Base, and Naval Air Weapons Station China Lake. Only in cases where all mitigation options are exhausted, or agreement on mitigation cannot be reached, will DoD recommend that BLM disapprove the project.

Regarding offshore renewable energy projects, the Clearinghouse co-chairs and the Services have supported the Department of the Interior's Atlantic Offshore Wind Policy Group and the various state task forces led by the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE).

Mr. FORBES. The Department of Defense is expected to meet several installation energy-related goals and mandates. This includes reducing facility intensity by 30% by 2015 and 37.5% by 2020. Another goal requires the DOD to consume 7.5% of electric energy from renewable resources by 2013. An additional goal requires DOD to produce or procure 25% of facilities energy from renewable sources by 2025.

- Do you believe DOD will meet all of these installation energy goals and mandates?

- What do you see as your biggest challenge or impediment to meeting the goals and mandates, particularly while ensuring necessary oversight and appropriate stewardship of taxpayer dollars through a demonstrated return on investment?

Dr. ROBYN. [The information was not available at the time of printing.]

Mr. FORBES. The President recently provided his vision for a secure energy future, one tenet of which is the expansion of "clean energy" in the United States.

- How is the Department of Defense expected to contribute to the President's goal?

- What is the plan to expand the use of clean energy on its installations?

Dr. ROBYN. [The information was not available at the time of printing.]

Mr. FORBES. DOD construction costs include many requirements that drive the overall costs to include federal contracting requirements (Davis-Bacon wages, federal subcontracting and small business goals, bonding requirements (Miller Act)), federal design requirements, energy efficiency objectives, and a robust quality assurance capacity to manage construction contracts. These costs generally add 25–40% in construction costs over private-sector construction requirements.

- What steps is the Department taking to mitigate the overall costs of construction and reduce overall barriers to entry in DOD construction market?
- What can Congress do to assist in reducing statutory burdens and reduce overall construction costs?

Dr. ROBYN. The Department has taken several measures to lower construction costs and mitigate the additional costs imposed by federal contracting requirements and unique DoD requirements and constraints, to include: 1) adopting industry design and construction standards and criteria in lieu of military standards; 2) allowing use of all commercial construction types (Types I through V), including wood-frame construction; 3) standardizing facility designs to reduce total design costs; and 4) packaging similar facilities into a single construction project, where possible, to achieve economies of scale.

The Department continually strives to reduce barriers to entry in the DoD construction market. In addition to mitigating costs, items 1) and 2) above have enabled a larger number of construction firms to compete for military construction projects because familiarity with unique defense design and construction standards is not required. Likewise, the Department's move to electronic distribution of bid documents has greatly increased the accessibility of the military construction program to the construction market and has significantly lowered the administrative and cost barriers to compete for a project during the last decade.

Mr. FORBES. The Army has decided to reduce the number of Brigade Combat Teams in Europe from four to three.

- What capabilities would be lost if BCT forces were reduced in Europe?
- How does the Department balance this capability degradation in Europe with the cost savings associated with stationing forces in the United States?

Secretary HAMMACK. The mix of capabilities offered by the three distinct types of BCTs remaining in Europe (Heavy, Stryker, and Airborne) enables EUCOM to meet a wide array of engagement, building partner capacity, and interoperability objectives while supporting the full range of military operations needed for plausible European contingencies. This BCT mix ensures we maintain a flexible and easily deployable forward-based defense posture that optimizes our ability to meet NATO commitments and training/engagement objectives and to satisfy security objectives.

We believe that retaining three BCTs in Europe strikes the best balance between a stringent fiscal environment and the need to maintain a flexible and easily deployable ground force to meet commitments with Allies and partners.

Mr. FORBES. The Army is responsible for the implementation of several complex BRAC recommendations that will likely not be completed by the statutory BRAC deadline of September 2011.

- Considering the magnitude of movements occurring this summer to implement the BRAC decisions, how will the Department be able to retain mission capabilities and complete the BRAC decisions by the statutory deadline?
- What is the risk in completing the BRAC decisions by the statutory deadline?
- Will Wounded Warrior care in the National Capital Region at the conclusion of BRAC be on a par with the standard of care that is provided today?

Secretary HAMMACK. Throughout the BRAC process, the Army has been managing the transition to new facilities closely and specifically asking commanders in the field for their assessment of impact on mission capability. Based on the assessments received, the department believes that it will meet the BRAC deadline and sustain mission capabilities. In terms of risk in meeting the deadline, we are constantly in contact with the field to monitor and if necessary mitigate risk. For example, I receive weekly reports from the commander of Walter Reed that provides their assessment of the move to Bethesda and their ability to meet the mission requirement.

Wounded Warrior care in the National Capital Region at the conclusion of BRAC will be consistent with today's standard of care. The new facilities will provide an optimal healing environment and support structure for transitioning Wounded Ill and Injured (WII) and their Family members while better aligning healthcare delivery with the population centers of the National Capital Region (NCR) beneficiaries.

Mr. FORBES. The Army is taking very aggressive steps to establish net-zero pilot programs across installations. This is a very innovative approach for net-zero water, net-zero energy, and net-zero waste.

- Has the Army conducted a cost benefit analysis to determine the return on investment for achieving these goals?
- If so, what is the result, or is the Army prepared to adjust the goals to ensure it makes appropriate investments with a demonstrated payback?
- How will this help the Army become less reliant on the commercial grid?

Secretary HAMMACK. The Army's Net Zero Installation Initiative is a strategy that strives to bring the overall consumption of resources on installations down to an effective rate of zero. The program establishes a framework of reduction, re-purposing, recycling and composting, energy recovery, and disposal to guide them towards achieving net zero in an environmentally responsible, cost-effective and efficient manner. While the Army has not conducted a cost benefit analysis to determine return on investment on the Net Zero Installation approach, we know that reducing energy and water use reduces cost.

The Army does align with the U.S. Department of Energy concerning life-cycle cost methodology and criteria established by the Federal Energy Management Program (FEMP) (NIST Handbook 135, 1995 Edition), as it relates to specific projects. Net zero projects will be evaluated on a life cycle cost basis to identify the best investments and return on investment.

As with our weapon system investments to ensure national security, we are moving ahead with our aggressive steps to ensure the Army's future access to resources. Net zero initiatives will allow:

- Increased reliability of installation energy and water in support of mission requirements.
- Reduction in greenhouse gases and vulnerability to external supply disruption.
- Lower installation and facilities utilities costs (in light of rising fuel prices in commercial and foreign markets).

Cost-benefit analyses will include more than the monetary aspects to allow for best decisions and these aspects noted above are heavily weighted in favor of net zero investments.

The Net Zero Installation program provides the framework to decrease the Army's reliance on the commercial grid. As part of the Army's overall effort to conserve precious resources, Net Zero installations will consume only as much energy or water they produce and eliminate solid waste to landfills.

Mr. FORBES. The Government of Japan has not yet established the final laydown of the Marine Corps aviation realignment on Okinawa. In its FY12 budget request, the Department of Defense request of \$155 million is imbalanced compared to the

Government of Japan funds request of \$472 million that is pending consideration of the Japanese Diet.

- Why did the President's budget request not match the funding amount requested by the Government of Japan?
- How does the lack of tangible progress regarding the configuration of the Futenma Replacement Facility on Okinawa impact the Department in its decision to request funds to support the Marine Corps realignment in Guam?
- How has the Government of Japan responded to the budget request with regard to the FY12 level of funding for the Marine Corps realignment in Guam?
- How will the most recent natural disasters in Japan impact Japan's ability to fiscally support this major realignment?

Secretary PFANNENSTIEL. The funding request for FY-12 is the result of careful consideration of many planning and execution factors, including the Futenma Replacement Facility. The Department considered the concerns noted by Congress in the FY-11 National Defense Authorization Act Joint Explanatory Statement and is committed to executing the realignment in a deliberate manner. Funding decisions were made to take the time to work towards resolution of these issues. Additionally, as discussed in the Record of Decision for the Guam and Commonwealth of the Northern Mariana Islands Military Buildup, the Department will use Adaptive Program Management to adjust the pace and sequencing of construction projects so that the buildup does not exceed Guam's infrastructure capacities. Efforts are underway to increase the capacity of Guam's commercial port, using \$50 million in DOD funding and \$54 million in USDA financing; improve roadways using Defense Access Road funding (\$49M appropriated in FY10 and \$67M authorized for appropriation in FY11); and address critical improvements to Guam's utilities systems by applying financing from the Government of Japan. As these upgrades come online, the pace of construction can be adjusted accordingly. Projects requested in FY-12 are those that are necessary at this time to support future vertical construction and also to support the introduction of off-island workers necessary to ramp-up construction over the next few years.

In the wake of the earthquake, tsunami and nuclear disasters, the Government of Japan has reiterated and demonstrated that it remains committed to the relocation of Marines from Okinawa to Guam. We have communicated with the Government of Japan regarding the amount of our FY12 MILCON budget request and they understand our decision-making rationale based on the factors noted above. The Diet has approved the JFY-11 budget, which includes \$167 million in direct cash contributions for facilities construction and design, and \$415 million in utilities financing. At \$167 million, the Government of Japan's direct cash contribution is comparable to DOD's \$156 million military construction funding request. Of the \$415 million in utilities financing, \$273 million of this utilities financing will be applied to critical upgrades to wastewater systems off-base, which will support the relocating Marines and Guam's population growth in the long-term and in time to support the requirements of the off-island construction workforce. The balance of the JFY-11 utilities financing will be used for improvements to the Navy's water system on base and will eventually be married up with the P-2048 Finegayan Water Utilities FY12 MILCON project request. Coupled with the efforts noted above, these improvements will allow for the construction program to ramp-up.

Mr. FORBES. The United States and the Government of Japan concluded an agreement in 2006 that stipulated the movement of Marine Corps forces to Guam and provided a framework to share the \$10.2 billion in costs associated with the Marine Corps movement. Since the 2006 agreement, the Marine Corps has indicated that the overall cost estimate does not provide for the full spectrum of training to support their requirements.

- What is the overall cost to move Marine Corps forces to Guam?
- Does this cost estimate include the required training elements to support the Marine Corps?

Secretary PFANNENSTIEL. The overall cost estimates are currently under review at the Office of the Secretary of Defense. While I cannot answer when the information will be validated by OSD, I can state that the cost estimate includes all required training elements to support the relocating Marines.

Mr. FORBES. The fiscal year 2012 budget request includes a \$15 million military construction project for road improvements at Naval Station Mayport (FL) and \$15 million in planning and design costs for future projects. While GAO believes that the Navy's costs are overstated, this request is the first of several military construction projects that the Navy anticipates will cost \$564 million to provide the supporting infrastructure for a nuclear aircraft carrier. The Navy cites the strategic

risk of locating all nuclear aircraft carriers on the East Coast at a single location as the principal reason to relocate an aircraft carrier to Mayport.

- 1) Has the Navy adopted a consistent strategic risk assessment regarding the basing of ballistic missile submarines, nuclear aircraft carriers, and other critical assets in the United States? If not, why not?
- 2) If strategic dispersal is central to the Navy's decision, why did the Navy abandon strategic dispersal in the Gulf of Mexico in BRAC 2005 through the closure of Naval Station Ingleside and Naval Station Pascagoula?
- 3) In the decision process, why did the Navy not evaluate Norfolk, VA, against those qualities expected in Mayport, FL, in the range of alternatives?

Secretary PFANNENSTIEL. The one-time infrastructure cost associated with the creation of a second CVN homeport at Mayport, FL is \$489M in Military Construction (MILCON) projects including Planning and Design. Specifically, in FY 2012 the Navy requested \$15M for the Massey Avenue Corridor Improvement Project (P503) and \$2M for Mayport Planning and Design efforts.

1) Thorough, formal strategic risk assessments include vulnerability, threat and trend analyses and are routinely conducted and updated by Navy, Joint Staff, FBI, and Department of Homeland Security officials and others. These risk assessments inform Navy basing decisions. The Navy applies strategic risk assessments as a factor when evaluating basing options and alternatives across the force. Other factors include overall dispersal, strategic/operational impacts, balanced port loading, maintenance and logistics, existing infrastructure, sailor/family quality of life, environmental impacts and costs.

2) Strategic dispersal of Navy ships is not a new concept, and is not unique to nuclear aircraft carriers. The Navy emphasized strategic dispersal in BRAC 2005; it was a key requirement in analysis conducted to support recommendations for closure and realignment as forwarded to the Secretary of Defense. As contained in the BRAC 2005 report, Navy established rules to guide the Department of the Navy (DON) analysis and infrastructure groups' scenario development. Among the DON rules used to bound recommendations were: "(1) to ensure that the model did not result in unbalanced force levels on each coast, at least 40 percent of the requirements had to be located on each coast; (2) one strategic nuclear submarine homeport per coast was required to ensure that this key infrastructure capability was maintained; and, (3) two ports on each coast capable of cold iron berthing a nuclear-powered carrier must be retained in order to allow for dispersal." Strategic dispersal was evaluated with respect to the closure of Naval Station Pascagoula, as contained in the Department of Defense Base Realignment and Closure Report of May 2005, within Volume IV (*Department of the Navy Analyses and Recommendations*). For example, report justification for closure of NS Pascagoula states, "Sufficient capacity and Fleet dispersal is maintained with East Coast surface Fleet homeports of Naval Station Norfolk and Naval Station Mayport, FL."

3) The strategic dispersal of a nuclear aircraft carrier on the East Coast is not a competition between Norfolk and Mayport, the positive qualities of both ports combine to ensure prudent positioning and sustainment of critical national assets.

Mr. FORBES. The Secretary of the Navy established energy goals that far exceed the requirements for the other military services.

- What is the impetus for these targets, and why do you believe this is critical to national security?

Secretary PFANNENSTIEL. The Secretary of the Navy (SECNAV) has set forth five energy goals to reduce the Department of the Navy's (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.

The impetus for these energy goals is to ensure DON's Energy Security and Energy Independence. Energy Security is sustained by utilizing sustainable sources that meet tactical, expeditionary, and shore operational requirements and force sustainment functions, and having the ability to protect and deliver sufficient energy to meet operational needs. Energy Independence is achieved when Naval forces rely 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.

DON's Energy Program for Security and Independence will lead the Navy and Marine Corps efforts to improve operational effectiveness while increasing energy security and advancing energy independence. DON will achieve the SECNAV goals by adopting energy efficient acquisition practices, technologies, and operations.

Mr. FORBES. The Navy has proposed to defer investments in facilities restoration and modernization.

- 1) Why did the Navy elect to take risk in the facility accounts and delay critical sustainment, restoration and modernization activities?
- 2) What is the long-term effect of a delay in funding this facility maintenance account?

Secretary PFANNENSTIEL. 1) To maximize our support for warfighting readiness and capability, the Navy reduced its facilities sustainment posture to 80 percent of the Department of Defense Facilities Sustainment Model.

2) The Navy will attempt to mitigate the inherent risk to this strategy, the attendant operational impacts, and to ensure the safety of our Sailors and civilians by prioritizing projects that address facilities with the lowest quality rating as well as the facilities and building systems that have the most significant impact to our personnel. Less critical maintenance and repair actions will continue to be deferred.

Mr. FORBES. The Air Force has proposed to defer investments again in facilities restoration and modernization.

- Why did the Air Force elect to take risk in the facility accounts and delay critical sustainment, restoration and modernization activities?
- What is the long-term effect of a delay in funding this facility maintenance account?

Secretary YONKERS. Overall, in FY12, the Air Force increased investment in facilities O&M accounts (restoration & modernization, and demolition) and decreased investment in its facilities sustainment account. The net was \$160M in growth from FY11. In response to the OSD-directed initiative to reduce overhead, the AF instituted a number of O&M account efficiencies and reinvested resources into critical weapon systems programs. As a result the Air Force will achieve \$1.6B in facility sustainment and operations efficiencies across the FYDP without mission impact. We shall ensure capabilities are not degraded by leveraging sustainable facility design, demolishing excess infrastructure, sourcing strategically, enforcing common standards, and employing sound asset management support practices. It is our view that the Air Force did not take risk in facilities or delay critical SRM activities.

Mr. FORBES. The term “energy security” is defined by the QDR as having “assured access to reliable supplies of energy and the ability to protect and deliver sufficient energy to meet operational needs.”

- How is the Air Force developing renewable energy projects on its installations that are compatible with this goal, and providing redundant power in the event of a failure of the public grid?

Secretary YONKERS. The Air Force has a strategic rationale and operational imperative to decrease demand and diversify sources of supply to enhance energy security, including by implementing a portfolio of renewable and alternative energy projects, as energy availability and security impacts all Air Force missions, operations, and organizations.

By taking a balanced approach between Air Force focused investments to reduce energy intensity and leveraging the renewable energy market through 3rd part investment to increase energy resiliency and redundancies, the Air Force is focused on diversifying its sources of energy to meet its operational needs and in turn enhance its energy security posture. The Air Force currently has 85 operational renewable energy projects on 43 bases, totaling 34 MW of renewable energy capacity. Additionally, there are projects lined up for FY11–13 that total more than 1,000 MW of operational energy, including large-scale solar projects at Luke Air Force Base in Arizona, and Edwards Air Force Base in California.

QUESTIONS SUBMITTED BY MS. BORDALLO

Ms. BORDALLO. You mention in your testimony that contemporary urban planning techniques and modern energy technologies will be used as part of the development on Guam. Can you elaborate on what these contemporary urban planning techniques are and how they will be incorporated on Guam? Further, I am concerned that base planning really does not take into account local planning laws and master plans. As we move forward, does the Department have the authorities necessary to do a better job of planning new installations or in the expansion of current installations?

Dr. ROBYN. The Department currently has all the necessary authorities for planning to support the Marine relocation to Guam or any other expansion of a current installation. The plan for development on Guam includes sustainable planning tech-

niques such as Leadership in Energy and Environmental Design (LEED) rated buildings, the nationally accepted benchmark for design and construction of high performance green buildings. We also plan to incorporate energy efficiency strategies, taking advantage of exterior shading, natural lighting, and passive solar orientation with sustainable landscapes with native vegetation. In fact, the Federal Planning Division of the American Planning Association recognized the "Guam Joint Military Master Plan Sustainability Program and Implementation Tools" submission as its 2010 annual award winner in the Outstanding Sustainable Planning, Design, or Development Initiative category.

Ms. BORDALLO. What Operational Energy Initiatives is the Army engaging in? Further, what policies are the Army considering or implemented to improve energy efficiency on its installations and how are the Guard and Reserves being integrated into any such policies? Finally, what can this committee do to assist with the development or implementation of these policies?

Secretary HAMMACK. In regards to Operational Energy, the Army is undertaking a range of initiatives to enhance operational energy performance and is deploying solutions throughout Afghanistan and Iraq. Improving the Army's Operational Energy Posture will increase mission effectiveness by enhancing or preserving adaptability, versatility, flexibility and sustainability, as well as reducing costs.

At existing forward operating bases, we continue implement new and efficient ways to expand the use of solar power, turning waste to energy, reuse of grey water such as reusing shower water for toilets, using waste heat for steam to electricity generation, solar hot water, micro power grids and other technologies to reduce the demand for resources.

The Army has replaced "point generation" power production with 22 minigrid/power plants supporting U.S. forces in Afghanistan. This approach is achieving efficiency improvements of over 50%. Roughly $\frac{1}{3}$ of these power plants incorporate "smart" technology to optimize power production based on demand.

The Army is on track to field a new family of tactical generators, the Advanced Medium Mobile Power Sources family, or AMMPS, starting in 2012. The generators, ranging in size from 5 kW to 60 kW, use an average of 20 percent less fuel than the current sets in the field.

The Army is deploying the Tactical Fuels Manager Defense (TFMD), an automated fuel inventory management system that is configured to enhance tactical fuel accountability procedures. TFMD provides enterprise-level asset visibility of fuel operations, automated inventory management, theft deterrence, and business process improvements. This will lead to more effective fuel management practices.

The Army is fielding systems to reduce weight and increase the capabilities of energy-related Soldier systems, such as the Rucksack Enhance Portable Power System (REPPS), a lightweight, portable power system capable of recharging batteries or/and act as a continuous power source that reduces the weight in batteries that a soldier needs to carry. One hundred systems have been delivered to units supporting Operation Enduring Freedom.

Soldiers of the 1-16 Infantry Battalion received training on advanced power and energy systems at Fort Riley, Kansas to use during their recent deployment to Afghanistan. Technologies include a suite of advanced soldier power capabilities such as rechargeable batteries, power networking devices, and solar and fuel cell chargers that will bring power to the most disadvantaged operating environments. These innovations in expeditionary Soldier power will help to reduce the overall volume and weight of the Soldier's combat load, and will allow the small tactical unit to sustain themselves throughout extended mission durations.

The Army also plans to significantly reduce operational contingency base camp energy demand by 30-60% through integrated solutions such as smart micro-grids, renewable energy sources, insulated shelters, more efficient generators and engines, better energy storage, power conditioning devices, and onsite water production.

Regarding your question on installation energy, the Army is working to significantly improve energy efficiency across our installations and has recently published policies to standardize energy efficiency in Army operations, to include energy efficient lighting requirements, implementation of the highest building efficiency standards in the Federal Government and an Acquisition Policy requiring energy productivity to be a consideration in all Army Acquisition Programs.

The Army, in concert with the Department of Energy is researching a range of technologies to improve vehicle efficiency. The Army is replacing 4,000 non-tactical fossil-fueled GSA-leased vehicles with low-speed electric vehicles and is also leasing more than 3,000 hybrid vehicles, the largest such fleet in the Department of Defense to undergo this transition. These efforts will reduce risks associated with the volatility of oil prices and result in affordable, efficient vehicles for the Army and the public.

With respect to integrating the Guard and Reserve Components, as part of the Army's overall effort to conserve precious resources, the Army is focusing on Net Zero installations which will consume only as much energy or water as they produce and eliminate solid waste to landfills. The Army recently identified six Net Zero Pilot Installations in each of the energy, water, and waste categories and two integrated installations striving towards net zero by 2020. Two of the Net Zero energy pilots include Army Reserve installations (Camp Parks and Fort Hunter Liggett, CA). Additionally, the Oregon Army National Guard volunteered to pilot a unique Net Zero Energy Initiative to include all of their installations across the state. The Army will prepare a programmatic NEPA document to examine the impact of selected net zero technologies and actions in implementing net zero Army-wide. This initiative will establish Army communities as models for energy security, sustainability, value and quality of life.

Lastly, regarding where the committee can be helpful, the Army believes the key to meeting our energy goals will be to expand the use of the Energy Conservation Investment Program (ECIP) and improve utilization of the authorities that Congress has already provided. Existing authorities include the Energy Service Performance Contracts (ESPC), Utilities Energy Service Contracts (UESC), Power Purchase Agreements (PPA) and Enhanced Use Leases (EUL). These authorities will allow the Army to leverage significant private sector investment for large scale renewable energy projects. Continued Congressional support of these authorities and of other Army energy initiatives will help us to achieve our energy goals.

Ms. BORDALLO. The age of earmarks, regrettably, is over here in Congress. The Department and Congress have played games for years about funding requirements in different portions of the budget. Of relevance to this subcommittee is funding of military construction projects for the National Guard and Reserves. Since 1996 both the Army and Air National Guard budgets have been over 200% higher than the President's budget with the authorization and appropriations process are complete. How will the Army and Air Force alter their requirements process for military construction to make sure that our Guardsmen and Reservists are getting equitable treatment in the President's Budget for facilities now that we cannot move up projects in the Future Years Defense Program? The Guard and Reserves are an operational force and their requirements are changing. What is being done to address this matter?

Secretary HAMMACK. The Army funds military construction (MILCON) projects across all components based on programming guidance and priorities. The initiatives receiving the highest priority for MILCON in Fiscal Year 12 include completion of support to Grow the Army and Global Defense Posture Realignment; the Army's transformation to a modular force and permanent party and training barracks buy outs. Reserve Component requirements are integrated into the prioritization process and compete well when they support high priority initiatives. Army senior leaders strive to ensure balance and equity of resource distribution across all components and review the program through that lens. This will be especially important as MILCON investments become limited in future years.

Ms. BORDALLO. We took an important step forward with the Guam build-up with the signing of the programmatic agreement. I see that several task orders were recently awarded to firms that had MACC contracts. My question is a follow-up to something I asked at our hearing back in March. What steps have been taken to develop milestones or triggers as part of the adaptive management program? I believe working groups met recently and will present at the next CM-CC meeting. What are those triggers? How clearly understood will they be by the local community, local leaders and the contractors? Further, how will the CM-CC ensure compliance with these milestones and triggers? I'd like to learn more about these matters.

Secretary PFANNENSTIEL. The Initial Civil-Military Coordination Council (CMCC) Charter, included as Attachment 1 to the Record of Decision, established a process that will be used to identify, coordinate and synchronize actions to avoid or reduce significant environmental impacts associated with the military buildup. Possible responses to identified impacts could include: 1) change to the pace of construction (i.e. contract awards or construction start dates), and/or 2) modification to the sequence of construction projects. Decisions regarding the pace and sequencing of construction are to remain with the appropriate organizations.

The CMCC will provide overarching guidance to topic-specific Council Working Groups (CWGs), and milestones and triggers will be unique to each CWG. Five CWGs (Construction, Utilities, Transportation, Housing, and Natural Resources) have been established thus far, and the CMCC is flexible to adding additional CWGs in the future as necessary. The CWGs have taken concrete steps to assess potential resource impacts, data requirements, and triggers, with the intent to have

them reviewed and approved by the CMCC before major construction efforts. Some baseline metrics have been identified, and there is an ongoing effort to scrutinize metrics as to applicability. Some metrics are easy to determine (water turbidity) while others are more subjective/qualitative (unacceptable traffic congestion). As Adaptive Program Management is a new approach, it is still very dynamic in nature. Triggers will be continuously reviewed for effectiveness or applicability throughout the buildup process, allowing for changes or modifications if appropriate.

CWGs have formed sub-groups that that will concentrate on specific areas (such as terrestrial, marine and cultural under the Natural Resources CWG) and have identified resource impacts that should be monitored, such as storm water pollution/direct impact to coral reefs, water supply and quality, labor supply, port throughput, power capacity, and demand and stresses on essential public services. The CWGs will determine if additional sub-groups are necessary as the process matures. Thus far, most CWG efforts have been inclusive of all sub-areas during discussions. As the level of effort or application of resources increase in a specific area, a sub-group may be initiated.

The federal government, which includes representatives from DOD and various resource agencies, continues to collaborate with the Government of Guam to identify and mature, relevant metrics and triggers that can be appropriately managed with APM and that can be communicated effectively.

The CWGs are to utilize available sources of data including reports, surveys, ongoing projects and similar sources generated by local, federal and other organizations that are derived from existing programs. CMCC leadership is considering the development of a dashboard that can easily display data for both decision-makers and the general public. The CMCC meetings are open to the public and have had substantial media coverage to this point.

As more detail and fidelity emerge, concepts and procedures will be matured and incorporated into a Final CMCC Operating Charter. The CMCC itself has no authority to ensure compliance with its recommendations, apart from efforts by individual member agencies consistent with their respective existing authorities.

Ms. BORDALLO. What types of alternative energy projects or programs are you looking at implementing at Andersen Air Force Base or in the overall Joint Region Marianas? How can I help make Guam an example of successful alternative energy programs?

Secretary YONKERS. Joint Region Marianas (JRM), which includes former Andersen AFB, represents 21% of the Guam Power Authority's consumer base and is expected to increase to 25% after the military buildup. To help alleviate this increase, the DoD and Guam Power Authority have Memorandum of Understanding regarding the buildup and long-term power requirements. In the JRM, Navy is the lead for alternative energy projects, and the Air Force is currently cooperating with them to evaluate the technical, economical, political, legal and environmental challenges and feasibility of projects on Guam, such as waste-to-energy.

Ms. BORDALLO. The age of earmarks, regrettably, is over here in Congress. The Department and Congress have played games for years about funding requirements in different portions of the budget. Of relevance to this subcommittee is funding of military construction projects for the National Guard and Reserves. Since 1996 both the Army and Air National Guard budgets have been over 200% higher than the President's budget with the authorization and appropriations process are complete. How will the Army and Air Force alter their requirements process for military construction to make sure that our Guardsmen and Reservists are getting equitable treatment in the President's Budget for facilities now that we cannot move up projects in the Future Years Defense Program? The Guard and Reserves are an operational force and their requirements are changing. What is being done to address this matter?

Secretary YONKERS. We thank the committee for its past support of increases to Military Construction (MILCON) in the President's Budget, and for its support of the Military Construction program in general. With regard to equitable treatment, the Air National Guard and Air Force Reserves currently receive a fair share of the total Air Force Military Construction budget. We clearly recognize the critical role played by the Air Reserve Components, so the Air Force will continue to ensure that they receive at least their fair share of MILCON funding during our annual budget processes during these times of fiscal restraint.

QUESTIONS SUBMITTED BY MS. SUTTON

Ms. SUTTON. Dr. Robyn, the President of the United States and Members of Congress, among many others, have stated that there are critical aspects of the infra-

structure of the United States that must be addressed, including the toll corrosion, stress, and fatigue are taking on bridges, roads, buildings, pipes, and other infrastructure.

Corrosion in DoD infrastructure alone costs the Department a minimum of \$1.9 billion in annual direct costs.

- What is your plan to address corrosion, and are you partnering with the DOD Office of Corrosion Policy and Oversight on this issue?
- For the record, I would like to know what each of the other members testifying today are doing in regards in combating corrosion and would appreciate your input.

Dr. ROBYN. As the OSD proponent for facilities policy, our plan to address corrosion of facilities is addressed in the Department's overall corrosion control and prevention strategy, which includes identification of cost effective corrosion control technology, transitioning technology into criteria and specifications, and funding our facilities sustainment program. Installations and Environment actively partners with the DoD Corrosion Policy and Oversight Office, which is also located under the oversight of the Under Secretary of Defense for Acquisition, Technology, and Logistics, regarding facilities corrosion issues.

Ms. SUTTON. Dr. Robyn, the President of the United States and Members of Congress, among many others, have stated that there are critical aspects of the infrastructure of the United States that must be addressed, including the toll corrosion, stress, and fatigue are taking on bridges, roads, buildings, pipes, and other infrastructure.

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Secretary HAMMACK. As the Assistant Secretary of the Army (Installations, Energy & Environment), I am an active member of the Army's Corrosion Prevention and Control (CPC) program. I cooperate and collaborate with the Army's Corrosion Control and Prevention Control Executive (CCPE) in planning and executing the Army's CPC Strategic Plan, which includes support the Office of the Secretary of Defense (OSD) Director, Corrosion Policy and Oversight office. My staff is active members of both the Army's and OSD corrosion working-level integrated product teams. A component of the Army's and OSD corrosion program is to explore, demonstrate, and implement new technologies directed toward the Department of Defense (DoD) infrastructure.

As new technologies have been successfully demonstrated we then update the Unified Facilities Criteria (UFC), Unified Facilities Guide Specifications (UFGS), and Design Guides. As construction projects are designed and executed, these UFC, UFGS, and design guides are used by the U.S. Army Corps of Engineers (USACE). In addition, our engineers and scientists share their experience and knowledge with various industry associations and communities to advance the application of these technologies in the US infrastructure.

We are exploring the use of a number of different sensor technologies to identify and inform us of deterioration, stress and fatigue. Over time, the knowledge we gain from this information will aid us in determine the materials that will provide the optimum corrosion resistance of our infrastructure. We believe that this knowledge will also enable us to predict the health and well-being of the various infrastructure elements. This, we believe, will enable us to better determine and project the infrastructure maintenance workload.

Ms. SUTTON. Dr. Robyn, the President of the United States and Members of Congress, among many others, have stated that there are critical aspects of the infrastructure of the United States that must be addressed, including the toll corrosion, stress, and fatigue are taking on bridges, roads, buildings, pipes, and other infrastructure.

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Secretary PFANNENSTIEL. The Navy's shore infrastructure Corrosion Prevention and Control program is addressed by Naval Facilities Engineering Command (NAVFAC) through an organizational structure that incorporates Research, Development, Technology, and Evaluation criteria research and development; design policy; execution and sustainment, restoration and modernization policy; and program administration. NAVFAC corrosion subject matter experts interface regularly with the Navy Corrosion Executive as well as the DoD Office of Corrosion Policy and Oversight. NAVFAC representatives actively participate in the DOD Corrosion Prevention and Control Integrated Product Team and specialized working groups.

Ms. SUTTON. Dr. Robyn, the President of the United States and Members of Congress, among many others, have stated that there are critical aspects of the infrastructure of the United States that must be addressed, including the toll corrosion, stress, and fatigue are taking on bridges, roads, buildings, pipes, and other infrastructure.

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Secretary YONKERS. We recognize that our aging infrastructure is an important issue and that corrosion degradation is a factor affecting the sustainment of Air Force real property.

Our policy direction for corrosion control of facilities and infrastructure is defined in Air Force Instruction 32-1054. This guidance directs the consideration of corrosion control in project designs and mandates use of corrosion control measures in our infrastructure. Areas that are addressed are the use of protective coatings, cathodic protection and industrial water treatment. Our bridges are inspected, per the federal requirements, for corrosion deficiencies of structural members. We submit annual updates to the national Bridge Inventory database to indicate condition and status. We are partnering with the Defense Logistics Agency to inspect and repair our fuels infrastructure including fuel storage tanks and underground piping for corrosion degradation. Key aspects include tank bottom inspections, evaluations of cathodic protection systems and pipeline condition evaluations. We are also evaluating our fuels infrastructure to determine any corrosive or material degradation effects from the proposed use of alternative jet fuels.

To better manage real property assets, we have instituted improved processes to better manage corrosion degradation and overall facilities and infrastructure sustainment. We have successfully partnered with industry reviewing asset management practices by visiting corporate leadership of national companies who manage large scale properties and infrastructure similar to our Air Force. To implement improvements, the Air Force is instituting systematic and integrated processes to manage built infrastructure, their associated performance, risk and expenditures over their lifecycle. Success to date includes adopting the International Infrastructure Management Manual processes, reorganization of personnel better aligning with strategic objectives and comprehensive analysis of our IT needs. We are also institutionalizing detailed condition and performance assessments across our vertical and horizontal infrastructure to better understand risks and to strategize investment planning. While this transition is on-going, we are staging introductory phases leveraging existing IT systems and personnel. We will continue implementation as our new IT systems evolve and as our Air Force's asset management practices mature.

We participate in the Corrosion Policy and Oversight Office under the Secretary of Defense's (OSD) Integrated Product Team (IPT) process. Under the OSD IPT, we participate in the Facilities/Infrastructure working group and interact with OSD and the technical corrosion representatives of our sister Services. This working group addresses corrosion control technologies and knowledge transfer to the working field.