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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

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FULL COMMITTEE HEARING

ON

# BUDGET REQUEST FROM THE DEPARTMENT OF THE NAVY

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HEARING HELD
MARCH 1, 2011

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# FISCAL YEAR 2012 NATIONAL DEFENSE AUTHORIZATION BUDGET REQUEST FROM THE DEPARTMENT OF THE NAVY

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HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
*Washington, DC, Tuesday, March 1, 2011.*

The committee met, pursuant to call, at 10:01 a.m., in room 2118, Rayburn House Office Building, Hon. Howard P. "Buck" McKeon (chairman of the committee) presiding.

## OPENING STATEMENT OF HON. HOWARD P. "BUCK" MCKEON, A REPRESENTATIVE FROM CALIFORNIA, CHAIRMAN, COMMITTEE ON ARMED SERVICES

The CHAIRMAN. Good morning, ladies and gentlemen. Thank you for joining us today as we consider the President's fiscal year 2012 budget request for the Department of the Navy. Secretary Mabus, Admiral Roughead, good to have you here again. General Amos, welcome for your first hearing here as Commandant. Glad to have you.

We want to thank all of you men for the tremendous service you have performed for our country and for those that wear the uniform behind you, and behind you, elsewhere around the country, around the world. As we review your budget requests and reconcile it with the larger DOD [Department of Defense] efficiencies initiative, we can see in many ways the Department of Navy gained capabilities.

However, I remain concerned that this request does not fully provide for the Navy and the Marine Corps. I support efforts to identify savings and reinvest those dollars in the critical force structure and modernization. But many of the efficiencies identified by your department are cost avoidance initiatives and not clear-cut savings. As such, we are concerned that they in fact materialize.

Furthermore, over the 5-year period that this budget request covers, your Department harvested over 42 billion in so-called efficiencies yet had to sacrifice approximately $16 billion of that amount or 38 percent back to the Treasury. In order to generate much of the savings, you have been compelled to make significant force structure cuts. But your requirements haven't changed.

For example, the amphibious assault mission remains valid but you cancelled the Expeditionary Fighting Vehicle. Likewise, the strike fighter inventory requirement to support the current National Defense Strategy's 10 aircraft carrier air wings containing 50 strike fighter aircraft each.

We do not currently meet this requirement but the budget request puts the F–35B Joint Strike Fighter on a 2-year probation

and you have shuttered an aircraft carrier air wing. Similarly, the budget request assumes savings as a result of a decrease in the Marine Corps and end strength of 20,000 personnel before the Marine Corps could even complete its force structure review. Now, the Marine Corps suggests they cannot live with that number. It can only reduce end strength by 15,000.

Finally, you proposed to design the *Ohio*-class replacement ballistic submarine with fewer missile tubes than envisioned by the New START [Strategic Arms Reduction Treaty] Treaty or STRATCOM [United States Strategic Command]. Adding to my concern is that the current battle force inventory is at least 25 ships below your stated 313-ship floor. Although we have not seen the results of the force structure assessment you indicated was underway last year, one can only imagine that the requirements for ships will grow as missions such as anti-piracy and sea-based missile defense expand.

Just in time replacements for legacy force structure such as the *Ford*-class aircraft carrier program and the Joint Strike Fighter program are currently behind schedule and over cost, causing even more resources to be required to sustain legacy platforms. Your department gives this nation the most flexible and lethal projection of power of any country in the world. It is imperative that we sustain and maintain a robust and effective fighting force borne from the sea and that we provide you with sufficient resources to do that, which includes finishing the fiscal year 2011 Defense appropriations.

As you know that we are really working together to try to see that happen, it is not going to happen this week. But hopefully in the ongoing discussions we can bring that to a good conclusion.

Ranking Member Smith.

**STATEMENT OF HON. ADAM SMITH, A REPRESENTATIVE FROM WASHINGTON, RANKING MEMBER, COMMITTEE ON ARMED SERVICES**

Mr. SMITH. Thank you, Mr. Chairman.

And thank you, gentlemen, for being here this morning and for your service to our country. And we are in a very, very challenging budget environment. Short-term, we need to get something done for fiscal year 2011. I know the pressure that has put on you; it is always helpful to hear specifics about that.

So during your testimony today, it would be good to hear more about sort of what the C.R. [Continuing Resolution] means in terms of limiting your ability to operate, hopefully to spur us all to get that done so that we can have an actual appropriations bill for the Department of Defense. We know that impacts you in many ways. And then beyond that, even once we get through the last 7 months of 2011, and going forward, we face enormous budget challenges across the whole of government and certainly that will have some impact on the Department of Defense. So, we are anxious to hear how you plan to manage those.

And the Navy and the Marine Corps are in a sort of a unique position. You are the main upfront projection of our power. The main point of the Navy and Marine Corps is to be ready to go anywhere anytime, often with very little notice. So that preparation re-

quires, you know, a broader array of preparation to make sure that we are ready for whatever comes at us.

You have all done that very, very well in the past. And in the future, there will be many more challenges along those lines. We continue to have the problems of piracy. The disruption in the Middle East could give rise to any number of different decisions that we have to make in terms of being able to get in to that region in a supportive capacity. And, of course, there continues to be major challenges in the CENTCOM [United States Central Command] AOR [Area of Responsibility] that require your services.

So that ability to project power is critical to our national security. Navy and the Marine Corps are a critical part of that. So I agree very much with the Chairman's comments about, you know, some of the challenges going forward, some of the decisions that have been made about which programs to continue, which programs to cancel, how to make shifts.

I look forward to your testimony today, to further explain some of those decisions and how exactly they will work out. And pretty much along the lines as was what the Chairman said so I will not repeat that.

And I guess the last thing I like to say, you know, we, for quite some time in this committee have talked about the number of ships that are necessary within the Navy, 313 seems to be the magic number. I think it would be helpful for all of us to sort of better understand why. You know, what are the requirements that have led us to say that 313 is the magic number.

And then the other piece of that, of course, is you have a lot of different ships, that are not all created equal, we could conceivably have 313 but still not meet your needs if we don't have the right types of ship—no, I am sorry, ships. So a better understanding of how you see that balance going forward would be helpful for the committee.

And with that, I will yield back and I look forward to your testimony.

And thank you again, Mr. Chairman.

The CHAIRMAN. Thank you.

Well, we are happy to have the Honorable Ray Mabus, Secretary of the Navy; Admiral Gary Roughead, the United States Navy, Chief of Naval Operations; General James F. Amos, the United States Marine Corps Commandant.

Mr. Secretary, you will start it out.

## STATEMENT OF HON. RAY MABUS, SECRETARY OF THE NAVY

Secretary MABUS. Mr. Chairman, Ranking Member Smith, members of the committee, I have the honor of appearing here today on behalf of the sailors, Marines and civilians that make up the Department of the Navy.

I want to mention the absence of Representative Gabby Giffords, who were it not for the senseless act in January, would be here with us today. She is a member of the Navy family and been a true friend of the Navy and Marine Corps throughout her entire career. And I want to extend the thoughts and the prayers of everybody in the Department of the Navy to her and to her family as she recovers.

Today, the Navy and Marine Corps are conducting missions across the full range of military operations. They remain the most formidable expeditionary fighting force the world has ever known. And with your support, they will continue to meet the multiplicity of missions entrusted to them by our nation.

Today as the Chairman and the Ranking Member pointed out, we face an immediate crisis, the absence of a Defense Appropriations Bill and the increasingly serious problems of operating under a continuing resolution. The pressure of the C.R. has already significantly impacted procurement and reduced the resources available to maintain readiness.

If the C.R. continues for the entire year, we will be forced to reduce aircraft flight hours and ship steaming days, cancel up to 29 of 85 surface ship maintenance availabilities, to defer maintenance on as many as 70 aircraft and 290 aircraft engines, defer up to 140 maintenance and construction projects across this country.

In addition, the lack of legislative action will prevent the construction of one *Virginia*-class submarine, two *Arleigh Burke* destroyers and one mobile landing platform, prevent procurement of two nuclear reactor cores and delay increased funding for the *Ohio*-class replacement.

Reduce Marine Corps procurement up to a third after rebalancing the Marine Corps manpower counts, create a $4.6 billion shortfall in operation and maintenance accounts, and create nearly a $600 million shortfall in combined Navy and Marine Corps manpower accounts. These measures will not only place additional stress on the force and our family, they will weaken the industrial base and affect over 10,000 private sector jobs.

The disruption to our fleet and to our shore maintenance and modernization schedules may take years to recover from and will come at a much greater cost. We strongly request congressional action to address the implications of this continuing resolution. This is particularly important when considering submission of the fiscal year 2012 budget request which was based on the fiscal year 2011 request.

The fiscal year 2012 President's budget request of $161 billion, an increase of only 0.5 percent over fiscal year 2011, includes funds for 10 aircraft—for 10 ships and 223 aircraft. It maintains our commitment to take care of our people, build a strong R&D [Research and Development] and industrial based and grow the fleet.

The $15 billion request for overseas contingency operations which represents a drop of $3.5 billion from fiscal year 2011 includes funds to sustain operations, manpower, infrastructure as well as procure equipment and support operations in Afghanistan. During the development of this budget, we were keenly aware of the fiscal position of the country and the necessity to be responsible stewards of taxpayer dollars.

The resulting request is a strategy-driven document informed by fiscal realities. It balances competing requirements and tries to do what is best for the country, the Navy, the Marine Corps and our sailors and Marines. We began this budget cycle by examining every aspect of what we do and how we do it.

Consequently, $42 billion in the Department of the Navy efficiencies were identified over the 5 years. As a result, we had been

able to add one *Aegis*-class destroyer, three TAO(X) fleet oilers, one T–AGOS ocean surveillance ship to our shipbuilding plan. With our dual-block LCS [Littoral Combat Ship] strategy, this increases the total number of ships over the next 5 years from 50 to 56, including one Joint High Speed Vessel to be built for the Army.

The savings also allows us to buy additional F/A–18s, extend the service life of up to 150 legacy aircraft as a hedge against delays and the deployment of the F–35B and allow us to continue investing in unmanned systems which are becoming increasingly important on the battlefield and unmatched in their ability to covertly surveil hostile forces without placing our own people at risk.

This upcoming year, we will see deployment of the Fire Scout to Afghanistan and continued testing of the UCAS–D [Unmanned Combat Air System Demonstrator], the forerunner of an integrated carrier launch strike system. In 2010, one of the most important efforts was the decision endorsed by Congress to pursue the new Littoral Combat Ship through a dual-block buy strategy.

At an average cost of less than $440 million per ship and with the cost reductions we have seen on LCS–3 and 4, the new strategy will save taxpayers $2.9 billion. This plan is one that is good for the Navy, good for taxpayers, good for the country and demonstrates what can accomplished when sound acquisition principles are followed and enforced.

We heard the message from Congress very clearly. We need more ships but they have to be affordable. The LCS strategy supports the industrial base by keeping workers employed at two shipyards and is indicative of the Department's push to ensure acquisitions excellence.

The fixed price contracts used for LCS are our model. They are the result of effective competition and give the government full ownership of the technical data packages in construction and afford greater Congressional oversight. With the new LCS strategy, we get more ships more quickly, more affordably.

Significant additional savings were also achieved through terminating the Expeditionary Fighting Vehicle. It is important to emphasize that this decision in no way changes our nation's commitment to amphibious warfare or on amphibious assault capability.

We have to maintain an amphibious assault capability that will put Marines ashore, ready for the fight. But the EFV [Expeditionary Fighting Vehicle] is not the vehicle to do this. Conceived in the 1980s, the EFV was a previous-generation solution to a tactical problem that has since fundamentally changed. And its cost per unit would have consumed half that Corps' total procurement and 90 percent of its vehicle-related operation and maintenance account. We simply cannot afford it.

In aviation programs, we are also closely monitoring the Joint Strike Fighter, particularly the Marine Corps variant, the B. After a 2-year period of focused scrutiny, we will make an informal recommendation about resolving the technical and cost issues. Ashore, we continue to confront rising health care cost caused by an increasing number of beneficiaries, expanded benefits and increased utilization.

To deal with these trends, we have to implement systematic efficiencies and specific initiatives that improve the quality of care and

customer satisfaction but at the same time more responsibly managed cost. We concur with the recommendations made by the Secretary of Defense to ensure fiscal solvency and benefit equity for our retirees.

Finally, we are continuing efforts to invest in and develop alternative energy. The latest headlines from around the world reinforce our basic point—energy is first and foremost an issue of national security. We can't allow volatile regions of the world to control the price and affect the supply of the fuel that we use.

Last year—the Navy and Marine Corps took some huge steps forward including flying the F/A–18 Hornet on biofuel, conducting a large scale of expansion of solar power and beginning expeditionary initiatives, efficiencies and initiatives in Afghanistan.

What we are doing there is already saving lives as we reduce our reliance on imported fuel. We will continue these investments this year. And we will continue to move forward toward our goal of at least 50 percent alternative energies by 2020.

In closing, it is a solemn privilege to lead the naval services during an era of protracted war and of national challenge. I have been honored by the trust the President and Congress have placed in me and profoundly moved by the sacrifice and devotion I have witnessed in the sailors and Marines who defend us.

The Navy and Marine Corps are and will remain ready to do any mission America gives them.

Thank you and Godspeed.

[The prepared statement of Secretary Mabus can be found in the Appendix on page 57.]

The CHAIRMAN. Thank you very much, Mr. Secretary.

Admiral.

**STATEMENT OF ADM GARY ROUGHEAD, USN, CHIEF OF NAVAL OPERATIONS**

Admiral ROUGHEAD. Thank you very much, Mr. Chairman.

Chairman McKeon, and Ranking Member Smith, and members of the Committee, it is my honor to appear before you in my fourth year as the Chief of Naval Operations, representing more than 600,000 sailors, Navy civilians and their families who operate and live globally.

I appreciate your continued support for them and their families as they continue to carry out our maritime strategy. I, too, would like to echo the Secretary's comments and thoughts with regard to Representative Giffords; all of us who served wish her the very best and a speedy recovery.

Our Navy continues to meet operational commitments and respond to crises as they emerge. We are engaged in Iraq and Afghanistan with 14,000 sailors on the ground and another 14,000 at sea in the region. Thirty percent of the air support over Afghanistan flies off the decks of our aircraft carriers. But our presence in the Middle East also gives us the flexibility to respond to the sweeping changes that we see taking place there.

But our interests extend far beyond that and so do our operations. Today, we have approximately 65,000 sailors deployed at about 40 percent of our force structures.

We are globally present and we are persistently engaged. We provide deterrence in Northeast Asia and a presence in the Western Pacific. We conduct counter-piracy operations in the Indian Ocean and we are building maritime partnerships in Africa, South America and the Pacific.

The demand continues to grow for the offshore option our Navy and Marine Corps team provides the nation. We assume the lead for the first phase of the phased, adaptive approach for ballistic missile defense in Europe and we are working with the Missile Defense Agency on providing that same capability ashore.

We have created the new information directorate on my staff and that has enabled us to make better decisions and investments in countering anti-access and area-denial threats. We have recently established the 10th fleet, our cyber fleet, and it's already demonstrated its expertise by conducting joint and naval operations in the cyber network cryptology and space arenas.

To deliver the above, we have been pushing the fleet hard. We have 288 ships today, the smallest it has been since 1916 when our interests and responsibilities were nowhere near what they are today. And that is why 313 ships remains the floor of our future force. It also is why sustaining fleet capacity is essential in reaching that floor.

Since I became CNO [Chief of Naval Operations], I focused on ensuring the Navy is ready, that our quality of work and quality of life for fulfilling to the men and women of our Navy, and that we place underperforming programs back on track. We have introduced stability, affordability and capacity into our shipbuilding and aviation plans. And with the assistance of Congress, we have advanced capabilities to meet the most likely evolving threats.

We have secured as the Secretary mentioned the fixed-price dual award for 20 Littoral Combat Ships. We have addressed our strike fighter capacity with a multi-year F/A–18 procurement. Pending resolution of the continuing resolution, we will build two *Virginia*-class submarines per year, another guided missile destroyer. We will start the mobile landing platform, construct and refuel our aircraft carriers as planned, and continued the design of our replacement strategic deterrence submarine.

I am pleased with our accomplishments and I thank the Congress for their continued support of our acquisition strategies. Our fiscal year 12 budget request is a balanced approach to increasing fleet capacity, maintaining warfighting readiness, and developing, and enhancing our Navy total force.

The budget goes beyond ships and aircraft. It enhances electronic warfare, information dominance, integrated air and missile defense, and anti-submarine warfare capabilities for the evolving challenges.

It continues to develop a family of unmanned systems that will work in concert with our manned systems to secure access and establish maritime superiority when and where we choose. It continues our effort over the last 2 years to reduce total ownership costs and leverages the opportunity presented by the Secretary of Defense's efficiency initiative to reduce excess overhead, improve readiness, and reinvest in warfighting capability and capacity that improves the long-term sustainability of our force.

Importantly, it supports the Secretary of Defense's health care initiatives included in the President's budget, which continue our efforts in health care to improve internal efficiency, incentivize behavior, and ensure all our beneficiaries are treated equitably.

We are seeing high satisfaction with our medical home port initiative. And I am comfortable with the changes to propose fees and co-payments including indexing enrollment fees to a medical inflation index, incentivizing beneficiaries to use the most cost-effective prescription delivery methods and the elimination of sole community hospital status.

These are gradual, fair, and equitable changes that enhance our ability to deliver high-quality health care for years to come. You can be exceptionally proud of our sailors and Navy civilians, who they are, and what they do. Today, sailors are the best with whom I have ever served.

I ask for your strong support of our fiscal year 2012 budget request. And I thank you for all you do to support the men and women who make our Navy the enduring global force for good. I look forward to your questions.

[The prepared statement of Admiral Roughead can be found in the Appendix on page 97.]

The CHAIRMAN. Thank you, Admiral.

General.

**STATEMENT OF GEN. JAMES F. AMOS, USMC, COMMANDANT OF THE MARINE CORPS**

General AMOS. Chairman McKeon, Ranking Member Smith, and members of the committee, it is my honor to appear before you today for the first time as the commandant of the Marine Corps to articulate the posture of your Corps. Today, the Corps serves as America's Expeditionary Force-in-Readiness, a balanced air-ground logistics team of 202,000 active, 39,600 reserve, and 35,000 civilian Marines.

Our ability to serve as our nation's principal crisis response force is due in large part to this committee's and Congress's strident continued strong support. I thank you for that.

Today, there are roughly 32,000 Marines forward deployed around the world. As we sit here, it is roughly 7:50 in the morning, excuse me, in the evening, in Afghanistan. The rainy season has hit. The evenings remain cold and damp. It is in this nation where 20,000 of our young men and women are engaged in full spectrum combat operations and counterinsurgency operations.

I am encouraged by the significant progress that they have made in the Helmand province. And you have my assurance that this effort remains my top priority. Sergeant Major Kent and I spent Christmas with our Marines and our sailors in Afghanistan. I am happy to report that their morale is high and belief in their mission remained strong.

Partnered with the United States Navy, we are forward-deployed and forward-engaged. This past year alone, our afloat forces conducted humanitarian assistance missions in Pakistan, Haiti, and the Philippines.

We recaptured the pirated ship, *Magellan Star*, rescuing its crew from Somali pirates, and partnered with allied forces in engage-

ment missions in the Pacific Rim, Latin America, Africa, and throughout Eastern Europe.

Halfway around the world this morning, Marines are ready, honing their skills on board our Navy's great capital ships, prepared to do our nation's bidding. Such a role as America's crisis response force necessitates that we maintain a high state of readiness.

We are either ready to respond to today's crisis, with today's force, today, and thus—or you risk being late and thus being irrelevant. I am keenly aware of the fiscal realities confronting our nation. During these times of constrained resources, the Marine Corps remains committed to being the best stewards of scarce public funds.

We maintain a longstanding tradition in Congress as the Department of Defense's penny-pinchers. Our institutionalized culture of frugality positions us as the best value for the defense dollar. For approximately 8.5 percent of the annual defense budget, the Marine Corps provides the nation 31 percent of its ground operating forces, 12 percent of its fixed-wing tactical aircraft, and 19 percent of its attack helicopters.

This year's budget submission was framed by my force service level priorities. We will, number one, continue to provide the best trained and equipped Marine units to Afghanistan. Two, rebalance our Corps and posture it for the future. Three, better educate and train our Marines to succeed in increasingly complex environments. And four, finally, keep faith with our Marines, our sailors, and our families. While these priorities will guide our long-term plan for the Marine Corps, there are nonetheless pressing issues facing our Corps today that concern me, issues for which I ask Congress's continued assistance in solving.

Our equipment abroad and at home stations has been heavily taxed in the nearly 10 years of constant combat operations. The price tag for reset is $10.6 billion of which $3.1 billion has been requested in fiscal year 2011 and $2.5 billion is being sought in fiscal year 2012. The remaining $5 billion bill will be needed upon the completion of our mission in Afghanistan.

The F–35B STOVL [Short Take Off and Vertical Landing] Joint Strike Fighter is vital to our ability to conduct expeditionary operations. Continued funding and support from Congress for this program is of utmost importance. During the next 2 years of F–35B scrutiny, I will be personally involved with the program and closely supervising it as the commandant of the Marine Corps.

Both the Secretary of Defense and the Secretary of the Navy have reaffirmed the necessity of the Marine Corps' amphibious assault mission. We must develop an affordable and capable amphibious combat vehicle to project Marines from sea, to land, in permissive, uncertain and hostile environments. I ask for your support to reach this goal.

To ensure that the Marine Corps remains a relevant force with the capacity and capability to respond to the demands of the future security environment, we recently conducted a detailed and internally driven force structure review. The results of this effort provide America a strategically mobile middleweight force optimized for forward presence and rapid crisis response.

As we look to the future of the Marine Corps, it is committed to finding ways to be more energy efficient. Since 2009, we have aggressively pursued energy-efficient capabilities that will make Marine units more energy self-sufficient, increase our combat effectiveness, and protect our lives.

Two weeks ago, I signed our new bases-to-battlefield energy planning guidance, which sets goals and metrics in a plan to implement just that. Finally, I would like to comment on the impact the current continuing resolution has had on our operations and programs.

As of today, $565 million in military construction contracts have not been awarded. $2.4 billion of MILCON [Military Construction] is at risk for the remainder of the year for the Marine Corps. These projects impact the lives of Marines, the local economies of the communities around our bases and stations, and are projected to generate over 63,000 jobs from the Carolinas to Hawaii.

If the continuing resolution extends through the entire fiscal year, 13 bachelor enlisted quarters, totaling 5,000 affected spaces, will not be built, thus stymieing our BEQ [Bachelor Enlisted Quarters] modernization efforts. These 13 bachelor enlisted quarters will allow eight infantry battalions to move out of 50-year-old Cold War barracks. Finally, a continuing resolution could prove catastrophic to our procurement accounts, resulting in a loss of almost a third of our procurement budget.

Lastly, you have my promise that in these challenging times ahead, the Marine Corps will only ask for what it needs, not what it might want. We will make the hard decisions before coming to Congress and we will redouble our efforts toward our traditional culture of frugality. As has been the case for over 235 years, your Marine Corps stands ready to respond when the nation calls whoever the President may direct.

Once again, I thank each of you for your continued support. I ask that my written testimony be submitted for the record. And I am prepared to answer your questions, Mr. Chairman.

[The prepared statement of General Amos can be found in the Appendix on page 123.]

The CHAIRMAN. Thank you, General.

Thank you to each of you. Just a couple of things on the C.R. If that had been taken care of last year on regular order, we wouldn't even be discussing it now, but it is what is. And I know we're, all of the members on this committee in strong support of getting this work finished up.

In the process of the C.R., the appropriators and the leadership have separated out the defense and they are working to bring that to a resolution and then all the other issues will be dealt with in one large omnibus package. But the defense, we are trying to finish up that appropriation bill. And I know every week that goes by, it causes more problems. So, hopefully we can get that wrapped up quickly.

General, I just returned. Mr. Reyes and Mr. Kline and myself went to Afghanistan. I know other members of the committee have just returned over the last break from Afghanistan, and I was very impressed with the morale of the Marines down at Marja and in the south down there with the job that they have done.

And those young captains were so excited to show us what they were doing and what they had accomplished, and I was really impressed by their attitude, by their professionalism, and by the way that they are carrying out their responsibilities.

And it was just—it was a great experience for me. And I saw a lot of progress from a year-and-a-half ago to now, when the Marines had just gotten to Camp Leatherneck were just starting to move out to where, now, they have freed up most of that area and done an outstanding job.

The concern I have and I mentioned it in my opening statement, the out-years Department of the Navy budget plans for the Marine Corps end strength of 182,000 personnel. However, the Marine Corps force structure assessment just released states a requirement for an end strength 5,000 personnel over that amount. What is your out-year budgeting strategy for adding back the additional $500 million required to accommodate an additional 5,000 personnel?

General AMOS. Congressman, that—as you recall that sits out there in year 2015 and 2016, is when the budget was adjusted and it was 10,000 a year, that was the drawdown. That was proposed at the time. Now there is recognition within the Department of Defense that it is not 20,000.

What I have asked our leadership to allow me to meter down that manpower to avoid reductions in forces and keep faith—my last priority, keep faith with my families and sailors and our Marines. So, yet to be seen precisely how that drawdown will take place.

The Secretary of Defense and the Secretary of the Navy have assured me that it will be conditions-based. In other words, it is designed to be post-Afghanistan when the Marines are out of Afghanistan. So, based on that, there will probably be some adjustments as we move in to POM [Program Objective Memorandum] 2013 and POM 2014 as we work those budgets.

So, right now, we don't have as you note, we don't have the solution to that 5,000 yet. But we will be working that as we build the 2013 budget and as we build the 2014 budget, sir.

The CHAIRMAN. I understand it is very difficult for us to look out a year, especially when we haven't even finished up last year's work. So, it is difficult. But I have heard also that that is conditions-based. And we will just take care of this 1 year at a time as best we can.

On the SSBNX [Next-generation Ballistic Missile Submarine] program, the Navy has determined that designing an *Ohio*-class ballistic missile replacement submarine with 16 missile tubes is more affordable than designing it for the current missile requirement of 20 missile tubes per submarine.

You know, one of the things I am really concerned about is we have just eliminated the EFV. We have eliminated most of what we had planned for in the F–22s. When I first came here, we had out the B2 from a 130 to 20 and there have been a lot of programs started. And the excuse for eliminating the EFV is because now we can't afford it.

Well, I don't know when we determine that, because we have been working on it for 20 years. What my concern is now on this

submarine program, is that 20 years from now, are we—I mean, if you look at it right now and realistically look at the budget, we are not going to be able to afford it even at this reduced number of 16 silos.

Are we? Or do you feel that that will be affordable with all the other things that are needed for the Navy?

Secretary MABUS. Mr. Chairman, as we have looked forward, as you know, the *Ohio*-class replacement, we have to start building in 2019 to go on patrol in 2029, its first patrol. So what we are doing today is trying to come up with the best R&D, the best design that we can and to get the cost into a manageable range.

We have taken a billion dollars per boat out within the last year and we are looking for another half billion per boat. And the reason for that is twofold—one is to give us the best deterrent capability, because the *Ohio* class and its replacement are the most survivable legs of the nuclear triad. But it is also to keep from hollowing out our fleet, as we start to build these replacement submarines, because they do take such a large part of our shipbuilding budget, and to show what that will do in our long-range plans.

We have—one of the things that I have committed to and I think we stuck to is to be very realistic in terms of how much something will cost. How much we can anticipate the—a range that we can anticipate that Congress will provide for shipbuilding and to work within those means.

But I do think that the *Ohio*-class replacement that we are designing will be, well, it is absolutely necessary and we need to make it affordable so that we can both have that deterrence and also have the rest of the fleet that we are going to need in the next 20, 30, 40 years.

The CHAIRMAN. I think we are in on an agreement on the need. What my concern is that somewhere down the line, I mean, one of the ways we got the billion dollar saving is just cut it from 20 to 16 tubes. We cut the capability of the ship to save money. And that makes me a little nervous about how we are going to be able to really provide all of our needs. It is just across the board I see our defense needs being driven by budgetary concerns rather than to meet potential crises that might confront us at some point down the line.

Secretary MABUS. The number of tubes designed in today for the *Ohio*-class replacement meets every contingency that we know of today. It meets every targeting design that we will be tasked with.

We also—as technology changes we are able to reduce the number of those submarines from 14 to 12 because now we are—we will be building a life of a hull reactor so that there won't be the need to pull two submarines at a time out for a refueling. They would be able to stay on patrol for their entire lifetimes without refueling. So, as the technology changes, we will absolutely meet the needs, but try to do it within the fiscal realities that we confront.

The CHAIRMAN. Thank you. Ranking Member Smith.

Mr. SMITH. Thank you, Mr. Chairman. I certainly appreciate the difficulties of operating under a C.R. and the 2011 budget. And to share the Chairman's concerns, I want to make sure we go forward. It is worth pointing out that the House did in fact pass a 2011 defense appropriations bill. Also worth pointing out, actually, that the

Senate, on more than one occasion, had a defense and appropriations bills as well. But the filibuster is a very powerful tool to stop things from happening.

One of the things that I am committed to, this whole committee is committed to is working together across party lines to get something done. But certainly the House fulfilled its obligation and we are trying to get the appropriations bill done still. We are going to work together to make that happen.

And also I want to say I was in Afghanistan at the end of November and was very, very impressed with what the Marine Corps has accomplished. We were taken down to Helmand Province, walked to a village down there that you know a mere matter of months before no one could have walked through safely and we were able to do that, meet with the village leaders down there. The Marine Corps has done a fabulous job you know taking back territory and making a real difference and at a very high cost as well, which we are all aware—so, we thank you for your leadership and we thank all the Marines in Helmand for their incredible service to our country and moving that forward.

On the budget question, I think I share the Chairman's concerns you know broadly going forward how are we going to meet the requirements that are out there? One thing that I hope that you all would do, and everyone working on the Department of Defense issues on this point forward, is go back and look at the requirements very closely. I think that is really the key to making a fit within the budget.

You know what are the requirements that have been there for a long, long time and are just still sort of there because they have always been there? And what are the real requirements in the 21st century for what we are going to need to meet our national security needs? I think that is going to be a big part of the challenge, to make sure that we can fund what we need to fund by making sure that we are not funding things that we don't need to fund.

Those are some tough questions that I think the people—you know you three are certainly the most qualified people out there to answer those questions as are others in the DOD. I think we are going to need to take a hard look at that on all sides of this equation. So, I hope we will do that.

I want to thank you also for your kind words on behalf of Congresswoman Giffords. We appreciate that. She is getting better every day. And we are really looking forward to the day on this committee when she comes back. She is a valuable member of this committee, and she will be back soon, back working on those issues. So, I appreciate that.

Also, I am going to ask you a couple of questions that her staff has given me about issues that she is concerned about, and then I have just one question of my own.

As you know, Congresswoman Giffords is a leader on alternative energy and any energy efficient issues across all of government but particularly within the DOD. And the Navy and the Marine Corps have been just outstanding leaders on this issue.

On a previous hearing, we discussed a little bit the Marine Corps operating base and to figure out a way to better use solar power so that they can reduce their fuel consumption. And in reducing

their fuel consumption, reduce the number of shipments that had to be made. And every time, anyone has to drive, they are at risk of IEDs [Improvised Explosive Devices] so reducing that doesn't just save energy and money, it actually saves lives, and we appreciate that leadership.

And then, of course, we also have the Super Hornet that flew with the 50–50 mix of biofuels. I had to call it the Green Hornet. The name was just out there. It was very easy and very clever. So, we really appreciate your leadership and those issues.

A couple of specific questions, how scalable is all of this? Because I think that is one of the blocks that stops people from fully embracing alternative energy and energy efficiency. It is like, yes, there is a good idea here, a good idea there. But what does it really mean? How much does it really save?

I am a true believer, as is Congresswoman Giffords, that if we do this and do this aggressively it is very scalable. It can save us an enormous amount of money. But can you give us some idea of what—where you think this can go? How far can we go using alternative fuels? And, Secretary Mabus, if you would start off, it would be great.

Secretary MABUS. I think it is very scalable, Congressman. I believe that we will reach our goal of at least 50 percent alternative energy or non-fossil fuel energy, both afloat and ashore, by 2020. You mentioned the Marines, you know General Amos has signed out his plan to aggressively move these things forward into the combat zone. We import fuel more than any single thing into Afghanistan.

As you pointed out, we save money by producing energy on site. We save lives, because Marines are not guarding fuel convoys. And we free up Marines to do what they were sent there to do, which is fight or engage or rebuild.

On the Navy side, we have looked at two things, one is energy efficiencies; simply driving down the amount of energy that we use. You know things like hull coatings and voyage planning tools, things like that. We have also launched our first hybrid ship and we are going to do more in terms of hybrid drives, using electric drives for lower speeds.

And those—the *Makin Island*, our first hybrid ship, in its maiden voyage from Mississippi around South America to California saved almost $2 million in fuel cost. And so, we believe that is very scalable.

As you said, we have flown the F/A–18 and certified it on a 50–50 blend of biofuel. And we have also certified our helicopters. We have certified our swift boats and we are in the process of certifying our large service combatants on biofuels.

We believe that as the market increases, particularly from the Navy and Marine Corps, that prices are coming down. We are seeing that happening already today. And, that infrastructure will be built to support this. So, we think that it is absolutely scalable and not only scalable but absolutely necessary for our national security.

Mr. SMITH. Great. Gentlemen, do you have anything you wish to add?

Admiral ROUGHEAD. Yes, sir. I agree with the Secretary. Two years ago, when we established Task Force Energy in the Navy, we

started looking at where we could go and that led to the Green Hornet and to taking our inventory and putting it on alternative fuels. I have been very pleased with what I have seen. My recent updates indicate to me that it is scalable, that costs are coming down.

I also believe that there is an expanding interest out in the commercial sector which is going to be critical and I think will be imperative, and that will contribute to bringing these costs down.

We are continuing to press forward with the objectives that the Secretary has laid out, and I am encouraged by what I see. But I am also encouraged by the energy that our people are putting into this. And I think the cultural change is equally as important as some of the technical things that we see coming along.

Mr. SMITH. That is terrific.

General AMOS. Congressman, the CNO talked about cultural change and that is—I think that is really the hinge point probably for all services certainly within mine. At the lowest level—if you can get the young captains and the corporals excited about not having to carry extra batteries up into the mountains on patrol, such as in India Company 3rd Battalion 5th Marines up in Sangin who have been on a pretty tough fight for the last 4 months. They went for 90 days just recharging their batteries that we would normally resupply on an almost daily basis, just using their solar roll-up blankets that they had, to the point where they built their combat outposts and strung out all their stuff and then realized they liked it better than having generators run and having to haul water and having to haul fuel up there and then batteries resupply. So, it is a culture change for us. It is catching on.

Two Fridays ago, I sat with a Marine colonel that had a Black Engineer of the Year award and he was the award winner from Albany. And he was bragging about this new methane gas energy generation capability that they have at Albany. And they are using the trash in the dump and using all the land fill and then harvesting out the methane to run the generators. But we have been doing that at Miramar now for several years, but he has taken it to the next step.

He has captured the exhaust and the heat generated by this generator that is run on methane gas to develop steam and provide heat for the base. So, it is a culture change. I think we are not there yet, but I am very, very encouraged. And my sense is that probably all of our services are about ready to kind of jump off the edge of this thing. So, I am very encouraged by it.

Mr. SMITH. Terrific. Thank you. One question, and you can submit it for the record to my staff. You mentioned the other services—that was the last question—was how the different services are cooperating on this? Because everywhere I go—you know Army, Navy, Marine, Air Force—everyone's got sort of creative ideas. I wanted—I am curious what sort of synergy is going on so that you are learning from each other as you go and not duplicating. So if you could just have your staff submit something, both to my office and Congresswoman Giffords' office, that would be great.

[The information referred to can be found in the Appendix on page 155.]

Mr. SMITH. The only question that I had was on something you have mentioned in your testimony about how we changed now the aircraft carrier groups; you are reducing the air wings and the associated staff. There are 11 aircraft carriers and they are going down to 9 strike groups and air wings. And the staff and I are not quite clear on exactly how that is going to work or what impact that might have on your capability and how you feel about how it is going to play out. We understand the budget savings, want to make sure it can still work to fully support those 11 aircraft carriers.

Admiral ROUGHEAD. Yes, sir. I think a lot of the questions that have risen over taking out structure in the Navy really gets to some of the headquarters elements that we are talking about. As I have looked across the Navy and looked at how we were overseeing the operational forces, quite frankly, in my opinion, we had too much overhead structure. That structure tends to be more senior and, therefore, more expensive.

But if you look at our ability to still field the 10 carrier air wings, that is there. What we have done is in the submarine community, the destroyer community and the aviation community, we have taken out overhead, headquarters, senior people so that we could get more junior sailors back at sea in positions that really make a difference.

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

The CHAIRMAN. Thank you. Mr. Bartlett.

Mr. BARTLETT. Thank you. It has all the characteristics of a perfect storm. There is general agreement that the world has now reached that point that the United States reached 40 years ago, that is the peak oil where you have reached the maximum ability to produce oil.

This happens at just the time that the industrialized world is struggling to recover from a recession and demanding more oil. The developing world led by China and India are demanding hugely increased amounts of oil. There is now escalating unrest in the Arab world where most of the world's oil reserves are.

And a couple of weeks ago, WikiLeaks indicated that Saudi Arabia has 40 percent less oil reserves than they were claiming. That is probably true of most of the OPEC [Organization of the Petroleum Exporting Countries] countries that we believe increased their projected reserves so that they could pump more oil. And all of this is happening at the time that the world has quite clearly reached its maximum ability to produce oil. We are not going to produce more than about 84, 85 million barrels a day.

What is the world's response to this? The leadership in our country seems largely unaware of these challenges. We have only 2 percent of the world's oil. We use 25 percent of the world's oil and we are buying reserves nowhere in the world.

China is now very aggressively buying oil reserves all over the world. Why would they do that? In today's market place, there is no advantage to owning the reserves, because you can go to the global oil auction and buy all the oil that you can afford, whether or not you have reserves in your country. We buy 25 percent of the world's oil. We have only 2 percent of the world's reserves of oil.

There is only one reason that I could think of that you would want to own oil reserves and that is that the time will come when you are not going to be willing to share those reserves with the rest of the world.

If that is China's goal, then they need to be able to protect the sea lanes. Just a bit ago, they fielded a very sophisticated anti-ship missile. We are struggling to develop defenses against that.

Just quite recently we saw their J–20, very large fighter. There is a suggestion that it really wasn't designed as a fighter aircraft. It was designed to release wave-skimming, supersonic anti-ship cruise missiles. What do you make of this confluence of events and what contingency plans are you pursuing?

Secretary MABUS. Congressman, on the energy question, I think you made the point about not relying on fossil fuels and particularly imported fossil fuels more eloquently than I ever could. What we are doing is trying to move as rapidly as possible, the Navy and the Marine Corps, off dependence on fossil fuels, move them to American-based alternative fuels, both for expeditionary purposes or afloat purposes and for basing purposes.

We have a goal and we are going to meet it of use—of having at least half the Navy and Marine Corps total energy coming from non-fossil fuel sources by the year 2020.

We absolutely think that it is a matter of national security, of energy independence that we not be dependent on this. It is also simple finances. Every time the cost of oil goes up a dollar a barrel, it costs us $31 million. So, if oil goes up $30 a barrel, you are talking about spending an additional billion dollars just on fuel.

The Navy has always been a leader in terms of changing the types of fuel that we use. We went from sail to coal in the 1850s, from coal to oil in the early part of the 20th century; then, we pioneered nuclear in the 1950s, and we are going to do that again. That is our plans, and it is because we need a hedge against exactly what you were talking about to maintain our warfighting capabilities.

I would like for the CNO to talk about the specific operational things that we are doing about the other part of the question.

Admiral ROUGHEAD. Yes, sir. And, thank you for the question. And I echo the Secretary's comments on—in what really is behind our energy initiatives, it really is an operational issue and less a technical issue for me. I mean, it is really about how we operate and how unencumbered we can be if we get off the foreign oil.

With regard to the capabilities that are being fielded, you cited China; but quite frankly, many of those capabilities tend to proliferate today more than they have in the past. So, as I look at what we as a Navy must be able to do, it really has a global view and not just about China, but in all areas.

As we look at capabilities that are being developed as we have over the years, we look at what are the counters to those, what are the strengths that we as a Navy have and we amplify on those strengths and we address those areas that we know we want to pursue counters to.

I think in the area of anti-submarine warfare, for example, which is one that is—submarines are proliferating globally. There is no better anti-submarine warfare weapon than the *Virginia*-class sub-

marine. And that is why we want to get to two a year this year. If the C.R. is lifted, we can do that. But that is hugely critical.

We have made significant investments in ballistic missile defense, increasing the number of ships in our inventory up to 41 by the end of this defense plan.

We also have restructured ourselves within the Navy. We have recreated the U.S. 10th Fleet to go after areas of electronic warfare, electronic attack and cyber warfare.

And so, what we have done is we have re-imagined the future. We have reinvented ourselves to be able to address those challenges that are likely to be occurring in the years ahead. Thank you.

The CHAIRMAN. Thank you. Mr. Reyes.

Mr. REYES. Thank you, Mr. Chairman. Gentlemen, welcome and thank you for service. I have two main areas that I would like for you to address in the 5 minutes allotted to me. As we talked the last couple of days about the possibility of a no-fly zone over Libya and the ability to enforce that, and there are a couple of options.

NATO [North Atlantic Treaty Organization] has been mentioned. The United Nations authority is the other. When we are talking about the constraints, the uptempo and all the things that impact our Navy today, the Navy would be the only option to be able to impose that no-fly zone over a place like Libya. Am I correct?

Admiral ROUGHEAD. That would depend, Mr. Reyes, on basing rights, over flight rights. But to your point, we in the Navy don't have to worry about those, because we come from the sea. We don't ask permission where we put our airfields. We put them where they are needed. So, we are a very good option for that. But there are other factors that I think leadership would have to take into account.

Mr. REYES. Well, my point being—and that—and it goes to the question that the Ranking Member talked about in terms of going to nine carrier wings versus the 10. When we have unexpected emergencies or situations that come up, will—in your mind, will we be able to handle those kinds of things given the fact that we have these worldwide commitments and, basically, the Navy would be the best option in terms of being able to project that capability?

Admiral ROUGHEAD. Yes, sir. We are. Today, we have four aircraft carriers deployed. Two more are underway. And what we do with the fleet is we have it so that it is always forward and that we can move those carriers very quickly from one region to the other. And that is the beauty of how we have designed our fleet response plan.

So, I feel very comfortable with that. I also believe that what we have put in place with respect to our strike fighter force, the service life extension on the airplanes, the procurement of some additional E and F model Hornets and then moving to the Joint Strike Fighter that the Air Force that we have, particularly when we coupled with the Marine Corps and their Hornet force and what will also be a Joint Strike Fighter force that we will be well positioned for the future.

Mr. REYES. Okay. Thank you, Admiral. General, I have one question. And, again, I was as impressed with the change in conditions in Southern Afghanistan particularly in the area where the Ma-

rines where, we were wondering where they are going to be able to take it back. But one of the—we heard a very moving story about an IED attack on one of the—one of the units and I guess it was the convoy commander that got hit the hardest on there. But clearly, one of the big issues which also affects the Army is the traumatic brain injury. Can you address specifically in terms of the Marine Corps the kinds of programs or what you are doing to address TBI [Traumatic Brain Injury]?

General AMOS. Congressman, I would be happy to. This has been evolutionary and I know that you are close to General Croley when I was the assistant commandant of the Marine Corps. We worked for—both General Croley and I worked for 2 years in earnest trying to capitalize on all of the latest technology as far as being able to determine what is traumatic brain injury, what is it, what are the effects of that on that mass inside that skull.

We have come a long way since 2003 when, quite honestly, nobody was even talking about TBI. In a nutshell, today, we recognize it, we understand some of it, we don't understand all of it, but we have taken lessons learned from the National Football League, worked very closely with University of California, Los Angeles, the head of traumatic brain injury out there, Dr. David Hovda and using that as—and bringing in great minds across the country that understand this.

We built about 2 years ago—about a year-and-a-half ago what we call a concussive protocol. And what that means is recognition first of all that a concussive event of any kind that either knocks a Marine down, perhaps, or throws him up against the wall, or worse yet, he is standing 5 meters away from his buddy that steps on a pressure plated IED that goes off, all that has a great effect on the brain. Each brain is different. It is affected different.

So what we have done now using this protocol is we have brought every single Marine, and it has happened to every single soldier now that this happens to in Afghanistan. You enter this protocol. In other words, you have the event. It is registered. You come back to your combat outpost, forward operating base, wherever you are. You see the corpsman, medic in the case of the Army. The next person is the doctor if there is one available.

Depending on the extent of the injuries, we will fly our Marines from our forward operating base or combat outpost in the Leatherneck and they start this procedure where we do an exam of the head. There is a physical examination and then there is a cognitive test, a series of cognitive test over days. And depending how you—whether you were knocked out, depending on how feel, depending on how you look, with regards to the examination, dictates what the next step is.

But in a nutshell, this is the—what we have discovered is the brain needs to be rested after a concussive event. The very best thing you can do is take the brain and put it at rest. In that case, just keep it in the combat outpost, kept it at the forward operation base or fly back to a resuscitative—not a resuscitative, but a care unit which we have established at the Leatherneck.

And then depending on how long you were knocked out or how severe it is, it dictates how long it is before you go outside the wire again. You could conceivably never leave what we call the wire of

the combat outpost again. In our case, we have what is known as "three strikes you are in," which means on the third concussive event, you are not going anywhere. You are not going on patrol anymore. You are not leaving the wire.

So, these are things we are doing. We have set up the organization at Leatherneck which examines Marines and helps them with rehabilitation. The final thing, Congressman, is that we are in the process now of deploying an MRI [Magnetic Resonance Imaging] into Camp Leatherneck. That should happen this year and that will then give the local folks an opportunity to examine the brain and then send that information digitally back to the United States of America for analysis.

So, great recognition that is real. We are doing something about it. I think a concussive protocol will probably save mental lives down the road yet to be seen.

The CHAIRMAN. Thank you.

Mr. REYES. Thanks.

The CHAIRMAN. Mr. Akin.

Mr. AKIN. Thank you, Mr. Chairman, and thank you, our witnesses here this morning.

First of all, Admiral Roughead, the brief that you gave, I believe, was 2 or 3 weeks ago in the SCIF [Secure Compartmented Information Facility] was tremendously helpful. It was fast paced, but you covered a lot of territory and maybe quieted a lot of fears in certain people relative to naval capabilities and some of the new threats. That was a very helpful briefing.

And also, General Amos, thank you for taking time to review the EFV decision that you had worked through. I still have some reservations as you know. We will probably have a committee hearing about it just to try to look into that. But I appreciate your availability and your candor in saying this is what we are trying to do.

And as you know, Mr. Secretary, and General Amos, we are—part of our job is to say, "Wait a minute. We think you guys are being too good of soldiers" in terms of maybe being too tough on the budget, and there may be sometimes where we need to push back. We have tried to do that, members of this committee making the case that the overall national budget problem can't be fixed by cuts to defense and that that may be very unwise.

Certainly, the number of 288 ships that we are the same place we were in 1916 is not something that gives us a lot of sense of peace here. And you have heard me complain before that the more that you can include us in the process and help us to go to bat for you, particularly, General Amos, in terms of your reset necessity because of having had all this equipment deployed for so long, we want to try to help you in that regard.

Help us to help you in giving us as much heads up as you are making different decisions and things are going along instead of catching us. And you know, that has been my continuous complaint, and I repeat it too much. But all three of your availability, we are very appreciative.

We are supposed to know something about the political situation of what is going on and we, as you know, the House did pass an appropriations bill because we understand the pressure that you

are under. However, we are not the only players in this game and so far, that hasn't gone anywhere.

My recommendation is that you prepare just as Secretary and a number of you listed off—I forget who has made the list today—but you listed off some of the things where you need transfer authority. If we are continuing on this continued resolution approach, I think it would be good to have the second arrow and that would put together the most important transfer authority requirements that you need so that we can go to bat and if we have to include those in the—we can't do it in this little short continued resolution, as I understand it, because the bus has left the station.

But we may well be back at another one of these Band-Aid type things. And if we do have the key transfer authority things that you need, it may allow us to try to help you. You might think that there are a couple of—particularly a certain subcommittee chairman is a pain in the rear for complaining about you making decisions and not telling us ahead of time, but we are also, in the other hand, fighting in your behalf.

And we are trying to be a team player and a help, and we may be able to get some of those key transfer things through even if we don't have the appropriations piece fixed because we are in a period of tremendous budget instability as you know. The case that we have been making as a member of the Budget Committee, if you take a look at the simple numbers, our revenues are 2.2 trillion. Maybe you know this. Maybe you don't.

Two point two trillion, that is how much money comes in, and our entitlements plus debt service is 2.2 trillion. So we can zero defense and it doesn't solve the problem. And so we are making that case that we have to deal with this other budget problem aside from trying to continuing to whack defense and to run a Navy at the 1916 level. So help us to help you, but do help us by giving us this—the most important transfer authority pieces that you need. That was—so that was really all I had, unless you want to respond, I have a few seconds left here so——

Secretary MABUS. Thank you, Congressman. And just to respond very quickly on a couple of issues. One is it is not just transfer authority that we are lacking. It is new START Authority. That is what is really going to hamper so much on ship construction, for example, and you pointed out that we are, as the CNO said, 288 ships the lowest since 1916. But if we build our 5-year and then 10-year shipbuilding plan, we will get to around 325 ships in the early 2020.

So we will pass the 313 floor, and we will go up to the mid-320s in the early 2020s, but we won't be able to do that absent the New START Authority to build the second *Virginia*-class submarine, the two Aegis-class destroyers, the mobile landing platform. So I would add that.

The CHAIRMAN. Thank you.

Mr. AKIN. Thank you.

The CHAIRMAN. Sanchez.

Ms. SANCHEZ. Thank you, Mr. Chairman, and, gentlemen, thank you once again for being before our committee. Secretary Mabus, February of last year, the Department of Defense took up what I believe is a commendable step in reversing the ban that prohibits

women from being on Navy submarines. And as you probably know, I have been a strong advocate to allow women to fulfill all the positions currently available in our military, and I hope more of that happens.

So, Secretary, can you provide our committee with an update now, a year later, how that is going and if it is being successful and what more do you need. Do you need anything from us to ensure that that goes well?

Secretary MABUS. Well, thank you, and I share that that women should be absolutely integrated into all parts of the Navy in, particularly, the submarine community. We are moving forward the first group of women, are in nuclear power school and in submarine training, preparing to go on board our ballistic missile submarines and our guided missile submarines at the—late this year is the best estimate that we have.

The level of volunteers that when we made this announcement from both the Naval Academy and ROTC programs around the country was simply astounding. And the quality of the young women that are going through these—this program heading for our submarines is as high as can be imagined. Now we are also moving laterally some Supply Corps officers to be department heads on submarines and act as mentors for these new submariners, and that is also coming along.

And finally, we notified Congress in December of our intent to begin do design work on our attack submarines so that women could also be integrated into those. But we think that at this point, it is going very, very smoothly.

Ms. SANCHEZ. Great. That is great to hear. I wanted to give the opportunity to one of our members who is sitting very close to you—that would be Mrs. Hanabusa because she represents Hawaii, which, you know, the Navy and Marines are very important to. She sits on the, what we call, the bottom row, which means she probably never gets to ask a question very often. I don't know with the rest of my time if the gentlelady from Hawaii would have some questions for you.

Mrs. HANABUSA. Mr. Chair, is that acceptable? Thank you.

Thank you, gentlemen. I would like to understand something, which is—and I hope I am not overstepping Congressman Bordallo's question. But in the whole concept of the Guam situation, I noticed that there is reference to the fact that the budget request includes $33 million intended to move to other agencies to mitigate the infrastructure and socioeconomic impacts of Guam associated with the move of the Marines.

Can you explain to me exactly what the concern is that $33 million would have to be diverted for that specific purpose?

Secretary MABUS. One of the keys to the Guam strategy is one Guam and one government here that we are a total all of government solution and not just the Defense Department moving toward that. That was the rationale for moving that because other agencies would have a more direct interest and ability to do some of things that will need to be done to make the Guam move go forward.

Mrs. HANABUSA. So do you sense that there is going to be some resistance or concern raised by the people of Guam of this move

and if that is why the almost a proactive action of taking steps to ensure that it is—that you are addressing various types of social issues before the move?

Secretary MABUS. We have been working very closely with the government of Guam and with the people of Guam. We have had a lot of public input before the environmental impacts. Statement Record of Decision was signed last fall. The governor of Guam is here now and has been meeting with the Department of Defense and Department of Navy officials about this.

My Under Secretary, Bob Work, has recently returned from his fifth or sixth trip to Guam and we are endeavoring to work very closely to meet any cultural concerns, any concerns of the people of Guam have as this move proceeds.

Mrs. HANABUSA. Thank you.

The CHAIRMAN. Thank you.

Mrs. HANABUSA. Thank you.

The CHAIRMAN. Mr. Forbes.

Mr. FORBES. Thank you, Mr. Chairman.

General Amos, I wish I had the words to adequately thank you for what you have done for our Marine Corps and what our Marine Corps does every day for our country, but suffice to say, we appreciate it a great deal. And Admiral Roughead, I have known you for years, and I know your heart for and service to our Navy, and we thank you.

And, Mr. Secretary, thank you for being here today. One of my big concerns is when you look at the recent review by the Quadrennial Defense Review independent panel which as you know is a bipartisan panel made up of some very talented individuals that concerns you when you hear the word train wreck associated where they think we are headed with the recent QDR [Quadrennial Defense Review]. And they mentioned specifically the Navy and the need for us to grow the Navy.

And then it concerns me when we see the Secretary of Defense coming in as he did last year talking about the shipbuilding plan and saying that the out-years of the shipbuilding plan are simply a fantasy. As you know, our shipbuilding plan, we are looking at how many ships we are going to have both short-term and down the road. It is a pretty simple calculus. It is the number of ships we plan to build added to the number that is going to be in our fleet less what we decommission.

OMB disagrees with the number of ships that as you know that the Navy projects, they think we are headed towards 270 and not in the 300s. But suffice that—just put that aside for a moment. I am concerned about the ships we have on our fleet and, specifically, the estimated lives of those vessels because as you know, two things have happened—one, we have used them a lot more than we anticipated; but, secondly, we—we know that we have had just in 2 fiscal years, fiscal year 2010 and—I mean, 2010 and 2012, we have had $567 million of deferred maintenance.

When will we receive a revised assessment showing not the initial estimated lives of these vessels, but the current estimated projections of the life expectancies of those vessels? Is that in the works at any time for us to get?

Secretary MABUS. Congressman, if I could address one little part of the earlier statements. In the QDR review that was conducted as you said by some very distinguished Americans looking at that, they came up with a number of ships for the Navy that was higher than our plans get us in the early 2020s, which is in the 325-ship range.

The major difference though is in the way they counted ships. We do not count certain support ships that they did count and if you count apples to apples in those two documents, we are very close to where they think we need to be in the early 2020s. In terms of maintenance, we are very concerned because as the CNO says the Navy resets in stride. Maintenance is our reset and we are concerned that all our ships reached the total lifespan that we expect of them.

The CNO has established for each class of ship an engineering-based maintenance plan so that they will reach the end of their life span. We are moving sailors from shore afloat, 2,200 sailors will go into the fleet for optimum manning of our ships so that more maintenance—more preventative maintenance will occur on a routine basis. Four hundred sailors are moving to the pier for intermediate maintenance so that as ships come in for their scheduled maintenance calls, those maintenance calls are more valuable and make more of a difference.

Mr. FORBES. Mr. Secretary, I don't want to interrupt you, but I am losing my time.

Secretary MABUS. But because of—because of these things that we are doing, we think that the ships are going to reach the end of their schedule of life. And it was a long answer and I apologize for that, but——

Mr. FORBES. I appreciate the answer. The other question I have for you is, we know that we have had officials from the Navy talking about doing a new force structure assessment to look at if that number is correct or not correct, and I am always concerned. We talked about getting strategy but limiting based on fiscal realities. How can we be confident that when that assessment is done we know the part of it, that strategy versus the part of it that is being driven simply by budgetary concerns?

Secretary MABUS. Well, Congressman, the force structure review of the number of Navy ships which is under way in which will be completed soon. We are basing it all on what we need, on strategy. But we are also very mindful that we need to be good stewards of the taxpayers' money, that we try to be—try to make use of every single dollar that we get so that we can get to the number of ships.

But this is a bottom-up strategic review that is not budget-driven but nation-driven.

Mr. FORBES. Thank you, Mr. Secretary.

The CHAIRMAN. Thank you.

Mr. McIntyre.

Mr. MCINTYRE. Thank you. Thanks to all three of you for your leadership. I have one question for each of you, so in my time allotted, I will try to get each of these questions done.

Mr. Secretary, I appreciate the opportunity to be with you and the Secretary of Agriculture. Last year when the biofuels agreement was signed at the Pentagon and also to be at the maiden

flight of the Green Hornet last year on Earth Day, on page 27 in your testimony, you mentioned your five energy goals in wanting to generate at least 50 percent of all energy from alternative sources.

With the F–35 coming online, is there an effort even now to make sure that it can operate on biofuels rather than waiting to have to convert it later?

Secretary MABUS. There—one of the requirements we have for any biofuel that we use is that it is a drop-in fuel, but it can be used in any engine that we have. So, the Green Hornet was not modified in any way to fly on biofuels. Same will be true for the F–35. The fuel will have to match that and so far, they all have.

Mr. MCINTYRE. All right. Great. Thank you, Sir.

General Amos, on page 14 of your posture report, you mentioned MARSOC [United States Marine Corps Special Operations Command] which of course has its headquarters in North Carolina. Has the Marine Corps resolved the issue of whether MARSOC personnel will remain within MARSOC in the special operations community for life or will they rotate back to conventional forces? And is this affecting the number in terms of your consideration for the growth of MARSOC?

General AMOS. Congressman, we have—when MARSOC is fully stood up after the—they get that latest tranche of 1,000 Marines, they will be about 3,600 strong. Of that 3,600, there is roughly about 815 what we call critical skill operators. And those are those Marines that have the ultimate in training. They are the real special operators. They will have their own military occupational specialty designation. They will remain in MARSOC, that 815 for more—unless they want to come out.

But they are going to remain in MARSOC probably for the length of their career. The other remaining 1,800 will rotate out of MARSOC. Those are communicators, those are UAV [Unmanned Aerial Vehicles] folks, those are CI HUMINT [Counterintelligence and Human Intelligence] folks. They will come out at 5-year marks, come back to the fleet Marine force and as a rising tide raise all boats in the Marine Corps while they spread their goodness that they learned in MARSOC.

So we have solved it and there is a portion that will remain in MARSOC for the remainder of their time in the Marine Corps.

Mr. MCINTYRE. Thank you, Sir. And Admiral Roughead, thank you for coming to Wilmington, North Carolina last fall for the commissioning of the USS *Gravely*, the Navy's newest destroyer named for the first African American admiral in the United States Navy.

I know that on page 7 of your testimony, you mentioned specifically reducing risk with regard to purchasing more F–18 Super Hornets. We understand in the next decade, there is an assessment of a shortage of about 65 aircraft later in this decade.

What risk do you see that can make the strike-fighter shortfall rise even higher in the years ahead and that we may have to complement this with the Super Hornet?

Admiral ROUGHEAD. Right now, sir, I think that we are in a very good position with the new Super Hornets that are in this budget. There are nine as, you know, pending on the hill. And then the

Service Life Extension Program that we have funded in this budget. I am very comfortable with the 35C that is coming along.

So, what we have been able to lay in and with the support of Congress, I think we have a good way forward on our strike fighter shortfall and, you know, we will continue to watch the development of the F–35C but I feel very good about how we position ourselves for that future.

Mr. MCINTYRE. All right. Thank you. Thank you, gentleman, very much. We got it all done. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. Mr. Miller.

Mr. MILLER. Thank you, Mr. Chairman. I have questions that I would like to submit for the record and because he is the last one to ask a question, I would like to yield my time to Mr. Palazzo.

The CHAIRMAN. The gentleman is recognized for 4 minutes and 50 seconds.

Mr. PALAZZO. Thank you, Mr. Chairman. Kind of caught me off guard there. But I appreciate it.

General Amos, there was recently an article in the Washington Times that stated that American combat troops will get sensitivity training directly on the battlefield about "don't ask/don't tell" instead of waiting until they returned to their home base in the United States.

The article goes on to say that no units will be exempt. In your professional military opinion, do you believe that performance sensitivity training of this nature in anticipation of the repeal of "don't ask/don't tell" while—is the best use of military resources at this time?

General AMOS. Congressman, we have about—we have done the math now. We have many units on the ground of Afghanistan that make the 20 thousand, we have turned several units over.

Those that are coming in have already—we have rushed to make sure that they had to train before they left. We estimate about 11 units of lieutenant colonel command battalions and squadrons that will need to get the training, what we call tier-three training while they are in Afghanistan.

Honestly, I am not concerned about that. I don't look at it as sensitivity training by the way. I look at it as leadership training. And my sense is that I have good lieutenant colonels, good company commanders, and they will know precisely when the optimum time is.

Not every Marine in combat is busy 24 hours a day, 7 days a week as, you know, from your former life. So, there will be opportunities where Marines will be able to sit down with their company commander, the company first sergeant or squadron commander and have that leadership training.

I don't think it will be onerous. I think it will be focused purely on leadership principles. Those things that are near and dear to the Marines. And I think actually it will be a lot easier to do in combat than we thought—than we might think otherwise.

Mr. PALAZZO. All right. Thank you, General. I yield back my time.

The CHAIRMAN. Thank you. Mr. Andrews.

Mr. ANDREWS. Thank you, Mr. Chairman. Mr. Secretary, welcome. It is good to see you. And on page 17 and 18 of your testi-

mony, you make reference to the Littoral Combat Ship dual-block procurement strategy which I agree I think has been very beneficial for the department and for the country.

And you indicate that you are projecting savings of approximately $1.9 billion over a 5-year period on the program and across to $40 million per ship. To what would you attribute those cost savings from the dual-block strategy? In other words, what is the wisdom of the strategy that generates those savings?

Secretary MABUS. A couple of things, one is competition. We have two variants, they competed against each other and drove the prices down significantly.

Secondly, is we have locked in those savings over the 5 years by signing firm fixed-price contracts for 10 of each variant, so, 20 ships.

Mr. ANDREWS. Right.

Secretary MABUS. If we, by sticking to those two things, competition and then doing firm fixed-price contracts, we know we are going to—we are going to get these savings and one of the things I think is important to point out is that while the average is—cost of these ships is of about $433 million apiece, the last ship—the last two ships will cost around $360 million apiece.

So, the cost of the ships as each ship is built is going down—as you go forward, we should see those savings continue.

Mr. ANDREWS. I appreciate that. I know this is not a decision at your pay grade but I think the Chairman would be interested as well in exploring why that same logic doesn't apply to the JSF [Joint Strike Fighter] engine program, if there are benefits to having two competitors that create those efficiencies over the long term, why doesn't that argument apply to the second engine?

Secretary MABUS. Well, if I could take a crack at my pay grade, we always planned to have two competitors for—you know, for the Littoral Combat Ship. And we have paid for all the engineering and R&D, the upfront calls that makes it different from the alternate engine in that—the alternate engine are the—engine was seen as one. And you would have to pay for all the development cost for a second engine. That is a huge difference.

Mr. ANDREWS. I do appreciate that although I would respectfully say that it looks like the savings over time would let you catch up and dwarf what it would cost to catch up with—the R&D outlay but thank you.

Let me move on to General Amos, his comments about the amphibious combat vehicle. And I guess, I see your comment that you are going to begin development of an affordable and capable ACV [Amphibious Combat Vehicle] to replace the EFV program.

When do you think that the alternative would be fieldable? I mean under optimal circumstance, we go from where we are sitting this afternoon to where we will be able to get those vessels in the water, what is the optimal timetable to make that happen?

General AMOS. There are two answers to that. One is the Commandant of the Marine Corps answer which is before I leave office 4 years—3½ years from now, we have a program of record, we will have steel, it will be a vehicle, and I will be able to drive that. That is my answer.

Mr. ANDREWS. I like that answer.

General AMOS. Okay. That is the answer. And I am trying to pressurize industry. I am trying to pressurize the acquisition professional folks, I want the word to get out. If I go by the standard acquisition timeline which in some cases got us to where we are today, it will be 2024.

So, you understand the exigency. And we will have a vehicle by the time I give up this job.

Mr. ANDREWS. What would you say the two or three main impediments are to you achieving that objective by the time you relinquish your job?

General AMOS. I think it is—first of all, I have, in this case, I am on reasonably solid ground because I have the full support of my Service Secretary, his acquisition professional, Sean Stackley, I have the full support of the Secretary of Defense and Dr. Ash Carter who is AT&L [Acquisition, Technology and Logistics].

So, they are all behind it and they are going—what we would really like to do is use the MRAP [Mine Resistant Ambush Protected] model. Understanding the MRAP model was probably too aggressive and—but it saved lives. But so—something probably that resembles the sense of urgency of the MRAP.

But probably a little bit more scheduled. And that is what we are going to do. We're going to try to move everything to the left.

Mr. ANDREWS. If I could just permit one moment of advertising. You guys did a terrific job on the MRAP without Chairman Hunter, former Chairman Skelton, former member Gene Taylor and some others that would have never happened, and for those who think Congress should not have a direct role in spending decisions here, I would refer you to the MRAP decision.

I yield back. I thank you for your answers.

The CHAIRMAN. Thank you, and I appreciate the gentleman's question. You are right, I am also interested, and my recollection is that the Department also planned for two engines originally in the JSF acquisition strategy.

And if we were a couple of years down the road, we will have already—we would have already paid for those acquisition costs as we did with the LCS. And then we would have the opportunity of realizing the competition going forward.

Thank you. Mr. Turner.

Mr. TURNER. Thank you, Mr. Chairman. I am a little taken aback by the answer of what the timeframe is on the EFV, I mean, I am very concerned about that—that whole decision process and the answer because in your answer is a timeframe that does not have anything to necessarily reflect on the threat.

I mean the time that you are finished being commandant doesn't really answer the question of when is it going to be needed. Here is my concern on the whole question of the EFV: We know that there is no funding in fiscal year 2012, both you and the Secretary have re-affirmed the requirements to conduct amphibious assault missions.

And you intend to develop, as you were describing something else, but the—as the Secretary was giving us the answer of his cuts when you have announced that there was going to be a cut with this vehicle. He says, "the most plausible scenario of power projections from the sea could be handled through a mix of existing air

and sea systems employed in new ways along with new vehicles—scenarios that do not require the exquisite features of the EFV."

Can you describe the analytical work Secretary Gates is referring to in his statement? And was there a report done? And the EFV also to my understanding that there were, there was the cessation of the testing phase. And I am a little worried about our ability to mine or ascertain the innovations with respect to the vehicle.

May I—if I can have your thoughts.

General AMOS. So on your last point, the acquisition decision memorandum was released about 2 or 3 weeks ago. Giving 60 days for the Secretary of the Navy to and the Department to take a look at how to shut down the current EFV line.

The forecast is, is to take the best of what is left in the testing for this fiscal year and continue on with that. Those decisions are working through right now. So, what you will do is you will capitalize between now and the end of this year—the end of the contract on those things that are probably going to be the most fruit-bearing as it relates to the EFV.

The whole concept is to take those technologies, those lessons learned and then apply them to the amphibious combat vehicle. So, the shutdown of the line is in work right now. But it will be done from my words, it will be done focused on those things that it ought to be focused on.

As it relates to the EFV and the elegance of the EFV, when those requirements were developed 2½ decades ago, we look at a threat and said it is 25 miles that is about the farthest a naval vessel will have to go over the horizon to be able to be out of harm's way.

Well, we know that that is not the case today. The enemy has not gotten any easier, has only gotten more lethal. So, as a superpower nation, we could either decide we are going to abrogate all that space—the sea space. And get out a thousand miles or we can take the technologies and capabilities we have—that we know we have right now and integrate them in the joint force and allow the naval vessels to come in to be able to disembark the Marines in the new amphibious combat vehicle.

That is the difference between the requirements the way they were viewed in the 1980s and the requirements as the way they are being viewed in 2011.

Mr. TURNER. As we have had a lot of discussions here today about the reductions, ways to find savings and everyone understanding that of course we have the cost pressures—we would certainly also need to recognize that we are a nation at war. And a lot of these cuts and reductions have an effect on our capabilities and on our men and women who are serving.

We have also the end-strength reductions that are planned and I am very concerned there. And I wanted to also give some of my time to Mr. Runyan who is down in front. But when you answer his question, could you also add any thoughts that you might have on how those end-strength reductions might affect dwell time. I think people are very concerned about the ratios of dwell time. You have a goal of one to three. And now, we are having difficulty I believe meeting—getting one to two.

And then I have a minute left but I would like to—I concede that Mr. Runyan for him to add additional question.

The CHAIRMAN. The gentleman is recognized for 1 minute.

Mr. RUNYAN. Thank you, Mr. Chairman. Thank you the gentleman from Ohio. Mr. Secretary Mabus and Admiral Roughead, according to recent reports the Aegis radar system is in the worst shape ever. Aegis is considered the world's best seagoing radar and combat system due to its power and adaptability.

But the training and maintenance are vital to maintain in the system's readiness out in the field, could you please discuss any—Aegis fleet readiness concerns that you have and how we can help keep the Aegis radar available—a viable option once fielded?

Admiral ROUGHEAD. Thank you very much, sir. And then, we have—similar to how we looked at all of our ship maintenance issues, we have looked at Aegis and also how that system and the radar integrates into some other complex areas.

There are some things that we are working on in a technical sense that gets to the interoperability in a much better and a more reliable way than what I would like to see. But then we have also taken a look at what training do we have to add into the pipeline. We are also adding people to those ships because as we went through an optimal manning initiative, we took people off of the ships which ultimately gets to equipment maintenance, equipment reliability.

So, those are just a couple of the things that we are working on.

Mr. RUNYAN. Thank you very much.

The CHAIRMAN. Thank you. It is the Chair's intent to call two more questioners and then a 5-minute recess. Mr. Conaway. Excuse me, Mr. Langevin.

Mr. LANGEVIN. Thank you, Mr. Chairman. And gentlemen, I want to thank each of you, Secretary Mabus, Admiral Roughead and General Amos for your testimony here today but most especially for all that you do to protect our nation.

Let me just say that I want to talk briefly about one of our nation's most vulnerable strategic—I am sorry—valuable strategic assets, our nuclear submarine force.

We have talked about the *Ohio* replacement in particular a bit this morning. Obviously, our submariners have maintained a constant vigilance over the past decades to provide us and our allies with strategic deterrence that remains unmatched by any other nation on the planet.

Their work in the silent service, obviously deserves our utmost respect and support. So, I believe it is absolutely vital that we remain committed to projects such as the *Ohio* Replacement Program.

I do, however, remain concerned that the large investments required for this critical system would be threatened by the needs of our surface fleet. Admiral Roughead, as I understand you recently stated support for moving the SSBN–X funding out of the Navy shipbuilding and conversion account.

Given our fiscal pressures, can you offer your vision of how that could be accomplished? And what legislative authority or permissions would be needed to change to be needed—to be changed or added? And in addition, the Navy's—Navy officials recently told committee staff that our programs—that the program's schedule

and cost present "huge challenges and tremendous risk," which we can all understand of course.

But what are your views of this program and your confidence level that the Navy will meet its cost and schedule goals given the critical importance of this program?

Admiral ROUGHEAD. Thank you very much, sir. And my comments relative to the SSBN–X dealt with the fact that submarine is being recapitalized in the decade of the 2020s and at that time, there are several things that are going to happen.

Many of the submarines and surface combatants that we built in the 1980s are going to be aging out and retiring from service during that decade. That is when we are starting to lay in the SSBN–X.

On top of that, we will be building the carriers on 5-year centers, so there will be likely two carriers built during that same time. We are also going to be refueling our aircraft carriers which—that is not inexpensive. And at that time also, we are going to be decommissioning some of the earlier *Nimitz*-class aircraft carriers.

So, in the 2020s you have a fairly significant demand being placed on the shipbuilding account and also on the shipbuilding infrastructure. And so I do believe that that has to be examined, the recapitalization of the service fleet, recapitalization of the ballistic missile submarine, with everything else going on, I believe requires some different thinking.

With regard to legislative authorities, my sense is it is really a question of how the budget is laid in for that. I am not sure that there is a legislative piece but I would leave that more to you to have a view of that.

I am very comfortable with where we are going with SSBN–X. The decision and the recommendation that I made with regard to the number of tubes—launch tubes are consistent with the new START treaty. They are consistent with the missions that I see that ship having to perform. And even though it may be characterized as a cost-cutting measure, I believe it sizes the ship for the missions it will perform.

We are not backing off on the stealth imperative that that ship must have because the last one of that class will be on patrol in 2080, and so we have to make sure that we have built in the stealth.

I am very comfortable with our knowledge of how we have been able to bring down the cost on *Virginia* to apply that to the SSBN–X and I am very positive about where we are headed with it.

Mr. LANGEVIN. Thank you, Admiral. Also on another topic that has been important to me—cyber security. For Secretary Mabus or Admiral Roughead, let me just talk about cyber security threats to our critical infrastructure in particular.

Let me just say that I have been relatively disappointed by the overall lack of response and commitment to this issue. And I firmly believe America is still vulnerable to a cyber attack against our electric grid which would obviously cause severe damage not only our critical infrastructure but to our economy and the welfare of our citizens.

We need to pay more attention to this issue, because of this concern last Congress, I posed a question to heads of Cyber Security

for all of our military services, and the question basically was if our civilian power systems are vulnerable, what is being done to protect our numerous military bases that rely on them to operate?

So, the answers though were disturbing but not surprising, specifically Vice Admiral Barry McCullough, head of the Navy's 10th Fleet testified, "These systems are very vulnerable to attack."

So, noting that much of the power and water systems for our naval bases are served by single sources that have only very limited backup capability, with an attack on our power station, when an attack on a power station potentially requires weeks or even months to recover from, our bases could face serious problems maintaining operational status. What is Navy doing to address these threats not only to its critical structure but also its secured and unsecured networks?

The CHAIRMAN. Gentleman's time has expired. Could you please give him those answers for the record please?

[The information referred to can be found in the Appendix on page 156.]

The CHAIRMAN. Mr. Conaway.

Mr. CONAWAY. Thank you, Mr. Chairman. Gentlemen, welcome. Glad you are here. Just an aside, I want to associate myself with Mr. Andrews' comments. I do believe competition works. It works for LCS, and I think it works across most of our platforms that—including the engine.

But I would like to turn my—our attention to something a whole lot more—less exciting and more mundane than the cyber attacks or anything else. It has to do with back office at the Navy and your inability to provide the taxpayers in this country with audited financial statements of the sums of money that we—that we give that we provide through the appropriation process.

I want to brag right upfront, the Marine Corps has taken the lead as they typically do on most things and that rumor has it that the September 30, 2011, financial statements will get audited by the Marine Corps and will pass an audit, that same issue needs to be spread across all branches, I have had this conversation with the Secretary and others as well.

Nothing in your written statements that I was able to see made reference to this issue at all. Without top-down leadership this ain't going to happen. I have met with the next layer below you guys, with Robert Hale and others, your counterparts for the Navy, in the Marine Corps and the Army and others, and they get it. And they are ready to go in and they are making efforts to do that but without you two saying make it happen, then this isn't going to happen.

I am also concerned, and I am going to appreciate your comments in reference to all of the cost savings and cuttings and redeployments and swaps around that is going on, I am concerned that you will cannibalize the resources needed to make this happen in efforts to redeploy those resources somewhere else.

And my final comment as to why this is important. Over and over and over this morning, you have talked to us about greening the military and how much that is going to "save us."

I have professional skepticism about that number. You cannot tell us today what the differential between what we would have

spent had we ignored the greening effort versus all we spent on this. You know, you can't tell me that delta and if we are going to eliminate the Expeditionary Fighting Vehicle because we "can't afford it," then taxpayers need to know what it is we are doing and why.

And so, give me some sense as to your commitments to making this happen sooner than later in terms of getting the back office in the shape that it can be audited.

Secretary MABUS. Congressman, as a former elected state auditor of Mississippi——

Mr. CONAWAY. Good. Glad to hear that.

Secretary MABUS [continuing]. I understand very well the importance of what you are talking about here. And I want to echo what you said about the Marine Corps. The Marines are very close to being able to do that. I want to also assure you that the entire Department of the Navy is taking this very seriously and working very hard on it.

We have two major issues. One is legacy systems just the sheer number of legacy systems that we have out there and the amount of effort that is taking to convert those. But we are doing it and we are also presenting our financial statements to you in GAAP [Generally Accepted Accounting Principles] form and in meeting the FASB [Financial Accounting Standards Board] regulations.

Secondly, one issue that we are working with GASB [Governmental Accounting Standards Board] on is coming up with an accurate cost for our assets. For example, USS *Enterprise* was built more than 50 years ago, in the 1960s.

Going back and finding an accurate cost at that time is just onerous. It is going to require a lot of time. It is going to require a lot of effort and we won't get much for it in the end. So, we are working to try to come up with a good cost-figure structure so that we can move to the audited financial statements.

If I could say one word on the energy initiatives, one is, over the next 5 years we can show absolutely that we are going to save $1.5 billion by——

Mr. CONAWAY. Yes, okay. I got you. But if we've got the accounting sytems in place that allows us to rely on those numbers, I would appreciate it. In the closing comments, I agree with you figuring out what Ft. Hood costs or a 50- or 60-year-old aircraft carrier. Don't let that be the reason why we don't audit and put in place the things you use every day to run your business.

And we are—I would be glad that I will be working with GASB to try to figure out a different standard for the only customer, the Federal government. I mean, the fixed asset side is important, but just don't let that be the enemy of what we need to get that done. And so I appreciate that.

I yield back. Thanks for your comments.

The CHAIRMAN. Thank you.

We will now take a 5-minute recess and reconvene at 1 minute to 12:00.

[Recess.]

The CHAIRMAN. The meeting will come to order.

Mr. Cooper.

Mr. COOPER. Thank you, Mr. Chairman.

First, I want to thank the Navy for allowing me to have a Navy fellow this year. John Krisciunas does an excellent job, but he should not be blamed for whatever inadequacies are in the following questions.

Three hundred and thirteen ships is a crude measure of capability. Is there a better way to help explain to the public platforms and missions so that they can know that our Navy is strong enough to do the job?

Admiral.

Admiral ROUGHEAD. Well, I think you are right onto it, sir, because too often we do look at the number. And as was mentioned by one of your colleagues earlier, we could drive to that number rather quickly, but it would be rather ineffective force.

I think it is important that we continue to have a dialogue with the American people about the types of capabilities that we need, but I think it also is on full display every day.

The four aircraft carriers that we have deployed now are there, flexible, and ready to respond particularly as we see events sweeping through the Middle East. In the Western Pacific and in the Arabian Gulf and in the Mediterranean are surface combatants who are providing ballistic missile defense capability.

Our submarines are forward-providing intelligence, surveillance, and reconnaissance. And so the real key is designing the type of force and the balance in the force that allows us to go forward as a nation to protect our interest to support and operate with our friends, allies, and partners. And that discussion is something that I really believe is necessary if we want to have a valid discussion about the Navy the nation needs.

Mr. COOPER. Secretary Mabus, when will the new force structure assessment be ready do you think?

Secretary MABUS. It would be ready very soon, and we will certainly get it to you. But to the CNO's point, to your point, new force structure assessment was built on capability needs and mission needs and not to reach a certain arbitrary number. We wanted to look at the mix of ships, the type of capabilities and the missions that we have been asked to do in order to come up with that force structure.

Mr. COOPER. It is about a lot more than hulls in the water.

Tell me, the CBO [Congressional Budget Office] may have outdated numbers, but they were estimating the Navy's needs to be about $19 billion a year in funding. And it is my understanding you are going to have to make do with something more like $15 billion a year. Is that doable?

Secretary MABUS. Well, if you look at our 5-year shipbuilding plan and then on out to 10 and then 30 years, one of the things we try to be very realistic about was how much money we could expect, and the average is $15 billion a year. For our shipbuilding needs, we think that that falls within the historic average. And it will give us the ships we need if we manage that money correctly and if we bring those ships in at the budget that they need to be brought in at.

Mr. COOPER. I thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

And I appreciate that question about the 313 versus the platforms performing the missions. However, it was pointed out I believe in the QDR that at some point numbers do count, too. So, it has to be a combination of both.

Mr. Coffman.

Mr. COFFMAN. Thank you, Mr. Chairman, and Admiral Roughead, Secretary Mabus, and General Amos. Thank you all for your service, long service to our country, distinguished service.

Secretary Mabus, I just want to clarify this. Under Secretary of Defense Carter's memo of February 16th, 2011, directs you within 60 days to provide a plan for the cancellation of the Expeditionary Fighting Vehicle including termination cost for the program and a plan to harvest technology from the program for future efforts.

How do you plan on maximizing the return on taxpayer dollars already invested in the EFV program in terms of technology harvested and lessons learned?

Secretary MABUS. Well, as you pointed out, Congressman, the directive tells us to harvest as much of those technologies as is possible. We would much prefer to use the monies remaining in the current contract to harvest that technology instead of paying termination fees.

And so the plan that we are coming up with to the very maximum extent possible gets those technologies so that we can use those and use the lessons learned as we develop the next amphibious assault vehicle, as General Amos has talked about earlier today.

Mr. COFFMAN. Well, Mr. Secretary, let me ask you a follow-up. How long do you anticipate it will be before you have a new amphibious tractor, a new EFV or add initial operating capability?

Secretary MABUS. I absolutely agree with my Commandant. I want to add one thing here. We can build a new tracked amphibious assault vehicle in a reasonable amount of time.

The EFV, had it been continued, would not have reached full operating capability until the mid 2020s. And we were going to have to do how to take mitigating steps in terms of upgrading our AAVs [Amphibious Assault Vehicles], slipping our AAVs, things like that, regardless of what amphibious assault vehicles that we were doing.

And I think we ought to be able to build these things a lot quicker than we have historically. And as I said, I absolutely trust my Commandant in his estimate.

Mr. COFFMAN. General Amos, do you have any response?

General AMOS. Sir, I think the benefit of—I mean, it is regretful that we spent $3.2 billion over the last 2½ decades, and that pains me. I won't belabor why I came to a decision that I want to recommend my Secretary. I won't do that here.

But here is the good news out of this thing. We will take a lot of that technology, a lot of the capabilities that have been developed for the EFV to include the remainder of this year.

And I have every expectation that we will be able to translate some, if not the large percentage of that, over to the amphibious combat vehicle. So it will not all be lost to include the remainder of the money, sir, for this year, sir.

Mr. COFFMAN. Thanks, General Amos.

Admiral Roughead, one of the Navy's core requirements is amphibious power projection. In a recent *Navy Times* article, you spoke about increasing the manning levels of our Navy's amphibious fleet to ensure these vessels are properly staffed to carry out their vital missions.

Given the personnel challenges, the problematic first deployment of the LPD–17 USS *San Antonio* and projection of 30 operational amphibious ships in fiscal year 2012, what other steps are you taking in terms of shipbuilding, operational readiness assessments, and service life extension to ensure that the nation retains its ability to project power with our amphibious fleet? How effective have efforts been to extend the service life of the USS *Nassau* and USS *Peleliu*?

Admiral ROUGHEAD. Well, thank you, sir.

A range of things we have underway talk about manning. We leaned out some of these headquarters so I could put more sailors on ships so that the ships can be properly maintained. Sailors have the time now to go off to school to be trained in the skills they are going to need.

We have moved maintenance back onto the waterfront. Again, that is also very helpful. We put in place a structured, engineered life cycle plan to get the ships to the end of their service life.

The other thing that we have done and what we have been forced into by this continuing resolution is some of those ships are getting ready to go into a midlife upgrade. And in order to make sure that I can get to that, those are some of the other—I am canceling other availabilities to try to hang on to that midlife. Because if we don't get to midlife, then we have a real issue. So, that is one aspect of it. So, there is a whole collection of activities that we have in place to make sure that our ships get to the end of their service life.

With regard to *Nassau* and *Peleliu*, I believe that we do have enough life to get them to where we now have them going out. But in any efforts to keep those ships for additional time, we will run into maintenance issues and then also the manpower piece because those sailors are destined to go on to the new force structure. So we have to keep that in mind as well.

I do believe that we are through the woods on the LPD–17 quality issues. We have worked that very hard. And I am pleased with how those ships are now starting to perform. But it is also a lesson to be learned that you don't take ships before they are finished and that you really make sure that you are leaning on the quality early on in the construction process.

Mr. COFFMAN. Thank you, Admiral Roughead.

Mr. Chairman, I yield back.

The CHAIRMAN. Thank you.

Mr. Courtney.

Mr. COURTNEY. Thank you, Mr. Chairman.

And thank you to the witnesses for your outstanding testimony today.

This past weekend, there was kind of a lot of news reports about the speech that was given by one of the senior senators in New England area who talked about communities have to be ready, "when the 2015 base realignment and closure process begins."

You know, someone who is now in the middle of—I think this is our third hearing on the cost efficiencies over the next 5 years. Secretary Gates, Admiral Mullen, I mean, none of the witnesses have ever uttered the word BRAC [Defense Base Closure and Realignment]. And I am just wondering if you could speak to whether the Navy or the Pentagon is preparing for new BRAC, has requested one or plans to before the completion of the 2005 round.

Secretary MABUS. No.

Mr. COURTNEY. Thank you.

And again for folks maybe who are in the room here, I think it is important to, again, reiterate that Congress authorizes the BRAC process.

Again, if you extrapolate from the 2005 BRAC round, the authorization occurred in 2002, so if we were really heading down that path, I mean, this really is the year that we would have to authorize it because it takes a while to get a commission up and running. And is that—I am just wondering if you could help sort of explain that process a bit.

Secretary MABUS. Congressman, first, I know of no effort to plan for one in the Navy, or in larger DOD. You are right that it is a long process. It takes a long time. In fact, we are still dealing with a lot of the issues that previous BRAC round surfaced and we continue to work those. And it is a long process, it is a congressionally mandated process. And I don't know of anything in the Navy or Marine Corps that we are looking at to process such as that.

Mr. COURTNEY. Thank you.

I think that answer is going to be very helpful. And again, just the budget which came over from the administration actually has about another $300 million this year just to, again, continue to implement the last round. So, we are far from done with that last process.

Admiral, the *New York Times* editorial page about 2 weeks ago had a piece about cost savings in the Pentagon. I think someone has got it stuck in their word processor a phrase that says that the *Virginia*-class program is a Cold War relic because that is how they referred to it in that piece.

And you talked earlier about the proliferation of submarines around the world, and I am just wondering if you could just address, again, the question of whether or not this really fits within the strategic needs of our country, the *Virginia*-class program.

Admiral ROUGHEAD. Absolutely, Mr. Courtney.

The *Virginia*-class submarine is not looking back, it looks forward. And it is the best submarine in the world today. Its capabilities are absolutely extraordinary. It is a submarine that is here. It is not something that we are thinking about.

We already have three of them homeported in Hawaii, out in the Pacific. And we have deployed the submarine. We are very pleased with the results. And it is, as I have said on many occasions, the best anti-submarine weapon that we have in our inventory and it is going to be relevant for a long time.

Mr. COURTNEY. Thank you. And I want to find that guy who writes those things because it just—and sit down with them because—and thank you for your answer.

You know, lastly, there has been some discussion about the second engine battle. I think this Committee could tell it looks like that beer commercial where one side yells "tastes great" and the other side says "less filling" in terms of the debate that is there.

But, you know, Admiral Roughead, you spoke very eloquently about the fact that you can't just look at the production cost, you also have to look at the life cycle cost in terms of, you know, having systems to repair and maintain two separate engine systems. And I was wondering if you could maybe reiterate that point again because I think it really is a very powerful argument about why we have to make a choice here.

Admiral ROUGHEAD. Yes, sir, I agree. I mean, if you introduce, in my opinion, the second engine you are talking about, dual logistics, dual training, dual maintenance, and that all comes into play.

The other thing for the Navy that is important and why we have long advocated the single engine is that when we go to sea in our aircraft carriers and our amphibious ships, we are rather space constrained.

And so, for the Navy, one variant where we have one training track for people, one logistic system and one maintenance system is the way that we must be because we can't afford to have the redundancy in the space that would drive. So, we have long advocated for the single engine. And for the Navy, I think that that is really the most effective cost approach that we can have.

The CHAIRMAN. Thank you.

And we have not had any discussions on the BRAC on our side or Mr. Smith and I have not discussed it and we are not contemplating it. So if that helps too.

Mr. Rigell.

Mr. RIGELL. Thank you, Mr. Chairman.

And Secretary Mabus, CNO Roughead, and Commandant Amos, from one American to another thank you very much for your distinguished service. I appreciate what you are doing to protect our young men and women and give them the best equipment and leadership when we put them in harm's way.

And I would like to direct our attention today to our East Coast carriers home porting of those carriers, the threats that may come against those carriers and mitigating those risks.

And can you tell us today are there times we have five in ports on the East Coast, or are times when there are fewer than five in port and as few as, say, two carriers in port at any one time?

Admiral ROUGHEAD. Yes sir, the carrier numbers fluctuate depending on how many are deployed, how many may be out for local operations, so the number of carriers in port at any given time varies.

Mr. RIGELL. And it can down to—we have had times then where we had as few as two and that even as few as one, correct, in port, and—?

Admiral ROUGHEAD. I have been in Norfolk, I was assigned there for a long time, and I have seen the piers empty at times.

Mr. RIGELL. That is correct, and so, there are times the ship's log would indicate that there have been zero carriers in port and for some period of time. So we know that the *Enterprise* is being de-

commissioned and the math is pretty simple. That is going to take us down to four.

Is it reasonable to assume then that as the number of carriers decreases on the East Coast that the number of days that—total days that our carriers are in port would also decrease, correct? Do you follow me on that logic?

Admiral ROUGHEAD. I am following you very well. Yes, sir.

Mr. RIGELL. Okay. So as the target for the terrorists, the number of targets decrease, the threat also decreases against that particular asset, would you agree with that Admiral?

Admiral ROUGHEAD. I think it is important to think not simply in terms of the ships alone but the infrastructure that is required to support them and to maintain them, to husband them.

So even though if an aircraft carrier is at sea it still has to come back in to perhaps have nuclear maintenance performed on it and right now Norfolk, Virginia, or the Hampton Roads area, an area of about 15-mile radius is the only place on the East Coast where we can do that.

Mr. RIGELL. Correct and that also is true, isn't it of our SSBNs? We have—you know, the operations on the east at King's Bay and also on the West Coast, just one, is that correct?

Admiral ROUGHEAD. That is not true when you get to the infrastructure, sir, because we have King's Bay, we can bring a nuclear ballistic submarine into Hampton Roads to do maintenance there, either at Newport News or at the shipyard. And then if we have to, we could also take it up to New London to have work done at Electric Boat up there.

So I have three sites on the East Coast where I can take care of our nuclear submarines. I have many sites on the East Coast where I can take care of our conventional ships. I currently have one place on the East Coast where I can maintain a nuclear aircraft carrier.

Mr. RIGELL. Because I read your testimony which I appreciate you sharing with us that it indicated that one of the risks is I guess the weather or environmental things like that. Given that carriers by their nature are mobile, I frankly don't place that much weight on that particular one, I am fully concerned about a terrorist attack.

But given the fact that we are already in a decreasing risk environment just by the sense that we are decreasing from five to four on the East Coast and also in this context of extraordinary times that we are in from a fiscal standpoint that with my business background I can see—unfortunately it is only going to increase and in a rather dramatic way.

The decisions that we make here, those who follow us 2, 4, 6, 8, 10 years down the road I think are going to continue to be under enormous pressure. So it is disconcerting to me to see that Mayport still is a path that is being considered by the Navy for an East Coast home port for one of our nuclear aircraft carriers.

Would you consider, if formally requested, an evaluation at this time which would recognize that our fiscal situation is very dynamic and would you reevaluate that decision just given the fact that there is enormous fiscal pressure on us?

Admiral ROUGHEAD. I think the going in argument from me, from the very beginning of the strategic dispersal was the fact that having the flexibility and especially looking to the South. We are going to see changes in shipping patterns when the Panama Canal expands, so the southern regions, I think, will become more dynamic and not less.

I believe as we look out into the future the approaches from the South Atlantic and particularly as Africa really becomes more central to international security affairs and resources. I think having the strategic dispersal, having the redundancy and being able to take care of these very capital ships that we have will be more and more important to us.

Mr. RIGELL. Admiral, I would say this, in a perfect environment I would be fully supportive of more strategic dispersal. I do, as I look at our SSBNs and see we really, in many ways, have not dispersed those assets, it is difficult to process why we are so committed in this extraordinary fiscal environment of dispersing the carriers.

I think once it gets there if there is one that is moved you are dealing with one carrier and then it goes to sea and all these assets—you know, all the infrastructure's there are for nothing in effect.

Admiral ROUGHEAD. I would say that infrastructure is available to give us the redundancy that we need in the carrier force but it is also maintenance capability that can be used on other ships of the Navy as well.

Mr. RIGELL. Thank you for your time.

The CHAIRMAN. Thank you.

Ms. Pingree.

Ms. PINGREE. Thank you, Mr. Chair.

And thank you to all of you for your perseverance today and your testimony, and your hard work on behalf of our nation. I appreciate it very much.

Secretary Mabus, thank you for our recent phone call and your assistance and advice on the shipyard in my state, Bath Iron Works. But I want to talk to you today a little bit about the Portsmouth Naval Shipyard which is in Portsmouth, New Hampshire, and Kittery, Maine.

I am pleased that the shipyard has continued to be a bright beacon in this hard economic time both locally and for the Navy with a delivery of the *Virginia*-class submarines, it is clear that the yard has a solid workload for years to come.

And I know, Secretary Mabus, that you visited the shipyard in 2009, thank you for that, and you saw firsthand the extensive projects that are underway and the positive advancements in efficiency in technology that the yard is taking on. I am concerned though about the continued modernizations at the yard that are necessary to ensure efficient production.

As you know the shipyard has received strong support from both state delegations for many years. The shipyard is an economic engine for the region which I know everyone says that about their local entity but even during this tough economic times the shipyard has been to keep hiring and that was due in large part because of the investments in efficiency that have been made over the years.

I welcome, along with everyone else, the important efforts to reduce spending, but all the upgrades at the Portsmouth Naval Shipyard have been a direct result of congressional requests, or earmarks, as we used to call them.

These upgrades not only have improved the work there but are also shared with other naval facilities for the betterment of the armed forces as a whole. While the possibility is there of including this funding in the Navy's base budget, so it won't be as reliant on member support, this was not addressed in the fiscal year 2012 budget.

Because of the current ban on placing such requests and the reduction of spending in the President's budget, how do you plan to address such important efficiency needs that are directly related to ensuring our national security and readiness?

Secretary MABUS. Congresswoman, first I want to agree with you wholeheartedly on the value of not only Portsmouth but our other public naval shipyards that we have. They perform an amazingly valuable service for the country and for the Navy.

As we looked at the budget and add the maintenance requirements that we had, we tried to balance it out in terms of risk and in terms of absolute necessity for that maintenance. One thing that I would point out that was specific to shipyards was when the civilian hiring freeze was put into effect.

Shipyards were exempt from that so that shipyards can continue to hire the skilled workers that they need to hire to meet these maintenance requirements. So I think we are addressing the needs in a fiscally constrained environment for not only Portsmouth but for the Navy.

Ms. PINGREE. So I guess what I would say is we have developed a habit over what I think is 30 or 40 years of the shipyard, which is an old yard but does great work, requiring upgrades and efficiency but receiving all their support through the earmarking process. And while I understand we are in a transition here of how we do our budgeting, and we are in need of making tremendous cuts, and you had to be respectful of that in your budgeting process.

I am concerned that the yard will not be able to do the high-quality work that the Navy depends on if the efficiency military construction doesn't continue.

So I know that is a hard thing for you to answer but, you know, just one more time I want to say that this is very important funding, it is not in the President's budget, and it is not clear to me how we are going to continue that necessary work.

Secretary MABUS. I do appreciate that and it is, as you pointed out a transition period between, from one source of funding to migrating to the Navy's base budget. That and a lot of other things we will be taking close looks at because I know that the CNO maintenance and the maintaining of the fleet is among his very highest priorities as it is with mine.

Ms. PINGREE. Great, well, I appreciate your answer, and I know you will continue to hear from my delegation and that in New Hampshire as well.

The CHAIRMAN. Thank you.

Mr. Young.

Mr. YOUNG. Thank you, Mr. Chairman.

And thank you, Admiral, and Mr. Secretary and General for being with us today. I appreciate your service to our country and for your stamina here today.

I want to follow up, Admiral Roughead, on your mentioning, in a general way, the Navy's efforts to restructure how it deals with Cyber. And I would if you could specifically speak to the current status of the Tenth Fleet and its interface with other entities within DOD or within the Department of the Navy with respect to Cyber and whether those relationships are now clarified.

Admiral ROUGHEAD. Yes, sir, and I have been very pleased with how Tenth Fleet has come on. It has only been in existence now for a little over a year but the way that we aligned Tenth Fleet as a direct reporting component to U.S. Cyber Command and then the joint task forces under the Tenth Fleet, it has proven to be very responsive and very nimble and has given us a global view and a global response quite frankly that we did not have in the past.

I think the command relationships are strong. I have empowered the Tenth Fleet commander budgetarily in ways that I have not done with other fleet commanders so they can move much more quickly. He can respond much more quickly.

I believe that the dialog and the interaction, and the coordination that takes place among the service components is also going very well. So I think it is—I am very pleased with what I see.

Mr. YOUNG. Thank you, Admiral.

This line of conversation came up. I represent a district in southeastern Indiana and there is a large naval base, Crane, the naval service warfare center just outside the boundaries of our district. There is a great electronic warfare component to the services they offer there but they are also quite skilled in some different cyber areas.

And we were discussing whether there are any training programs, First Doctrine, has that been developed in a joint way with respect to Cyber? And then training programs pursuant to that doctrine? And could you perhaps speak to that, and I am hopeful that Crane will find some role in assisting with that training too.

Admiral ROUGHEAD. Yes, sir. And I think that the other thing that we have put a lot of emphasis on is the human dimension to this. We created the information dominance core, bringing together all the skills, about 45,000 people. And we in the Navy have the center for information dominance, essentially the school house for all of the services down in the Pensacola area for the Navy.

The other thing that we have done and I think this is where it ties in to Crane, Indiana, is that the Space and Warfare Systems Command has now—it really couples in better to Tenth Fleet and Cyber and the N26 organization the director for information dominance on my staff in ways it has never been able to do before, and I think it has the potential to bring the centers, the labs, places like Crane into that environment where we can be much more effective and where we can train and where we can also use those assets more effectively.

Mr. YOUNG. Thank you, Admiral.

One final follow-up here. If our Navy and I have seen naval service and especially as a Marine myself, if our Navy and Marine Corps were to have a Pearl Harbor-level cyber attack, so to speak,

would we be able to reconstitute our capabilities in a short period of time or would—is there some methodology, some apparatus out there for us to continue operations, even after having absorbed such an attack?

Admiral ROUGHEAD. I think that was one of the reasons why we have restructured ourselves, why we have created the Tenth Fleet was to be able to respond and be much more nimble and agile.

I think it would be—you know, there is probably not one definition of a Pearl Harbor type Cyber attack. If it is regional clearly we have the redundancies globally to be able to respond to that. If it is at a particular system or network I believe that we have redundancies to be able to accommodate that.

Would there be effects? Absolutely. But that is why we put in place the structures that we have, and as you know this is really an evolving area, but I believe that how we posture ourselves organizationally and with our talent today and the young sailors that do this. They are absolutely eye-watering. I believe we are well positioned to go into the future.

Mr. YOUNG. Thanks so much.

The CHAIRMAN. Thank you.

Mrs. Davis.

Mrs. DAVIS. Thank you, Mr. Chairman.

And thank you to all of you for your service and for being here, and on a personal level for always being available for questions. It has been a really strong relationship, and I really am grateful for that.

I am not sure whether anyone has asked about this question but I wanted to be sure I had a chance to check in with you on it. I know that the Navy, like so many other services, has had a challenge really of filling the number of medical personnel that it deems necessary.

And I want to know what the current assessments are now for the Navy reserve and active duty component. How do you plan to meet a 100 percent of the need that you have by the end of the year?

Secretary MABUS. In terms of doctors and nurses we are—we think we will meet the 100 percent requirement, where we are continuing to have some issues with psychological health professionals.

And we are trying to cast as broad a net as possible, we are also doing incentives to come in to naval service for people like that and also incentives for remaining on active duty. But as you pointed out, the medical corps whether doctors, nurses, or on the battlefield, corpsmen constitutes one of the strongest links that we have to have to take care of our sailors and our Marines, and it is something that the CNO, the Commandant and I focus on in a very strong way on an enduring basis.

And one of the great strands in that link is Balboa and the work that they are doing with our wounded warriors on things like amputations and bringing our wounded warriors back into either the service or the civilian community whole and ready to move forward with their lives.

Mrs. DAVIS. It is an extraordinary job that is being done for those who have been severely wounded. I would certainly agree with that.

Our numbers would indicate that the reserve is coming close to the 100 percent but that the Navy really is still falling quite a bit below that, somewhere in the neighborhood of 55 percent. Are we just off in seeing that?

Admiral ROUGHEAD. I think we are challenged a bit on the reserve side because as you know many of the reserve is filled with people leaving active duty. We don't have as many people leaving active duty as we used so there are some challenges associated there.

But we really have stepped up the efforts in the active side. As the Secretary mentioned in the mental health area we are—right now we are about 139 short out of around 830 or so professionals, but I would submit that that is a national issue that we are dealing with as well in the area of mental health. That there is a greater demand than there is a supply for that, but we continue to work this very hard, and we will stay in very close touch with you and with your subcommittee on this.

Mrs. DAVIS. Can I turn to the issue of tuition quickly because perhaps you haven't had a chance to talk about that. I understand that the Navy has begun to track the tuition assistance programs to gain a better understanding of how sailors are actually using this money.

And you have distinguished between the profit and the not-for-profit schools. Could you go into a little bit of detail regarding how these degrees are being used and if there is a difference between the degrees obtained from these institutions?

Admiral ROUGHEAD. Ma'am, I will take the question on the differences in how we are using the degrees between profit and non-profit. And I would like to take that for the record if I could, but we have given our tuition assistance programs a very hard look as we look across all of the programs that are available to our sailors, whether it is the GI Bill and the Transferability Tuition Assistance and then MyCAA [Military Spouse Career Advancement Account Program] is another program to see how they all fit together.

[The information referred to can be found in the Appendix on page 155.]

Admiral ROUGHEAD. We did put in place some guidelines, some new guidelines on the tuition assistance. We want it to lead to something so we have wanted sailors to have a plan. We also put some restrictions on the first year of service because as a sailor comes in and checks into a command they may take on some educational obligations that then become a little difficult to deliver on because of the pressures of their jobs.

So we have put some more structure and some more guidelines in place.

Mrs. DAVIS. May I ask very quickly. General Amos, has the Marine Corps stopped giving tuition assistance and relying only on the GI plan now, understanding that the constraints that you are under, but is that—am I representing that correctly?

General AMOS. Ma'am, I am going to have to come back to you on that for the record as well. What I know today is there has been no change in the way that we have done business over the last 5 or 6 years but let me double-check, and I will get you an absolutely drop-dead accurate answer.

[The information referred to can be found in the Appendix on page 156.]

Mrs. DAVIS. Okay. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Mr. Hunter.

Mr. HUNTER. Thank you, Mr. Chairman.

And Admiral, General, and Mr. Secretary, I have a question that stems kind of from what is going on when it comes to Libya, when it comes to Bahrain, when it comes to Egypt, when it comes to all these places that we are in, and we are not completely thrilled with their form of government but we know that we have to be there anyway, and we are going to stay there as long as we have to, I guess you would say. But we would like to operate from a, you could say, a floating platform that Admiral Roughead mentioned it earlier.

We have airfields on aircraft carriers obviously that operate anywhere we want them to operate. And I think there is going to be a point in time that I can see in the next decade or so where we have to leave some of these places where we have been operating simply because we cannot support their type of government, whether it is a semi-tyrannical rule or a total dictatorship but they let us use their air.

So my questioning goes to shipbuilding, and I have been reading this, General Amos, the posture of the United States Marine Corps, it is a motivating document and a lot of talking there is about projecting force. So when it comes to the number of amphibs [Amphibious Assault Ships] your number is 33, that is the minimum. I believe you have 31 and you would like 38.

So as we are moving forward to this time or we might be having to pull off of our land basis that we have established at various places throughout the world which in my mind makes amphibs that much more important. Why are we operating at the bare minimum? That just doesn't seem to square with me, Mr. Secretary, maybe, or General or everybody, if you don't mind answering that. Thank you.

Secretary MABUS. Congressman, thank you, and I will give an overview and then ask General Amos to talk to it as well.

Several years ago the Commandant and the CNO sat down and looked at amphibious requirements and in an unconstrained environment 38 is the number, 33 can get the job done that the Marines need to get done in terms of getting two brigades across a beach in a contested environment.

We are building toward that 33. We are also building toward a little different mix of the 33, 11 big deck amphibs, LHAs [Amphibious Assault Ships] or LHRs [Amphibious Assault Ship Replacements], 11 of the LPDs [Amphibious Transport Docks], 11 of the LSDs [Dock Landing Ships] which will give us more flexibility in terms of how we set up amphibious ready groups and how we deploy a Marine expeditionary unit as you know so well from your previous service.

So I think that we have the number right, and what we have got to do is make sure that we get to those 33 and that we get to the right mix. I would like to say that in fiscal year 2016, the next

LHA that we are going to build, we are going back to putting a well deck in it to give the Marines more flexibility in how they move on and off those ships.

Mr. HUNTER. If I could be more pointed in my question, these requirements were written in 2009. These requirements were written before what has happened this year—happened obviously and we can all say that in December the world will look a lot different than it looked in January. I think we can all agree on that.

And that a lot of these places where there is civil unrest and that we might have to take action or not, or that we decide it is not worth propping up a regime simply to be there militarily, your requirement of 38 was done then.

So are we—I don't know, I am still not squaring it away, when you say 38 is a good number and we are working towards it, that was 2 years ago or a year-and-a-half ago, it could be 45 right now, and we could not have enough amphibs if we had to operate in two different theaters and do something because I know for a fact the operational number of amphibs that the Commandant is able to deploy at any given time is much less than that 33 number or the 31 number because of the rotation cycle and the maintenance cycle.

So his numbers are extremely low in what he could actually deploy in any given time. The numbers you are working on, sir, are old. Those are old numbers that don't take into account, I don't think what has happened just this year.

Could you respond to that please?

Secretary MABUS. Well, number one the way that the 33 number was arrived was in terms of operational, what is operational at any given time given the maintenance requirements and the other things that you talked about.

Number two though is coming up with this number. It was not coming up with a number in a static environment. It was under the terms of the last QDR in 2010 presented in early—presented in early 2010 for the 2009 QDR. It was not only two major combat operations at any given point but also other—the force was tested against three different scenarios which included two major combat operations at the same time, but also other things that were unforeseen, that you could have a situation occur in a specific area of the world, in addition to the major combat operation which I believe is what you are getting at.

And this force of 33 amphibs was tested against that, and we believe will meet those requirements.

Mr. HUNTER. Thank you, gentlemen, for your service, dedication and unwavering duty. We really appreciate it and so does the nation. We are all lucky to have you. Thank you.

The CHAIRMAN. And just for the record, we were talking about 33, like we have 33. My numbers are that we currently have or will have by 2012, 30. We won't have 33 if everything goes right until 2017.

Secretary MABUS. That is correct, Mr. Chairman.

The CHAIRMAN. Mrs. Hanabusa.

Mrs. HANABUSA. Thank you, Mr. Chairman, and thank you, gentlemen, for being here.

First of all I would like to thank Admiral Roughead, who I remember from Hawaii in your years there. And my first question is, is to the Admiral.

Admiral, you made an interesting comment in your testimony and it has to do with building tomorrow's Navy. I am curious. Other than the hardware, the 313 that we want to get to, and you did mention the whole concept of the cyber terrorism and battles with that. Do you have a view of what tomorrow's Navy is going to look like? You have been Chief of Navy now for 4 years.

What is your view of tomorrow's Navy that you want to build?

Admiral ROUGHEAD. Thank you for the question. And I would say that tomorrow's Navy still has to have the flexibility, the agility, and the ability to respond very quickly, the ability to operate far from the homeland in areas that are of great interest to us.

But I do believe that it also requires us to move into this cyber world, which is something that we are all coming to grips with, to be able to operate systems, particularly unmanned systems, not just in the air, which is what most tend to think of when we talk about unmanned systems. But I think there is a huge potential for unmanned underwater systems. And I think how those net together will be a shape of the force into the future.

I also look at the proliferation that is taking place and what are the systems that we will need there. There is no question in my mind that ballistic missiles will continue to proliferate, will continue to become more sophisticated and will threaten at longer ranges, which is why we in the Navy made the move to really make ballistic missile a core mission.

And the reason I mentioned that is because something that is in Hawaii that is absolutely key to that is the Pacific Missile Range Facility at Barking Sands. There is no other place on the planet where that type of work is done, where the developments of this future capability will have to continue to evolve.

So, you know, those are some of the things. And at the bottom of it all will be the young men and women that operate this very sophisticated force, because even when we talk about unmanned, it still requires a human being to direct it to make critical decisions and to operate it. And so, looking and attracting those young men and women who want to be part of this future Navy is something that is probably the most important thing that we will all be doing.

Mrs. HANABUSA. And thank you, Admiral. And I think one of the understated facts that it takes someone to come here to know is really the ability of the Navy to have stepped up in Afghanistan and Iraq. And I know that a lot of the—what we call—OCO [Overseas Contingency Operations] is attributed to all of you, and I think that we owe you a great deal of gratitude for that.

I also would like to know from the Secretary, one of the things that I have been intrigued by when we talk about the nuclear capabilities and the *Ohio* class and going from 14 to 12 and 22 capabilities. How is that really—for lack of a better description, how do you get that and the President's view of a nuclear-free weapon type of situation? How do we get those two things to work together? It just seems like we are talking about nuclear weapons and we are talking—and our President is saying we are going to work towards non-nuclear weapons.

So how do you do that?

Secretary MABUS. Well, for the current time being, we have a triad of deterrence, and our *Ohio*-class submarines provide one leg of that deterrence, and I think that it is a critical national mission today.

We hope to work toward a reduction in that. But until that day comes, I think, it is incumbent on us to not only have that capability, but for it to be credible, for it to be up-to-date, and for it to be very survivable.

Mrs. HANABUSA. One tube, what is that capable of doing? It just seems like 24 to 20. They may not mean that much of a difference. I mean, you are talking about nuclear weapons, aren't you?

Secretary MABUS. Yes, you are. But you are also talking about, in terms of, what the mission is and what the targets would be under consideration. And in terms of coming up with the number of tubes, we have looked particularly with the uniform service of what the requirements are, what the mission is for this submarine. And we feel confident that the number of tubes that we are laying in for the *Ohio*-class replacement will meet all the missions that we have.

Mrs. HANABUSA. Thank you.

The CHAIRMAN. Thank you.

Mrs. HANABUSA. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Jones.

Mr. JONES. Mr. Chairman, thank you very much.

Mr. Secretary, I see you sitting there beside Admiral Roughead and General Amos. What is your title?

Secretary MABUS. Secretary of the Navy, sir.

Mr. JONES. Secretary of the Navy. Okay.

In 1947, the National Security Act stated that we have four equal services and, in fact, it says the Marine Corps, Army, Navy, and Air Force as the four services given statutory missions. So I would assume in my mind that means they are equal.

You, many times—in the 16, 17 years I have been here, I have heard many times that we are—the Navy and Marine Corps are one fighting team. Would you agree with that statement—one fighting team?

Secretary MABUS. Yes, sir, one fighting team and one family.

Mr. JONES. Right, one family. Well, I am pleased to hear that because I, again—and I won't fight the Chairman and the previous Chairman who have been very supportive going back to—I believe in—that the family should carry one name and that name would obviously be Navy and Marine Corps.

I have another issue, and I would like to bring this up, but our time goes so quickly. But I can assure you that when—I hope you have been to see the Navy football team play since you have been Secretary of the Navy.

Secretary MABUS. I have. So far, they haven't lost when I have gone either.

Mr. JONES. Well, I am sure the Navy and Marine Corps loves to hear that, and I mean that sincerely.

Well, a few years ago, we were here on the weekend and the Navy was playing Notre Dame. And so for the first time, sitting in my office, I happen to observe that on one sleeve, it has the Navy

anchor. On the other sleeve, it has the Marine emblem of the globe and anchor. I guess, you have noticed that on the jerseys.

Secretary MABUS. Yes, sir.

Mr. JONES. Okay. Well, again, we will fight this. We had 423 cosponsors in the House last year, Pat Roberts had 80 senators and I made the statement, "You couldn't get 80 senators last year to agree there is a Santa Claus."

So we are going to take the same fight up this year. We believe that it is the right thing to do to share that the families are fully and clearly recognized as four separate fighting teams. And even though the Navy and Marine Corps are a family and we appreciate that, they should have—the coach of the team or the leader of the team should carry the name of both.

It is a tragedy when a Marine dies in this country. And I have a copy of a letter that when a Marine dies, he receives a letter from the Secretary of the Navy, Washington D.C., with the Navy flag, nothing in the condolence letter about the Marine Corps—nothing.

Yes, it does have in the first paragraph where it has the name of the Marine who was killed, that he was a Marine, but in the heading, the family's name in the heading does nothing about Marine Corps. So thank you for your precise answers. I appreciate that very much.

I want to go back to a point now. I have received letters from you, Mr. Secretary, and the new Commandant and previous Commandants about my concern about clearing the name of two pilots who were killed in Arizona. Nineteen Marines were killed when they were asked to do something they never should have been asked to do because the plane was not ready.

In the 1 minute I have left, I have a copy of the guidelines for the British Royal Air Force. If there is a plane crash, these are the guidelines that they try to follow. And I don't have the time, and you wouldn't have time enough to answer—to ask you but one question. I want to go to the part that deals with guide to the consideration of human failings. We call them human factors. They say human failings.

This is the question. I would like to know if you agree with this or not. I realize these are the British regulations and not yours or not ours. Maybe I should say it that way. "Only in cases where there is absolutely no doubt whatsoever should deceased aircrew be found negligent." Do you agree with that?

Secretary MABUS. Well, what I would agree with, Congressman, is that we should follow very carefully our regulations in terms of when we investigate an accident and the reports that come out of that.

Mr. JONES. Mr. Secretary, that is fine. But I would tell you that your rules and regulations, when dead men cannot speak for themselves and dead men were put in a plane that should not have been doing the procedure it was, then we need to follow what the British say, and I will repeat it again, "Only in cases where there is absolutely no doubt whatsoever should deceased aircrew be found negligent."

Thank you for your answer.

The CHAIRMAN. Thank you.

Mr. Larsen.

Mr. LARSEN. Thank you, Mr. Chairman.

Admiral Roughead, I think I am expecting a letter from you by Friday regarding the P–8 and so I—well, that is all I will say about it. You can thank me later. But with regards to Aegis and looking at some other issues on one of the other subcommittees I have—Strategic Forces, and of course as well as on the Seapower, can you discuss the Sea-based Missile Defense requirements for our surface combatants. I know they are still in review.

Has there been progress in determining what the requirements are for the Navy to meet the requirements of the Phased, Adaptive Approach and what kind of timeline are we seeing—what investment do we see in this budget and what kind of timeline do we see to meet those requirements?

Admiral ROUGHEAD. Yes, sir. Thank you.

We are moving forward on Phased, Adaptive Approach. And, in fact, the first ship and the first phase will be sailing this month to be part of the Phased, Adaptive Approach in Europe. We also have been maintaining another ship in the Mediterranean with ballistic missile defense capability.

I do believe that we have been able to settle on the number of ships that are required. And that is what really drives the request in this budget to ramp up the number of ships and then the number of interceptors.

Those ships are still going to be very busy, there is no question about that, through this 5-year plan that we have in place. But we have closed in and your support to get us to have the 41 BMD [Ballistic Missile Defense]-capable ships by the end of this FYDP [Future Years Defense Plan] is going to be very key to minimizing the stress on that BMD force.

Mr. LARSEN. Just a question on that. Is the Navy's plan to make these primarily BMD ships first or are these going to be on-call for that? That is—obviously, they can do everything a destroyer can do, but are we going to ask them to be BMD first?

Admiral ROUGHEAD. They will receive more extensive training in BMD. They will be heavily focused on BMD. We will make sure that they are exercised routinely in BMD. So that will be an overriding case.

But as you mentioned, these are multi-mission ships. They can do much more than that and, in fact, in this past week, the USS *Stout* which is the BMD ship in the Mediterranean is the ship that escorted the ferry that was carrying the Americans from Libya to Malta.

So we can't simply say they are BMD. We expect them to do more. They will do more. But they are going to be the BMD horses of the Navy.

Mr. LARSEN. Great. With regards to the Next Generation Jammer, do we have a timing on the fielding of that? I know the budget just starts putting money into it, but what is the timing on fielding to replace—do you have anything on that?

Admiral ROUGHEAD. I will get back to you on the exact timeline on that. But clearly, by the end of the decade, it is where we want to be with that—capabilities.

[The information referred to can be found in the Appendix on page 156.]

Mr. LARSEN. And that will be able to ship to the 35, sorry to the 18G.

Admiral ROUGHEAD. Absolutely. Yes, sir.

Mr. LARSEN. Yes. Yes.

And, Commandant, is the Marine Corps anticipating that the 35B will have electronic attack capability or is that going to be—I am not quite sure. Is that going to be all in the Navy now or as you move away from your EA–6Bs?

General AMOS. Congressman, we transitioned from the Prowlers to the F–35B. We will have a significant electronic warfare, electronic attack capability in that airplane resident just the way it is coming off the line. So it is pretty significant.

There is every expectation that they will take the Next Generation Jamming Pod that is being developed—or is developed now for the F–18G and more than likely—you know, or translate that to the F–35B. So it will be an electronic attack-capable airplane.

Mr. LARSEN. Okay. Okay. That is great. We have been tracking that—has been tracking that—this progress for a while.

Secretary Mabus, see you don't get off too easy, again, we are going to be discussing these issues of satellites and probably in Strategic Forces. But the Mobile User Objective System programs experienced significant challenges, have increased costs and schedule delays, and don't feel special. You can apply that to a lot of our satellite programs, something we have all been watching and trying to get on top of.

But it now appears to be on track for the first launch in 2011 this year. Do you have concerns about any capability gaps or have we looked at alternatives to fill those gaps until this is up, as well as any gaps once the first one is up until we get further buses launched?

Secretary MABUS. You are correct on all of these things. And the thing we are looking at to fill any capability gaps is commercial service on a commercial satellite to make sure that we don't have the gaps because this is such a critical component of everything that we do.

Mr. LARSEN. That is right.

Thank you, Mr. Chairman.

The CHAIRMAN. Secretary, Admiral, and General, thank you very much for your time here today and for your responsiveness. I am sure we will continue to work together as we go through the budget process.

This hearing is now adjourned.

[Whereupon, at 1:00 p.m., the committee was adjourned.]

# A P P E N D I X

March 1, 2011

**PREPARED STATEMENTS SUBMITTED FOR THE RECORD**

MARCH 1, 2011

NOT FOR PUBLICATION UNTIL
RELEASED BY THE HOUSE
ARMED SERVICES COMMITTEE

**STATEMENT OF**

**THE HONORABLE RAY MABUS**

**SECRETARY OF THE NAVY**

**BEFORE THE**

**HOUSE ARMED SERVICES COMMITTEE**

**ON**

**01 MARCH 2011**

NOT FOR PUBLICATION UNTIL
RELEASED BY THE HOUSE
ARMED SERVICES COMMITTEE

Chairman McKeon and Ranking Member Smith, I have the honor of appearing here today on behalf of the nearly 900,000 Sailors, Marines, and civilians that make up the Department of the Navy. I have appeared before this Committee on a number of occasions, and I am happy to be here again, along with the Chief of Naval Operations and the Commandant of the Marine Corps, to report on the readiness, posture, progress, and budgetary requests of the Department. We consider ourselves privileged to lead the dedicated men and women of the Department who are selflessly serving the United States all around the world.

Today, your Navy and Marine Corps are conducting missions across the full range of military operations. They are engaged in combat in Afghanistan, stability operations in Iraq, deterrence and ballistic missile defense in the Pacific, Arabian Gulf, and the Mediterranean, as well as humanitarian assistance and disaster relief operations across the globe. Our unmatched global reach, endurance, and presence continue to allow the Navy and Marine Corps – in partnership with our sister services – to secure and advance America's interests wherever challenges or crises have arisen, as well as operate forward to prevent crises from occurring. We remain the most formidable expeditionary fighting force the world has ever known, and with your continued support, the Navy and Marine Corps will continue to meet the multiplicity of threats that endanger international peace and security.

But today we are very concerned about the absence of a Defense Appropriations Bill for FY 2011 and the negative effects of operating under a continuing resolution for the

remainder of the year. We are equally concerned about passage of a bill that reduces the topline from the level requested in the FY 2011 President's budget. Either course of action significantly impacts the resources available to grow the fleet and jeopardizes recent efforts to restore and maintain readiness levels commensurate with the standards expected of the Navy and Marine Corps.

Without legislative action, limiting FY 2011 procurement accounts to FY 2010 levels will:

- Prevent start of construction of one *VIRGINIA*-class submarine to be built in Groton and Newport News which will break the existing Multi-year Contract.
- Prevent start of construction of one Mobile Landing Platform to be built in San Diego.
- Prevent start of construction of one or possibly both programmed *ARLEIGH BURKE*-class destroyers to be built in Bath and Pascagoula due to DDG 1000/DDG 51 swap language that prevents award of either ship unless both are authorized and appropriated.
- Preclude fourth and final increment of full funding for construction of CVN 78 (USS *GERALD FORD*) and advance procurement for CVN 79.
- Prevent procurement of two nuclear reactor cores for refueling of one aircraft carrier and one ballistic missile submarine, as well as delay increased funding for research and development of the *OHIO*-class replacement and replacement of two Moored Training Ships that provide half of the force's nuclear training capability.

- Prevent completion of one *ARLEIGH BURKE*-class modernization.
- Reduce Marine Corps procurement by $563 million. This would add to equipment shortfalls generated by 9 years of conflict and prevent equipment replacement or purchase of 4 H-1 helicopters, numerous LAVs, MTVRs, LVSRs; tech upgrades to counter IED jammers; communication and intelligence equipment; tactical fuel systems to power our vehicles and generators; engineering equipment to move ammo, gear and supplies; air conditioners and heaters to take care of Marines and sensitive gear; and EOD improvements to protect them.

Reductions to expected procurement levels will create additional stress on the force, as units in service pick up additional commitments to cover the seams created by fewer available platforms.

Likewise, fixing FY 2011 operations to FY 2010 levels has created a $4.6 billion shortfall in Navy and Marine Corps operations, maintenance, and training accounts. Faced with this prospect, the Department began efforts in January to mitigate the impacts of operating under the continuing resolution, which over the course of the Fiscal Year will cause us to:

- Reduce aircraft flight hours and ship steaming days, including a reduction of four non-deployed air wings' flight hours to minimal flight-safety levels.
- Cancel up to 29 of 85 Surface Ship availabilities.

- Defer maintenance on 70 aircraft and 290 aircraft engines, bringing the combined backlog of aviation maintenance close to one-year redlines.
- Defer 41 facilities maintenance projects and 89 new construction projects in Arizona, California, Florida, Georgia, Hawaii, Louisiana, Maryland, North Carolina, Rhode Island, South Carolina, Virginia, and Guam. These cuts equal an approximate 50 percent reduction and will eliminate, among many projects, dry dock certifications, bachelor quarters maintenance projects, repairs to Explosive Handling Wharves (EHW) at Bangor and Kings Bay that support ballistic missile operations, and modernization projects to support introduction of new training aircraft.

The combined effects of the continuing resolution will directly impact the strength of the industrial base and over 10,000 private sector jobs at shipyards, factories, and Navy and Marine Corps facilities across the country. The degradation or loss of perishable skill-sets within our workforce, including many nuclear workers, and the disruption to both our fleet and shore maintenance and modernization schedules will take three years to recover based on rotational schedules alone – and only at significantly greater cost than requested in the FY 2011 President's Budget.

Finally, there is almost a $600 million shortfall in Navy and Marine Corps manpower accounts. As a result of this shortfall, the Services must raid other accounts in order to meet payroll for the duration of the year. We are currently living within funding constraints by limiting or conducting short-notice permanent change of station moves;

however, this tactic places significant hardship on our military families and is not sustainable over the entire fiscal year.

We strongly request Congressional action to address the implications of the Continuing Resolution on our forces and our people by taking action to enact the FY 2011 President's Budget.

**Departmental Priorities**

As I testified last year, there are four imperatives I believe the Department of the Navy must address to maintain preeminence as a fighting force and successfully meet the challenges of the future. They are:

(1) *Taking care of our Sailors, Marines, civilians, and their families*

(2) *Treating energy as a strategic national security issue*

(3) *Creating acquisition excellence*

(4) *Continuing development and deployment of unmanned systems*

These priorities underpin every action of the Department, from supporting current operations to developing the current year's budget request, finding efficiencies within the Department, and preparing our Navy and Marine Corps for the future.

Fundamentally, it comes down to a question of resources, of ensuring that our people have what they need to do their jobs, ensuring the nation that the Navy and Marine Corps uses our fiscal and energy resources wisely, and ensuring that seapower, as a resource,

remains readily available to meet the nation's policy requirements and the orders of the Commander in Chief.

**Seapower: A Critical Strategic Enabler**

It is clear that we live in a time of sweeping change and an era of strategic realignment. The President has stated that we "must pursue a strategy of national renewal and global leadership—a strategy that rebuilds the foundation of American strength and influence." Seapower has always been a part of that foundation and will continue to be an indispensible asset to American leadership and economic strength in the global community of nations. American seapower, as it has done for generations, continues to guarantee freedom of navigation and international maritime trade, underpinning global economic stability and facilitating continued global economic growth. No other component of American military power is as flexible or adaptable as seapower. I see one of my primary responsibilities as Secretary to be ensuring continuation of this responsiveness, flexibility, and adaptability through the policies we adopt and in the ships, aircraft, and weapons systems that we build.

Maritime nations have many inherent strategic advantages. Naval forces operating in the open ocean provide an effective conventional deterrent to those who threaten regional stability or promote extremism. Strong expeditionary forces can swiftly respond to crises and make potential adversaries pause before committing hostile actions. But should

deterrence fail, our combat ready naval forces must be prepared to conduct sustained combat operations.

The Navy and Marine Corps are America's "Away Team." They exist primarily to protect our nation far from home and respond quickly to crises wherever and whenever they occur. Exploiting their inherent mobility and maneuverability at sea, naval forces gather information, perform surveillance of seaborne and airborne threats, defend regional partners, deter prospective adversaries, interdict weapons of mass destruction, disrupt terrorist networks, conduct humanitarian assistance and disaster relief, and support the work of American diplomacy. This variety of capabilities is a primary feature of seapower, and it provides the President and our Nation with unmatched flexibility to deter conflict and, if necessary, project power from the sea to defend U.S. national security interests. The ability to accomplish these tasks without placing a large presence ashore and absent concerns of sovereignty is absolutely critical in our world of increasingly sophisticated threats and growing geopolitical complexity.

It is for these reasons, and in order to improve global force projection capabilities that the Navy, Marine Corps, and Air Force are working on an Air Sea Battle (ASB) concept to improve joint capabilities and cooperation in addressing anti-access/area-denial challenges.

Unique in history, the blanket of maritime security and stability provided by American maritime power is the first to be used for the good of the whole world. But in order to

ensure continued American leadership in issues of maritime policy and security, we strongly recommend accession of the United States to the Convention on the Law of the Sea, an action that has been similarly and repeatedly recommended by multiple Secretaries of the Navy and Chiefs of Naval Operation. Accession by the United States would enhance stability of the navigational rights inherent to the Convention and would strengthen our bargaining position in international discussions of Arctic Policy and access to resources and sea lines of communication.

**Current Operations**

Over the past year, our forces have successfully navigated the world's growing complexity and have consistently demonstrated the utility, effectiveness, and flexibility of seapower and maritime forces.

Following completion of the Marines Corps' mission in Iraq, the primary operational focus of the Department has been supporting the war effort in Afghanistan. Over 30,000 Marines and Sailors are committed to the fight there, working all across the country, with the largest concentration operating as Regional Command Southwest (RC-SW) along the Helmand River Valley.

In my visits to the Marines on the ground throughout the year, I had the opportunity to look firsthand at the progress made by our increased presence in Helmand. In December, I visited three Forward Operating Bases (FOBs) with increasing levels of stability in

three separate districts of Helmand: Sangin, Marjah, and Nawa – or as the Marines put it, I went to look at where the fight is, where the fight was, and where there is no fight.

In Nawa, I saw a strong partnership between the local government, Afghan National Police, the Afghan National Army, and our Marines – who have built the capacity of their partners so that they may shortly assume responsibility for their own security. The district is very safe, and because of the success of the counter-insurgency effort, Nawa is growing in both political strength and economic activity.

In Marjah, after successful operations to clear it last spring, the markets are open, schools are being built, and a local government is working to build capacity. In my visit just three months ago, I personally walked the streets of Marjah to witness the progress, something that even in the summer of 2010 would have been unthinkable. Then, just stepping outside the gates of our forward operating base would have generated a pitched battle. Now, it brought out street vendors and men on motorbikes.

I also went to Sangin District near the Kajaki Dam in Northern Helmand, which has been a Taliban stronghold for years and for the past few months has been the main effort of the fight in Helmand. Our Marines in Sangin have been conducting intensive combat and security missions in support of the counterinsurgency strategy, and concurrently – even in the midst of the fight, have been testing new solar energy equipment to expand their operational reach. Together with their partners from the Afghan National Security

Forces, they have taken the fight to the Taliban and are facilitating the Afghan Government's reestablishment of local control.

Elsewhere across Central Command, the Navy has over 14,000 Sailors on the ground supporting joint and coalition efforts and another 10,000 Sailors at sea supporting combat operations, including from our carriers operating in the Indian Ocean, where we are launching approximately 30 percent of the strike or close air support missions that watch over our Marines and Soldiers on the ground in Afghanistan.

In addition to combat operations, the Navy and Marine Corps remain globally engaged in a host of other security and stability operations. On any given day, more than 72,000 Sailors and Marines are deployed and almost half of our 286 ships are underway, ready to respond where needed.

It was the Navy and Marine Corps that were the first on scene after both the devastating earthquake in Haiti and the summer's catastrophic floods in Pakistan. Within hours of the January 12th earthquake, both Navy and Marine Corps assets were en route to Haiti. A total of over 10,000 Sailors and Marines and 23 ships, including the carrier USS *CARL VINSON*, the *BATAAN* and *NASSAU* Amphibious Ready Groups, and the hospital ship USNS *COMFORT* ultimately participated in Operation Unified Response.

Halfway around the world, after Pakistan was struck by devastating August floods that impacted nearly a fifth of its population, helicopters from the USS *PELELIU* and the 15th

Marine Expeditionary Unit supported the Government of Pakistan through delivery of 2,000 tons of relief supplies and by contributing to the rescue of over 10,000 people. Later, the ships of the *KEARSARGE* Amphibious Ready Group deployed early to provide a continuous U.S. humanitarian presence.

In response to the Administration's strategic direction, the Navy is scaling up our ballistic missile defense (BMD) force and their deployments to enhance our deterrent posture, especially in the defense of Europe. Our multi-mission, BMD-capable, AEGIS cruisers and destroyers now routinely deploy to the Mediterranean and the Arabian Gulf, as well as the Western Pacific to extend our deterrent umbrella for our allies. I had the opportunity a few months ago to visit the destroyer USS *RAMAGE* after she completed her first BMD deployment, and I can assure you that the Sailors on these ships are some of the most professional and dedicated men and women in the country, and they are incredibly excited about their work. We appreciate Congress' continued support of the destroyer and cruiser modernization programs that are bringing additional BMD capability to the fleet.

Our growing BMD capability is complemented by our traditional sea-based, strategic nuclear deterrent centered upon our globally deployed and proficient ballistic missile submarine force.

In the Western Pacific, as an integral part of U.S. diplomatic actions, several times last year the USS *GEORGE WASHINGTON* sortied to the South China Sea and the Sea of

Japan in response to territorial disputes with North Korea and open North Korean provocation. In late November, after the North Korean artillery attacks on Yeonpyeong Island west of Inchon, the *GEORGE WASHINGTON* strike group conducted a training exercise with the South Korean Navy in order to demonstrate the continuing value and strength of our alliance.

We are also working to build regional capacity and resolve security issues of common international concern.

In support of our Maritime Strategy, both the Navy and Marine Corps routinely engage with nations all around the world to build capacity and forge stronger maritime partnerships. In the "Rim of the Pacific" or RIMPAC exercise, 32 ships, five submarines, and more than 170 aircraft from 14 nations participated in the world's largest multinational maritime exercise encompassing every aspect of traditional naval warfare.

Global Partnership Stations in Africa, South America, and the Pacific are training hundreds of Sailors, Marines, and Coast Guardsmen from dozens of nations and are bringing advanced medical and civil engineering assistance to those in need. The Africa Partnership Station alone has trained with 32 African and European partners since 2007. And between them, Pacific Partnership 2010 – conducted by the USNS *MERCY* – and Continuing Promise 2010 – conducted by the USS *IWO JIMA* – treated over 100,000 patients and conducted over 20 civil engineering projects.

In the Caribbean and South America, we continue to work with the Coast Guard-led Joint Interagency Task Force-South to synchronize forces from thirteen nations and interdict the flow of illegal narcotics into the United States. In 2010 naval forces contributed to the seizure of over 133.2 tons of cocaine, 3.2 tons of marijuana, 92 boats and aircraft, and $2.7 billion in drug revenue.

In the Gulf of Aden and western Indian Ocean, the Navy remains committed to counter-piracy efforts with approximately sixteen partner nations. Combined Task Force 151, in cooperation with forces from the EU, NATO, and other nations deploying individual units or task groups, is operating off of Yemen and in the Somali Basin to protect the safe passage of maritime commerce. Where our forces are located, pirate activity has fallen, but the areas involved are huge, and as Secretary of State Clinton said in April 2009, the solution to Somalia piracy lies largely with Somalia, through building its capacity to police itself and offering young pirates viable alternatives to that way of life. We are treating the symptoms of piracy, rather than its fundamental cause: Somalia's failure as a state. Despite the international community's commitment, piracy has both continued to increase and move further offshore, a measure of pirate resiliency and the strong economic incentives that underpin it. Nine of ten pirates captured are ultimately freed as there is often insufficient evidence or political will to prosecute them, or to incarcerate them after conviction. We strongly endorse additional international efforts to address these concerns.

**FY 2012 Budget Submission**

Over the past year, I have visited with thousands of Sailors and Marines stationed with our forward operating forces at sea and our combat forces in Afghanistan. I can report, based on both the direct observations I mentioned and from personal inputs from Joint and Combined commanders, that the quality of our Sailors and Marines is superb and we are continuing to protect America's interests abroad. But while we are prevailing today, we must also build the foundation for the Navy and Marine Corps of tomorrow.

During the development of the President's FY 2012 Budget submission our Navy and Marine Corps leadership team made numerous difficult tradeoffs to preserve current readiness while better posturing the Navy and Marine Corps for the challenges of the future. I believe that the result provides a balanced approach that will enable the Services we lead to successfully perform our assigned missions, even while setting a course for future success. It is important, however, to reiterate that the FY 2012 budget was developed based upon ultimate passage of the President's FY 2011 budget. If the continuing resolution now in place remains the de facto budget for the year, or if a Defense Appropriations Bill is passed that reduces the amounts requested in the FY 2011 President's Budget, the proposed FY 2012 budget will not be sufficient to recover from delays, cancellations, and mitigations we have been forced to put in place this year.

Over the past year, we have examined every aspect of what we do and how we do it in order to eliminate waste and move every resource possible toward operations and

successfully executing our missions now, and in the future. At the direction of the Secretary of Defense, in June 2010, the Services were formally asked to continue this process through an efficiencies review, which we developed through three complementary approaches; buying smarter, streamlining our organization and operations, and being more efficient in the way we use, produce, and acquire energy. This effort has had a substantial impact on our overall budget, allowing us to invest more in our core warfighting missions and enhance our acquisition plans. Savings were also derived from OSD-mandated, Defense-wide efficiencies.

Since the review began, the Department of the Navy has identified approximately $35 billion in self-generated efficiencies over the next five years. When DoD-wide efficiencies are factored in we will achieve $42 billion in savings. These savings will facilitate adding one guided-missile AEGIS destroyer, three T-AO(X) fleet oilers, and one T-AGOS ocean surveillance ship to our shipbuilding plan, which with our dual-block LCS strategy will increase the total number of ships in the FYDP from 50 to 56, including one JHSV to be built for the Army, an average of more than 11 ships per year. We were also able to accelerate a Mobile Landing Platform from FY 2015 to FY 2012 and increase R&D funding to support the accelerated procurement of the T-AO(X), and the development of the next amphibious dock-landing ship (LSD(X)).

The savings allowed additional investments in the Next Generation Jammer to provide greater protection for tactical aircraft, electronic warfare systems, ballistic missile sets, and the new air and missile defense radar that will equip our DDG-51 Flight III

destroyers. The savings allowed increased funding for a new generation of sea-borne unmanned strike and surveillance aircraft; and gave us the ability to buy additional F/A-18s and extend the service life of 150 aircraft as a hedge against more delays in the deployment of the F-35B, the Short Take-Off and Vertical Landing (STOVL) variant of the Joint Strike Fighter.

We addressed Marine Corps needs by increasing equipment funding for units in dwell and for repair and refurbishment of Marine equipment used in Iraq and Afghanistan. Based on heavy usage rates, we requested $2.5 billion for Marine reset in the FY12 OCO request, and estimate a $5 billion reset liability upon termination of the conflict in Afghanistan. We also added funding for fire and maneuver platforms, command and control capabilities, and intelligence, surveillance, and reconnaissance.

We found the $35 billion through a close and systematic review of our programs and by cutting excess capacity in our support establishment. Over the FYDP, with Congressional support we will reduce Navy manpower ashore and reassign over 6,000 personnel to operational missions at sea; use multi-year procurement and production efficiencies to save more than $1.1 billion on the purchase of new airborne surveillance, jamming, and fighter aircraft; and disestablish both Second Fleet and excess staffs for submarine, patrol aircraft, and destroyer squadrons plus one carrier strike group staff.

Programmatically, one of the most important efficiency efforts was the decision endorsed by Congress to pursue the new Littoral Combat Ship (LCS) through a dual-block buy

procurement strategy. Over the past years the message from Congress has been clear, we must build more battle force ships as affordably as we can, consistent with the statutory requirements laid out in the Weapons System Acquisition Reform Act of 2009. We heard that message clearly, and are grateful to the Administration for its support and to the many Members of Congress who worked with the Navy to make the LCS program an example of what can be done right when strict acquisition standards are laid out and enforced.

With an average cost of $440 million per ship, and with the cost reductions we have seen demonstrated on LCS 3 and 4, the Navy will save taxpayers approximately $1.9 billion in FY12-FY16. More importantly, the fact that prices were so dramatically reduced from the initial bids in 2009 will allow us to save an additional $1 billion – for a total of $2.9 billion – through the dual award of a ten-ship contract to each bidder. This plan is truly one that is good for the Navy, good for taxpayers, and good for the country.

At the recommendation of both the Commandant and myself, significant additional savings were also achieved by the Department of Defense through termination of the Expeditionary Fighting Vehicle (EFV) program. The nation absolutely must retain and rebuild an amphibious assault capability that will get Marines from ship to shore in a protected amphibious tracked vehicle ready for the fight. This is a core capability the Marine Corps must have. But the EFV is not the vehicle to do this. Conceived in the 1980s, the EFV was the previous generation's solution to a tactical problem that has since fundamentally changed. Just as importantly, the EFV's cost per unit would have eaten up

over half of the Corps' total procurement account and 90 percent of the Corps' vehicle-related operation and maintenance account; the requirements levied on the vehicle outstripped what could affordably be achieved.

We are committed to developing and fielding an effective, survivable and affordable amphibious capability that will meet the Corps' amphibious requirements. This will be done through upgrading existing vehicles, through service-life extensions, and by working with OSD and industry to go as fast as possible in the acquisition and contracting process to develop a successor program to the EFV, one that will meet today's requirements for this critical Marine Corps capability.

We are also closely overseeing the Joint Strike Fighter program. In particular, we are providing additional focused attention on the Marine Corps variant, the F-35B, which the Secretary of Defense has placed on a two-year probation. During this time, solutions to the unique F-35B technical issues will be engineered and assessed while production will be held to a minimum sustaining production rate of six aircraft per year in FY 2012 and FY 2013. This low-production rate is required to ensure continuity in the engineering workforce involved in the design and assembly of the F-35B at the prime contractor and key vendors without a loss in learning and to sustain the supplier base of F-35B unique parts. After this two-year period of focused F-35B scrutiny, an informed decision will be made about how to proceed with development and production of this variant, to include the potential for program cancellation.

I want to point out that it is only the F-35B (STOVL) variant that is on probation. The F-35C variant, which will be flown off of our aircraft carriers, is doing satisfactorily and will be procured by both the Navy and the Marine Corps.

The President's Budget request of $161 billion will maintain our commitment to take care of our people, build a strong R&D and industrial base, and grow a fleet capable of sustaining our preeminence as the world's most formidable expeditionary force. The FY 2012 request of $15 billion for contingency operations includes incremental costs to sustain operations, manpower, equipment and infrastructure repair as well as equipment replacement to support our operations in Afghanistan and elsewhere.

The FY 2012 President's Budget request includes funds for 10 Navy battle force ships, including

2 *VIRGINIA*-class submarines,

1 *ARLEIGH BURKE*-class destroyer,

1 Mobile Landing Platform ship,

1 Joint High Speed Vessel,

1 Amphibious Transport Dock Ship, and

4 Littoral Combat Ships.

In aviation, we have requested 223 aircraft in the FY 2012 baseline budget, including:

13 F-35 Joint Strike Fighters for both the Navy and Marine Corps,

24 MH-60R and

11 P-8As to replace the aging current ASW and maritime patrol squadrons,

18 MH-60S for logistics support,

1 KC-130J,

25 H-1 variant helicopters,

30 MV-22 tilt-rotor aircraft,

28 F/A-18E/F fighter/attack planes,

12 E/A-18G to continue replacing the veteran EA-6B,

5 E-2D Advanced Hawkeyes,

36 Joint Primary Aircraft Trainers for our student aviators, and

20 Unmanned Aircraft.

The FY 2012 President's Budget request also contains funding for the Navy Unmanned Combat Aerial System demonstration and continues development of the Broad Area Maritime Surveillance (BAMS) unmanned system.

The individual efficiency initiatives the Department has put in place will continue to further streamline our organizations and operations, will reshape and reduce both capacity and personnel associated with the Department's "tail," and will contribute to the dramatic transformation already underway in how the Department does its business. More importantly, they will sharpen the operating "tooth," free up critical resources for maintaining and accelerating our shipbuilding and aviation acquisition plan, maximize fleet capabilities, and help preserve a strong industrial base.

**Taking Care of Sailors, Marines, Civilians, and their Families**

The Navy and Marine Corps have continued to recruit and retain the high quality men and women we brought into the Services in the past years, and 2010 was no exception. Both the Navy and Marine Corps met or exceeded their mission quotas and quality standards.

We recognize that quality of life programs are important for morale and the military mission. We recruit Sailors and Marines, but we retain families. We continue to provide a wide array of readiness programs, including deployment support services, morale and welfare services, and child and teen programs. These award winning career management, training, and life-work balance programs are nationally recognized for their excellence not only by respected national human resource organizations, but even more by the Marines and Sailors that benefit directly from them.

Medical care for our Wounded Warriors, already outstanding, continued to get better throughout the year. Since Operations Enduring Freedom and Iraqi Freedom began, over 12,000 Marines and Sailors have been wounded in action. Their service and sacrifice mandates that we provide quality care for those who have given so much for our country. Our medical community continues to meet this challenge and make advances in dealing with the signature wounds of the current wars: traumatic brain injuries, mental health issues, amputation, and disfiguring injuries, and Navy Medicine continues to reach

out to its colleagues in both civilian and Veterans Affairs hospitals to improve our understanding and improve overall care for our people.

But care for our Wounded Warriors does not end in the hospital. We have undertaken a commitment to bring our Veterans back into the workforce of the Department of the Navy through several Wounded Warrior outreach programs and hiring conferences. We are not there yet, but we are moving towards the goal of being able to say to every Wounded Warrior – if you want a job, we have one for you. As a representative example, in the past year alone, the Naval Sea Systems Command hired 200 Wounded Warriors. In 2011 we will continue to make employment opportunities for Wounded Warriors a priority for the Department.

It is important to note that rising health care costs within the Military Health System continue to present a fiscal challenge for the Department. Like the Secretary of Defense, both I and Departmental leadership are particularly concerned that the rate at which health care costs are increasing and the relative proportion of the Department's resources devoted to health care cannot be sustained; the Military Health System is not immune to the pressure of inflation and market forces evident in the civilian health care sector.

The military faces a growing number of eligible beneficiaries, expanded benefits, and increased utilization throughout the military health care system. As a Department, we must be resolute in our commitment to implement systemic efficiencies and specific initiatives which will improve quality of care and customer satisfaction but will at the

same time more responsibly manage cost. We have made progress, but there is more to do. We concur with the recommendations made by the Office of the Secretary of Defense; we must create incentives such as the Home Delivery Pharmacy Program and implement modest fee increases, where appropriate, to both ensure the fiscal position of the system and ensure equity in benefits for our retirees.

Taking care of Sailors and Marines also means aggressively addressing the issues of sexual assault prevention and response. Last year, you supported the establishment of a new Office of Sexual Assault Prevention and Response (SAPRO) reporting directly to me to focus attention on the issue, develop effective training, and coordinate prevention and response programs across the Navy and Marine Corps. However, it is clear through sexual assault surveys that this crime remains a significant problem in the services, and within some populations we have seen a negative trend of an increased number of assaults. But I can assure you that we are not accepting this trend, and we will not rest while any cases of this awful crime continue to occur.

In 2010, the Department moved forward on expanding the opportunities for women in the Navy. We established a comprehensive plan to integrate women into the submarine force, beginning with our ballistic missile and guided missile *OHIO*-class submarines. This summer, the first 21 women officers were selected for nuclear training – and they have begun their approximately 15-month training pipeline. The first of these officers will get to their boats beginning in November 2011.

We are preparing to move forward with successfully implementing Congressional guidance with respect to repeal of "Don't Ask, Don't Tell" in 2011.

Overall, the FY 2012 budget reflects a carefully crafted request for the fiscal support and resources necessary to sustain the force in light of the ongoing demands on our people and their families. Thank you for your continuing support.

**Energy Security and Leadership**

Energy consumption in the Navy and Marine Corps has become a strategic vulnerability, an operational Achilles' heel, and a readiness challenge. This has made our energy usage a national security issue of rising importance. As a Department, we rely too much on fossil fuels, making our forces susceptible to fluctuations in both price and supply. Dramatic shifts in cost and availability can be caused by a host of man-made or natural events in volatile areas of the world. Those potential shocks could have, in turn, strategic, operational, and tactical effects upon our forces. A survey of headlines around the world today demonstrates exactly the point we are trying to make – energy is first and foremost an issue of national security.

Without sustainable and reliable sources of energy and increased efficiency in our platforms, we may find ourselves paying an exorbitant price for operating our fleet, training our aviation and ground forces, and running our installations that support them. The ability to train and prepare forces for deployment could be curtailed. Worse still, our

naval forces may find that future adversaries target our operational dependence on petroleum, as we see in attacks on fuel convoys in Afghanistan today. Our dependence on a fragile fuel distribution network increases our footprint, drains resources from the tip of the spear to supporting logistics lines, and ties up combat forces for security. Thus, energy diversity and efficiency are essential to maintain our warfighting capabilities and enhance our combat effectiveness.

This is a topic I have spoken on a great deal, in front of this committee last year, around the world in speeches to industry and military audiences, and in conversations with international leaders. Through these events and discussions, it has become clear that energy security is not just an American issue – it is an issue that affects both our allies and potential adversaries alike. History has taught us that competition for resources has been one of the fundamental causes of conflict for centuries, and today, competition for energy still provides one of the most inflammatory sources of potential conflict.

Energy, or more specifically denial of energy, could affect many of our NATO partners in Europe and indeed the strength of the alliance itself. Many of our partners are dependent upon external sources for their energy, so for them – denial of energy is a weapon, one just as real as the threat of tanks or airplanes.

For all these reasons, and in order to improve our long-term strategic position and enhance the future operational effectiveness of our forces, I have charged the Navy and

Marine Corps with accelerating the exploration and exploitation of new ways to procure, produce, and use energy.

This effort began in October 2009, when I issued my five energy goals for the Department, the most important of which commits the Navy and Marine Corps to generate at least 50 percent of all the energy we use from alternative sources no later than 2020. Alternative sources include all renewable forms of energy such as solar, wind, geothermal, and ocean energy, as well as biofuels and nuclear energy.

We are on track to meet all our goals, and throughout 2010, we demonstrated progress through many energy programs, partnerships, and initiatives. Throughout the year, we successfully conducted both ground and airborne tests of an F/A-18 Hornet and MH-60 Seahawk helicopter, and ran a Riverine Command Boat (experimental) on renewable biofuel blends made from either camelina or algae. Recently, we also completed testing of a marine gas turbine engine that will enable us to certify our frigates, destroyers and cruisers for biofuel operations. In each case, there was no impact on performance and no degradation to engine reliability. Together, these tests represent critical milestones for the Department's goal of demonstrating the Great Green Fleet in 2012 and its planned deployment in 2016. In late 2010, the Navy conducted concurrent but unrelated tests of a more efficient F/A-18 engine in order to generate an increase in the aircraft's range.

Afloat, as I discussed last year, the USS *MAKIN ISLAND* is using a hybrid-electric drive to dramatically lower its fuel usage at slow speeds, which we estimate will generate life-

cycle savings of up to $250 million at today's fuel prices. Over the next few years, we will continue to move forward with installation of a similar system on new construction DDGs and look at the feasibility of retrofitting the fleet with these systems in the course of routine shipyard availabilities.

The Marine Corps is also aggressively exploring energy efficiency solutions in its operating forces in theater and in the supporting establishment. The Marines realize that energy as a resource influences a Commander's operational freedom of maneuver, and its conservation and wise use can save lives on the battlefield. Reduced logistics support and fewer convoys for expeditionary forces would free up resources and limit the exposure of Marines to ambush and IEDs. Energy efficiency equals better combat effectiveness.

At home, the Marine Corps demonstrated their traditional spirit of innovation by scouring the commercial world for rugged solutions, building two Experimental Forward Operating Bases (ExFOB) at Quantico and Twentynine Palms. New alternative energy technologies tested at the ExFOB deployed this fall with the Third Battalion, Fifth Marines (3/5), posted to Sangin District in the north of Helmand Province. Immediately upon arrival, they began evaluating expeditionary solar power generators at their forward operating bases and combat outposts to supplement or replace fossil fuels. They have done this even while engaged in near constant combat against a determined enemy in one of the most hotly contested districts of the war.

When I visited Sangin, I heard first-hand from a Marine First Lieutenant about what worked, what did not, and how his Marines in India Company of 3/5 were using the equipment. Two patrol bases are operating entirely on renewable energy, and another with a 90 percent reduction. One of the team-portable systems, called GREENS (Ground Renewable Expeditionary Energy Network System), is being used to provide power for the Operations Center, small radios, and small electronic equipment. And across the battalion's operating area, man-portable SPACES (Solar Portable Alternative Communications Energy System) are being used by individual squads to recharge their radios and other combat electronics. This capability made it possible for a foot patrol to operate for three weeks without battery resupply, reducing their burden by 700 pounds and saving more than $40,000.

By deploying these renewable solar energy technologies the Marines in Sangin have been able to expand their operational reach, eliminate or minimize their need for fossil fuels in their generators, and dramatically reduce the need for often dangerous logistic support.

At Camp Leatherneck, the Marines have likewise begun a small bio-fuel pilot project for Helmand Province, purchasing locally produced cotton oil from an Afghan facility to mix with their own fuel. At Leatherneck, a standard generator is producing power from a 20-80 mix of cotton oil to fuel, yielding a 20 percent reduction in demand for fuel, while simultaneously demonstrating to Afghan farmers that there are alternatives to opium, and demonstrating to Afghan leaders that they can power their own economy from within Afghanistan. I am monitoring its progress closely.

As the ExFOB gets all this feedback from returning Marines, our expeditionary energy systems and programs will continue to improve and we will move even further down the road of energy efficient, combat effective forces..

In addition to these tactical and platform applications, we have implemented a number of energy projects at our facilities ashore. We are actively exploring for new geothermal resources to augment our existing 270 MW geothermal power plant at China Lake. Last year we established the nation's first grid-connected wave buoy at MCB Kaneohe Bay, HI. Last December the Marines completed a 1.5 MW solar installation situated atop six acres of a landfill. The installation was unique because the equipment foundations were designed not to perforate the membrane covering the garbage below. Our budget request asks for continued support of these and similar projects in order to enhance our efficiency and maximize our move to greater independence and more resilient infrastructure.

And finally, throughout the year we developed partnerships with a number of federal agencies, states, academic institutions, and industry partners including the Departments of Energy and Agriculture, NASA, and the Small Business Administration.

It is precisely because of the spirit of innovation that these partnerships embody that our Nation remains a world leader in its unrivaled capacity to stimulate and exploit cutting-edge ideas and new technologies. The U.S. Navy has always been a technological leader and has excelled at embracing change, particularly in propulsion systems and energy sources. We moved from wind to coal in the 19th Century, from coal to oil early in the

20th Century, and added nuclear power sixty years ago. In every transition there were opponents to change, but in every case these changes increased our combat effectiveness by an order of magnitude.

I have tasked the Navy and the Marine Corps to once again pioneer technological change through alternative energy sources. I am pleased with the progress to date, and expect it to sharply enhance the long-term strategic agility of our operating forces, as well as better posture the Department for an age of fiscal austerity and potential energy volatility. I want to stress, however, that every action and program we undertake is focused on generating improved warfighting capability and strategic flexibility, it is not just change for change's sake.

**Creating Acquisition Excellence**

Our future combat readiness is dependent upon the design, development and acquisition of weapons, platforms, and information technology. The current ships and aircraft of the Navy and Marine Corps provide decisive advantages over today's threats. But that edge must be constantly sharpened and modernized against constantly evolving technologies. We must continue to invest in intelligence, precision missiles and munitions, networked command systems, stealth technology, unmanned vehicles and ground fighting systems. To retain our advantage across multiple warfighting areas, we rely heavily upon both our dedicated personnel and the expertise resident in America's private sector. Throughout my tenure, I have taken the opportunity to visit shipyards, aircraft plants, vehicle

factories, maintenance facilities, and warfare centers for detailed briefings and a firsthand look at the people responsible for designing and building our fleet and equipping our Sailors and Marines with vital weapon systems and technologies necessary to do their jobs. One cannot fail to recognize the creativity, dedication, and skills of our nation's workforce.

Yet, with government spending increasingly constrained, affordability, cost containment and total ownership costs are more important than ever. Because acquisition costs are rising faster than our top-line and because replacement systems can be more expensive than the platforms or weapon systems being replaced, we are putting tomorrow's force at risk.

Both on our own and as a result of Secretary Gates' guidance, the Department has devoted considerable effort to finding efficiencies, reducing support costs, and scrubbing our acquisition process to mitigate this impact. In accordance with the Weapons System Acquisition Reform Act passed by Congress in 2009, we have made the requirements and acquisition processes more rigorous in order to better manage the resources entrusted to us by the American taxpayer, and we are working with OSD to develop a streamlined process for acquiring information technology in a more responsive manner to better equip the warfighter with emerging technologies and ward off the cyber threat.
This requires constant examination of every single one of our policies, practices, priorities, and organizations, with a clear focus on controlling cost. Our acquisition community has been extensively engaged with industry and the Services to streamline

processes, and they are ruthlessly evaluating both requirements and the supporting analyses in order to get more value out of the overall acquisition system.

The Navy and Marine Corps will continue initiatives already in place to improve processes and to instill discipline in procurement. In 2010, we strengthened our cost estimating group and met statutory requirements to obtain independent cost estimates, and we have incorporated Defense-wide best practices in the formulation of all our major programs. We have made our cost estimates more realistic and are using these improved cost and schedule plans to make necessary capability tradeoffs and difficult investment decisions at the front end of the requirements process rather than during design or construction.

A professional acquisition workforce is a key element in our overall acquisition excellence initiative and a driver in our strategy to preserve our fighting edge at an affordable cost. Accordingly, and with your strong support, we are rebuilding the acquisition workforce within government to fulfill federal oversight of the acquisition process and ensure that accountability to taxpayers is the foremost concern of our employees. In the last year, the Department has added nearly 1,300 acquisition professionals towards the goal of increasing the community by 5,090 over the FYDP.

Our acquisition strategies have been shaped to expand the use of fixed price contracts, leverage competition, and tighten up on the use of incentive and award fees to ensure quality systems are consistently delivered on budget and on schedule. The new

acquisition plan for the Littoral Combat ship epitomizes this strategy, and is indicative of the type of fixed price contracts that will be the model for the future. The LCS block-buy contracts are the result of effective competition and give the government full ownership of the technical data package used in construction. This will ensure our ability to pursue competitive strategies for LCS Seaframe requirements in FY 16 and beyond and affords greater Congressional oversight of the program. With the new LCS strategy, we get more ships, at a faster rate, and at less cost.

The LCS dual-block procurement strategy also contributes to meeting another acquisition goal of both this Committee and the Navy through its strong support of the industrial shipbuilding base. Modernizing today's force and recapitalizing the fleet affordably cannot be accomplished without a healthy industrial base and strong performance by our industry partners. We have worked hard to procure our ships, aircraft, and weapon systems at a rate intended to bring stability to the industrial base and enable efficient production. The Navy's shipbuilding and aviation plans were developed with particular regard to maintaining the unique characteristics and strength of the industrial base and our efforts have promoted increased competition, greater innovation, and better capacity within the base.

Over the FYDP, we will continue to build upon our progress to date and we will work with our shipyards, aircraft manufacturers, weapon systems providers and systems integrators to build the best possible fleet for the future.

**Development and deployment of unmanned systems**

The complex nature of today's security environment, as well as current and future anti-access/area-denial threats faced by the United States, require that the Navy and Marine Corps continue to advance in unmanned systems and exploit the contributions they make to warfighting capability. Unmanned systems are unobtrusive, versatile, persistent, and they reduce the exposure of our Sailors and Marines to unnecessary threats or dangerous environments. They can perform a vast array of tasks such as intelligence, surveillance and reconnaissance, hydrographic monitoring, mine detection, targeting, and precision strike.

Navy and Marine Corps unmanned systems have already made key contributions to operations in Iraq and Afghanistan. In Operation Iraqi Freedom and Operation Enduring Freedom, unmanned aircraft systems have flown thousands of flight hours, enhancing the effectiveness of our combat operations and undoubtedly saving lives. Unmanned ground vehicles employed by the Marine Corps have conducted thousands of missions detecting and/or neutralizing improvised explosive devices. And off the Horn of Africa, unmanned systems contribute to surveillance and tracking of suspected or confirmed pirate vessels.

The range of tasks that these capabilities may fulfill will grow substantially over time. I am determined to ensure that your Navy and Marine Corps are at the cutting edge of this military capability.

Our vision for the future will exploit unmanned systems in every domain of our operating environment (sea, air, and land) while maintaining an affordable price. The Department's Unmanned Systems will move from adjunct capabilities supporting manned systems and platforms to providing autonomous, networked, and interoperable independent capabilities - much as naval aviation matured from an adjunct to the Battle Fleet to a combat capability in its own right in the first half of the 20th century.

We will field unmanned systems in the near term to:

- Provide sensing, influence and effects where manned systems are limited by range, endurance or risk.
- Shift from relying primarily on manned platforms to accomplish missions to combinations of manned platforms, robots, augmented human performance, and remotely operated and unmanned systems that make operational sense.
- Increase the combat effectiveness of Sailors and Marines, their platforms and combat organizations to better operate against multiple types of threats.

In implementing this vision, we will embrace Unmanned Systems as critical tools in our warfighting quiver of capabilities. We will integrate them into everything we do across the full range of military operations to enhance our combat effectiveness and efficiency. And we will invest in the infrastructure to ensure we have the capabilities and capacity to properly task, collect, process, exploit and disseminate the information so the intelligence data gets to the decision makers and warfighters. The initiatives and investments

contained in the FY 2012 Budget request will continue moving us along this desired track. I look forward to reporting our progress toward this vision throughout the year.

**Conclusion**

Today I have laid out our strategic posture as well as the goals and priorities that guide the Department's investment portfolio and future direction. These goals and programs will significantly influence our future capabilities and ensure we remain ready to deter regional conflict or respond rapidly and decisively to emerging crises. Our specific requests are reflected in the President's FY 2012 budget submission.

In order to retain a ready and agile force capable of conducting the full range of military operations, we must carefully weigh risks and apply our available resources efficiently and carefully. This year's request reflects our strategy-driven priorities and the disciplined trade-offs that you and the American taxpayer expect of us. The Department's efficiency efforts have been beneficial in terms of enhancing our ability to invest in the future even while preserving and extending our force structure.

This is not a one-time event, as we will continuously work to increase efficiencies in every project, program, and operation, afloat and ashore. The budget request ensures that we will retain the world's most powerful and agile expeditionary force. The CNO, Commandant, and myself are committed to that aim and to being effective stewards of the nation's resources.

As Secretary, I have seen firsthand the selfless courage of our young Marines and Sailors in Helmand; the dedication of our medical community caring for our wounded; the professionalism of our surface, submarine and aviation Sailors; and the incredible technical skills of the maintenance crews that sustain them. I have also borne witness to the sacrifices of our personnel in hospitals in theater and at the National Naval Medical Center. A single visit to Bethesda will make you marvel at the resilience of the human spirit and the unflagging patriotism of our American service men and women.

Your Navy and Marine Corps are performing at a high operational tempo, at unparalleled levels of skill and dedication, and with remarkable results afloat, at depth, aloft, in cyberspace, and ashore. Thanks to your support, this level of performance has been sustained with the modern platforms, weapons systems, and training necessary to underwrite our readiness. Your continued support recognizes and sustains the sacrifice of our Sailors, Marines, civilians and their families. The support of this Committee for our key programs and our people has been instrumental to operational success of the Navy and Marine Corps and maintenance of the world's most flexible instrument of national policy—a modernized and ready naval expeditionary force.

It is a solemn privilege to lead the Naval Services during an era of protracted war and national challenge. I have been honored by the trust the President and Congress have placed in me, and even more honored by the sacrifice and sterling devotion I have witnessed by those Sailors and Marine who go forward into harm's way to defend us. Preserving our values and our way of life is ultimately dependent upon our being

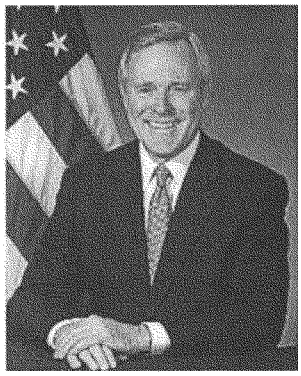
prepared to use decisive force against those who threaten them. The Navy and Marines have been ready to do so for 235 years, and will continue to be ready. You can count on it.

Thank you again for your support. Godspeed.

# Secretary of the Navy

## 5/19/2009 - Present

## Ray Mabus



Ray Mabus is the 75th United States Secretary of the Navy. As Secretary, he leads America's Navy and Marine Corps and is responsible for an annual budget in excess of $150 billion and almost 900,000 people.

The Secretary of the Navy is responsible for conducting all the affairs of the Department of the Navy, including recruiting, organizing, supplying, equipping, training, and mobilizing. Additionally, he oversees the construction, outfitting, and repair of naval ships, equipment and facilities, and is responsible for the formulation and implementation of policies and programs that are consistent with the national security policies and objectives established by the President and the Secretary of Defense.

Prior to joining the administration of President Barack Obama, Mabus served in a variety of top posts in government and the private sector. In 1988, Mabus was elected Governor of Mississippi. As the youngest governor of Mississippi in more than 100 years at the time of his election, he stressed education and job creation. He passed B.E.S.T. (Better Education for Success Tomorrow), one of the most comprehensive education reform programs in America, and was named one of Fortune Magazine's top ten education governors. He was appointed Ambassador to the Kingdom of Saudi Arabia for the Clinton Administration in 1994. During his tenure as Ambassador, a crisis with Iraq was successfully averted and Saudi Arabia officially abandoned the boycott of United States businesses that trade with Israel. He also was Chairman and CEO of Foamex, a large manufacturing company, which he led out of bankruptcy in less than nine months paying all creditors in full and saving equity. Prior to becoming Governor, he was elected State Auditor of Mississippi and served as a Surface Warfare Officer in the U.S. Navy aboard the cruiser USS *Little Rock*.

In June 2010, President Obama asked Secretary Mabus to prepare a long-term recovery plan for the Gulf of Mexico in the aftermath of the Deepwater Horizon oil spill. After extensive travel and many meetings, his report "America's Gulf Coast: A Long-Term Recovery Plan After the Deepwater Horizon Oil Spill" was released in September 2010. The report was met with broad bi-partisan support.

Secretary Mabus is a native of Ackerman, Mississippi, and received a Bachelor's Degree from the University of Mississippi, a Master's Degree from Johns Hopkins University, and a Law Degree from Harvard Law School. He has been awarded the U.S. Department of Defense Distinguished Public Service Award, the U.S. Army's distinguished Civilian Service Award, the Martin Luther King Social Responsibility Award from the King Center in Atlanta, the National Wildlife Federation Conservation Achievement Award, the King Abdul Aziz Award from the Kingdom of Saudi Arabia, and the Mississippi Association of Educators' Friend of Education Award.

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RELEASED BY THE HOUSE
ARMED SERVICES COMMITTEE

**STATEMENT OF**

**ADMIRAL GARY ROUGHEAD**

**CHIEF OF NAVAL OPERATIONS**

**BEFORE THE**

**HOUSE ARMED SERVICES COMMITTEE**

**ON**

**FY 2012 DEPARTMENT OF NAVY POSTURE**

**1 MARCH 2011**

NOT FOR PUBLICATION
UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

Chairman McKeon, Representative Smith, and members of the Committee, it is my honor and pleasure to appear before you, in my fourth year as CNO, representing the more than 600,000 Sailors and civilians of the United States Navy. As we have done for more than 235 years, our Navy is forward-deployed around the world protecting our national security and prosperity. Today, our dedicated Navy men and women are operating globally at sea, on land, in the air, and in space and cyberspace. I appreciate your continued support for them and their families.

As the demand for our Navy continues to grow, our Maritime Strategy, which I issued more than three years ago with the Commandants of the Marine Corps and the Coast Guard, continues to guide our Navy's operations and investments. Its core tenets are enduring and our Navy is executing daily the six core capabilities it articulates for our sea Services: forward presence, deterrence, sea control, power projection, maritime security, and humanitarian assistance and disaster response.

With your support, since becoming CNO, our Navy has placed underperforming programs back on track; we have introduced stability, affordability, and capacity into our shipbuilding and aviation plans; and we have advanced capabilities to meet the most likely evolving threats. We improved the performance of several programs, most notably the Littoral Combat Ship. After cancelling the LCS ships we had planned for 2007 because of unacceptable costs, last year we were able to secure a price for 20 ships through a dual award strategy that will add new and needed capabilities to our Fleet, bring important stability to the industrial base, and get us closer to the minimum of 313 ships our Navy needs. I thank Congress for their support of this strategy. We delivered five new ships in 2010, including one Virginia Class submarine, two Arleigh Burke Destroyers, and two T-AKE logistics ships. We commenced testing and low rate initial production of the P-8A Poseidon Multi-Mission Maritime Aircraft and continued testing and low rate initial production of the E-2D Advanced Hawkeye. Through multi-year procurement contracts for F/A-18E/F and EA-18G, and Virginia Class submarines, and planned multi-year procurements for the MH-60R/S and E-2D, we are introducing affordability in our aviation and shipbuilding plans and realizing significant savings. For example, on the Virginia Class Multi-Year Procurement alone, the savings has been $3.2B. We are advancing capability to meet emerging threats, particularly in Ballistic Missile Defense (BMD) and information dominance. In BMD, we assumed lead for the first phase of the President's Phased Adaptive Approach (PAA) for BMD of Europe and we are working with the Missile Defense Agency on providing Aegis Ashore capability to support the second phase of the PAA. Our newly-established Fleet Cyber Command/U.S. Tenth Fleet demonstrated its expertise conducting joint and naval exercises and operations in the cyber, network, cryptology, signals intelligence, information warfare, electronic warfare, and space arenas. We also achieved the early operational deployment of the MQ-8B Fire Scout Vertical Takeoff and Landing Tactical Unmanned Air Vehicle, the first successful flight of our Navy Unmanned Combat Air System demonstrator, and a memorandum of agreement with the Air Force to pursue increased commonality between the Global Hawk and Broad Area Maritime Surveillance programs.

Our Navy continues to meet planned operational commitments and respond to crises as they emerge globally. We remain engaged in operations in Afghanistan and in Iraq. Our Navy has more than 14,000 active and reserve Sailors on the ground and another 10,000 at sea in Central Command, including ongoing Individual Augmentee support to both operations. Our

aircraft carriers provide about 30 percent of the close air support for troops on the ground in Afghanistan and our Navy and Marine Corps pilots fly an even greater percentage of electronic attack missions there.

Because our national interests extend beyond Iraq and Afghanistan, so do the operations of our Navy. More than 40 percent of our Navy is underway daily; globally present and persistently engaged. Last year, our Navy provided deterrence against North Korea; conducted counter-piracy operations in the Indian Ocean with a coalition of several nations; trained local forces in maritime security as part of our Global Maritime Partnership initiatives in Africa and the Pacific; responded with humanitarian assistance and disaster relief to the earthquake in Haiti and the flood in Pakistan; and conducted the world's largest maritime exercise, which brought together 14 nations and more than 20,000 military personnel, to improve coordination and trust in multi-national operations in the Pacific. Navy sealift continues to deliver the lion's share of heavy war and humanitarian equipment in the Central Command and Pacific Command areas of responsibility, while Navy logisticians operate the seaport and airport facilities that ensure this vital materiel arrives on time. Our Sailors remain forward throughout the world, projecting US influence, responding to contingencies, and building international relationships that enable the safe, secure, and free flow of commerce that underpins our economic prosperity.

Our Navy's global presence guarantees our access and freedom of action on and under the sea. We are developing with the Air Force and Marine Corps the Air Sea Battle concept that will identify the doctrine, organization, training, procedures, and equipment needed for our Navy to counter growing military threats to our freedom of action. This joint effort will inform the conceptual, institutional, and material actions needed to employ integrated forces that support U.S. operations to project power and influence, protect allies and partners, and secure our national objectives in peace and war.

I remain committed to supporting our active and reserve Sailors, Navy civilians, and their families. Our Navy continues to be recognized as a highly-ranked place to work as a result of its workforce planning, life-work integration, diversity, and training opportunities. We met or exceeded overall officer and enlisted active recruiting goals last year and we are accessing a force of extreme high quality. We continue to move forward on assigning women into our submarine force, with the first women submariners on track to report aboard SSBNs and SSGNs by the end of this year. We remain committed to performance as a criterion for promotion in our Navy, and have successfully transitioned the majority of our civilian personnel out of the National Security Personnel System (NSPS). Our remaining NSPS employees are scheduled to convert by the end of this year. I appreciate the support of Congress for our Fleet and the dedicated Sailors, Navy civilians, and their families that serve our nation every day.

My priorities for the Navy remain unchanged: to build tomorrow's Navy, to remain ready to fight today, and to develop and support our Sailors, Navy civilians, and their families. We continue to advance our Navy in each of these areas thanks to your support.

Our Navy remains the most capable maritime force in the world; however, we are stretching our force to meet Combatant Commander demands. Since 2000, our Navy's ship-underway days have increased by approximately 15 percent, yet we have about 10 percent fewer ships in our Fleet. Greater demand for our forces has led to longer deployments and shorter dwell, or turnaround times, which increase stress on our Sailors and drive up maintenance

requirements for our ships and aircraft. We are implementing force management measures in the near term to stretch the capacity of our 286-ship force to meet increasing global requirements while providing the necessary maintenance our Fleet needs to reach its expected service life. Our Navy is different from other Services in that we reset our force "in stride"; that is, we rely upon regular maintenance of our ships and aircraft, and training and certification of our crews between deployments, to sustain our force. I thank Congress for their support of our FY 2011 Operations and Maintenance (O&M) request, which would enable our Navy's continuous reset and translate into decades of service for each ship and aircraft, a significant return on investment.

Regrettably, the continuing resolution (CR) for FY 2011 prevents us from applying the increased FY 2011 O&M funding to improve our readiness, and it negatively impacts our ability to procure our future Navy and support our Sailors, Navy civilians, and their families. It has forced us to take mitigation measures that include: reducing operations, limiting numerous contracts for base operating support, slowing civilian hiring, reducing Permanent Change of Station notifications for our Sailors from about six months lead time to less than two months, not initiating the Small Business Innovative Research program, and delaying procurement contracts for new capabilities and existing production lines. Starting this month, we will cancel or scale back ship maintenance availabilities in Norfolk, Mayport, and San Diego, and cancel more than a dozen MILCON projects in several states. If the CR lasts all year, we will have no choice but to make permanent these mitigations and others, significantly reducing our operations, maintenance, and training. We will be forced to further reduce facilities sustainment, cancel training events and additional surface ship availabilities, and defer maintenance on our aircraft, which would result in almost a one-year backlog in aviation maintenance. The impact of these actions will jeopardize the efforts we made in recent years to restore Fleet readiness. Without relief, we will procure only one Virginia class submarine and break the multiyear contract. Agreements made with our surface combatant builders, as a result of the DDG 1000 / DDG 51 swap, precludes us from awarding any DDG 51s in FY 2011 unless both ships are appropriated. In addition, without relief, we will delay the new start Mobile Landing Platform; we will constrain aircraft carrier construction and refueling, negatively impacting operational availability, increasing costs, and delaying CVN 79 delivery by up to one year; and we will limit aviation and weapons procurement to FY 2010 quantities, impacting E-2D and Standard Missile production. A full-year continuing resolution will also defer essential research and development in unmanned aerial systems and significantly delay the design of our replacement strategic deterrent submarine and the recapitalization of our nuclear operator training infrastructure. It will eliminate our ability to source out-of-cycle overseas contingency operations demands for increased Fleet presence and activated Navy Reserve Sailors. Operating under a continuing resolution for a full year at the FY 2010 level would have negative effects on our Fleet, on the ship and aviation industrial base, and on the many workers who support naval facilities. Your support in addressing this critical current and long term readiness issue is appreciated greatly.

Our FY 2012 budget submission achieves the optimal balance among my priorities, but it is based on our funding request for FY 2011. If the CR lasts all year, we will need to revisit our FY 2012 request to properly balance our Navy for today and in the future. Our FY 2012 budget request continues to rely on a combination of base budget and overseas contingency operations (OCO) funding, but it reduces the extent to which we rely on OCO funding for enduring missions. Our FY 2012 request continues the effort we started two years ago to reduce the cost to own and operate our Fleet. We leveraged the opportunity presented by the Secretary of

Defense to significantly reduce excess overhead costs, and apply the savings to warfighting capability and capacity, by executing a deliberate, thoughtful, and integrated approach to finding efficiencies that improve the long-term sustainability of our force. We are taking steps to buy smarter, streamline our organizations and operations, realign manpower, and pursue energy efficiencies. Through these efforts, and with your support, we will improve readiness and warfighting capabilities and optimize organizations and operations, including increasing the number of ships and aircraft in our procurement plans and enhancing or accelerating anti-access capabilities, unmanned systems, and energy initiatives.

Our FY 2012 budget request supports our Maritime Strategy and continues to support our forces, take care of our people, rebalance our force to meet current and future challenges, and reform how and what we buy. Highlights follow.

**Build Tomorrow's Navy**

Since the release of our Maritime Strategy, I have stated our Navy requires a minimum of 313 ships to meet operational requirements globally. This minimum remains valid; however, we continue to examine this requirement to address increased operational demands and expanding requirements for ballistic missile defense, intra-theater lift, and forces capable of confronting irregular challenges. Our FY 2012 submission funds 10 ships, including two VIRGINIA class fast attack submarines, one Joint High Speed Vessel (JHSV), one LPD 17, one Mobile Landing Platform (MLP), one DDG 51, and four Littoral Combat Ships (LCS), which reflects our new LCS procurement plan under the dual award strategy. Our submission also supports the acquisition of an oceanographic ship. I thank Congress for their support of our LCS acquisition strategy and for our shipbuilding program. With your support over the last three years, we have been able to improve the balance among capability, capacity, affordability, and executabilty in our shipbuilding plan.

As I reported last year, I remain concerned about the capacity of our Fleet in the future. Starting in the 2020s, many of our existing cruisers, destroyers, and submarines will reach the end of their service lives. During this period, it will be particularly critical to procure sufficient new ships to offset these decommissionings to avoid a rapid decline in force structure. In the same timeframe, we will begin to procure the replacement for our OHIO class ballistic missile submarine, the most survivable leg of our nation's nuclear deterrent triad. While we have reduced the cost of that submarine substantially, our total shipbuilding budget will be pressurized in that decade as we seek to recapitalize our surface and submarine forces while sustaining warfighting readiness and supporting our people. I am confident our near-term force structure plans provide the capability and capacity we need to meet demands today, but in this decade we must address how to best resource the shipbuilding programs required in the 2020s.

Our FY 2012 program funds 203 manned aircraft. We have increased our procurement of P-8A Poseidon Maritime Patrol Aircraft to provide needed anti-submarine warfare capacity to our Fleet and facilitate a successful transition from our legacy P-3 Orion aircraft. Our FY 2012 submission also procures 28 F/A-18 E/F aircraft, extending the F/A-18 procurement through FY 2014 and purchasing 41 more aircraft than requested in last year's budget submission. I remain committed to the F-35 Joint Strike Fighter, and was pleased to see the first flight of the F-35C last year. The timely delivery of the F-35C remains critical to our future carrier airwing strike

fighter capacity; however, we are procuring additional F/A-18 Super Hornets to address the decrease in strike fighter capacity we have identified. I thank Congress for their continued support of the F-35 program and our overall strike fighter fleet.

Our Navy is also looking beyond our ships and aircraft and investing in information capabilities that span space, cyberspace, and the electromagnetic spectrum. We moved boldly last year with the establishment of U.S. Tenth Fleet and the Deputy CNO for Information Dominance. That restructuring has enabled us to focus on enhancing our electronic warfare, information dominance, integrated air and missile defense, and anti-submarine warfare capabilities. I request Congress' support for these programs as they position our Navy to successfully conduct operations in an evolving anti-access environment today and in the future.

A viable, highly technical, and specialized industrial base is essential to sustaining the capability and capacity of our future Navy. Our shipbuilding and aviation industrial base is a strategic national asset and a significant contributor to our nation's economic prosperity, employing more than 97,000 uniquely-skilled Americans while indirectly supporting thousands more through second and third tier suppliers. The highly specialized skills in our shipbuilding base take years to develop; and, if lost, cannot be easily or quickly reconstituted. A viable shipbuilding industrial base, underpinned by predictable, level-loaded ship procurement, is essential to meet our nation's naval requirements.

I remain committed to delivering a balanced and capable Fleet that will meet our national security requirements. I seek your support for the following initiatives and programs:

## Aviation Programs

### Aircraft Carrier Force Structure

Our nuclear-powered aircraft carrier fleet is capable of flexibly employing capabilities that span from power projection and deterrence to humanitarian assistance and disaster response. Our 11-carrier force structure is based on worldwide presence and surge requirements, while also taking into account training and maintenance requirements. Our Navy has put in place measures to minimize the impact of the 10-carrier period between the inactivation of USS ENTERPRISE (CVN 65) and commissioning of USS GERALD R. FORD (CVN 78). After the delivery of CVN 78, we will maintain an 11-carrier force by continuing the refueling program for NIMITZ Class ships and delivering our FORD Class carriers at five-year intervals starting in 2020.

CVN 78, which is approximately 20 percent complete, is the lead ship of our first new class of aircraft carriers in nearly 40 years. These new carriers incorporate an innovative flight deck design that provides greater operational flexibility, a nuclear propulsion plant that generates more than 50 percent greater energy while decreasing maintenance requirements, and a combination of measures that reduce manning by more than 1,200 Sailors. Among the new technologies being integrated in these ships are the Dual Band Radar, the Electromagnetic Aircraft Launch System (EMALS), and the Advanced Arresting Gear (AAG), which will enable the carrier to increase its sortie generation rate by 25 percent and lower total ownership costs. AAG is currently undergoing commissioning testing at our land-based testing facility and, in December, EMALS successfully launched an F/A-18 aircraft. Both systems are on schedule to support delivery of CVN 78 in September 2015.

**Strike Fighter Capacity**

I remain committed to the F-35 Joint Strike Fighter (JSF) program. The timely delivery of the F-35C carrier variant is critical to our future carrier airwing strike fighter capability and capacity. As a result of delays in the F-35 program, we are closely managing our strike fighter inventory to address the decrease in strike fighter capacity that is projected to peak in 2018 as our F/A-18A-D aircraft reach the end of their service life. Our actions include managing the service life of our A-D aircraft, extending the service life of our A-D aircraft, buying new F/A-18E/F Super Hornet aircraft, and maintaining wholeness in the F-35C program. With these measures, we can manage our current strike fighter inventory to meet TACAIR requirements.

**F-35 Lightning II Joint Strike Fighter (JSF)**

The F-35 program gives us the advanced sensor, precision strike, firepower, and stealth capabilities our Fleet needs. I continue to base our Initial Operating Capability (IOC) timeline for the F-35C on the level of capability delivered at the completion of Initial Operational Test and Evaluation of the F-35C equipped with Block 3 software. We are reviewing the results of the in-depth Technical Baseline Review and restructuring of the System Development and Demonstration (SDD) phase to determine our IOC. While the overall system demonstration and development schedule has slipped, we have not reduced the total number of airplanes we plan to buy. Our FY 2012 request procures seven F-35C aircraft. We are monitoring the program closely and managing our existing strike fighter capacity to meet power projection demands until the F-35C is delivered. Procurement of an alternate engine for the F-35 increases our risk in this program. The Navy does not have a requirement for an alternate engine; indeed, we would only take one model to sea. Its additional costs threaten our ability to fund currently planned aircraft procurement quantities, which would exacerbate our anticipated decrease in strike fighter capacity throughout the remainder of this decade.

**F/A-18A-D Hornet and F/A-18E/F Super Hornet**

Our F/A-18A-D Hornet aircraft were originally designed for a service life of 6,000 flight hours. Through a life assessment program and High Flight Hour (HFH) inspections, which have been in place for three years, we have been able to extend the service life of our legacy F/A-18A-D aircraft to 8,600 flight hours. Our FY 2012 budget requests funding to pursue a Service Life Extension Program (SLEP) for 150 F/A-18A-D aircraft, commencing in FY 2012 at a rate of about 40 per year, that would further extend the service life of these aircraft to 10,000 flight hours. We are also conducting a life assessment program for our Super Hornet aircraft to extend their original 6,000-hour service life design to 9,000 hours. The F/A-18A-D HFH and SLEP are necessary measures to address our strike fighter inventory while preserving our investment in F-35C. To further reduce risk, we are accelerating the transition of 10 legacy F/A-18C squadrons to F/A-18 E/F Super Hornets, and our FY 2012 budget requests funding to procure more F/A-18E/F Super Hornets than we requested last year. I thank Congress for their support of the F/A-18 program as we introduce F-35C into our Fleet.

**EA-18G Growler**

The Navy has been a leader in Airborne Electronic Attack (AEA) for more than half a century and AEA is in high demand. AEA provides one of the most flexible offensive capabilities available to the joint warfighter and is becoming increasingly important as technology capable of manipulating the electromagnetic spectrum matures. We are leveraging the mature and proven F/A-18E/F Super Hornet airframe to recapitalize our AEA capability with the EA-18G Growler. Although the EA-18G currently utilizes the same ALQ-99 Tactical Jamming System as the EA-6B, we are developing a new system, the Next Generation Jammer, as a replacement for the aging ALQ-99. The Next Generation Jammer will incorporate a Modular Open System Architecture and improved reliability and maintainability to provide a robust, flexible jamming capability that can evolve to address emerging threats. The EA-18G is in full rate production and we have accepted delivery of 43 aircraft. We have transitioned three EA-6B Prowler squadrons to EA-18G Growlers and two more squadrons are currently in transition. Our first EA-18G squadron deployed in November to Iraq. Our program of record will buy 114 total EA-18G aircraft, recapitalizing 10 carrier-based EA-6B squadrons and four expeditionary squadrons, all to be stationed at NAS Whidbey Island. The program continues to deliver on schedule and our FY 2012 budget requests funding for 12 EA-18Gs.

**P-3C Orion and P-8A Poseidon Multi-Mission Maritime Aircraft**

Our P-3C Orion aircraft remain in high demand today across a range of missions including Anti-Submarine Warfare, Anti-Surface Warfare, and time-critical Intelligence, Surveillance and Reconnaissance. Our Maritime Patrol Aircraft (MPA) force is a direct enabler for troops on the ground in Central Command while also ensuring access and battle space awareness at sea. Because we are operating our P-3Cs at a high rate, about 100 P-3 aircraft have been grounded since February 2005 for fatigue life and we anticipate continued groundings through the remainder of the P-3 program. Through significant Congressional support for P-3C wing repairs and sustainment, as of February, we have a current inventory of 84 mission aircraft; a 58 percent increase since last year. Our FY 2012 budget requests about $100M to continue our P-3C sustainment program. Continued investment in this program and in the modernization of our P-3s is critical to ensure we retain sufficient capacity to conduct maritime battle space awareness and support to land forces in Central Command, while successfully transitioning to the P-8A.

The P-8A Poseidon Multi-Mission Maritime Aircraft is ideally suited for regional and littoral operations, and is our pre-eminent airborne capability against submarine threats. Procurement of P-8A will deliver needed capacity for these missions. The P-8A is scheduled to reach initial operating capability and will begin replacing our aging P-3 Fleet in 2013. The current delivery schedule enables transition of two squadrons per year. Our FY 2012 budget requests funding for 11 P-8A aircraft. I request Congress' support for the P-8A program schedule and for our P-3 sustainment and modernization program, the combination of which is essential to our transition to the next generation of MPA capability while avoiding future gaps in our MPA force.

**E-2D Advanced Hawkeye**

The E-2D Advanced Hawkeye aircraft, will replace the E-2C and represents a two-generation leap in airborne radar surveillance capability. The E-2D will improve nearly every facet of tactical air operations and add overland and littoral surveillance to support theater Integrated Air and Missile Defense (IAMD) against air threats in high clutter, complex electro-magnetic and jamming environments. The airborne radar on the E-2D, with its improved surveillance capability, is a key pillar of the Navy Integrated Fire Control-Counter Air (NIFC-CA) concept. Four test aircraft have been delivered to the Navy and we will commence operational test and evaluation in late 2011. The first Fleet squadron transition is planned for 2013, with an IOC scheduled for late 2014. Our FY 2012 budget requests six E-2D aircraft. We plan to procure 75 aircraft, with the final aircraft procurement in 2019 and Full Operational Capability (FOC) in 2022.

**MH-60R/S Multi-Mission Helicopter**

The MH-60R and MH-60S are in full rate production. The MH-60R multi-mission helicopter replaces the surface combatant-based SH-60B and carrier-based SH-60F with a newly manufactured airframe and enhanced mission systems. With these systems, the MH-60R provides focused surface warfare and anti-submarine warfare capabilities for our strike groups and individual ships. The MH-60S supports surface warfare, combat logistics, vertical replenishment, search and rescue, air ambulance, airborne mine counter-measures, and naval special warfare mission areas. We have delivered 85 MH-60R and 187 MH-60S to our Fleet and our FY 2012 budget requests funding for 24 MH-60R and 18 MH-60S helicopters.

**Surface Ship Programs**

**Littoral Combat Ship (LCS)**

LCS is a fast, agile, networked surface combatant optimized to support naval and joint force operations in the littorals with capability to support open-ocean operations. It will operate with focused-mission packages to counter mine, small boat, and submarine threats in the littorals. The modular design and open architecture of the seaframe and mission modules provide the inherent flexibility to add or adapt capabilities as new technologies mature or to counter threats that emerge beyond the Mine Countermeasures, Surface Warfare, and Anti-Submarine missions currently planned for LCS. These ships will employ a combination of manned helicopters and unmanned aerial, surface, and undersea vehicles.

USS FREEDOM (LCS 1) completed her first operational deployment to the Southern and Pacific Commands in April 2010, two years early. While deployed, USS FREEDOM successfully conducted counter-drug missions and validated its open ocean capability, allowing us to learn valuable lessons from these real-world operations. USS INDEPENDENCE (LCS 2) was commissioned in January 2010 and is currently in Norfolk undergoing post-delivery tests and trials. We are seeing demonstrated performance and stability in the construction of LCS 3 and LCS 4 that captures lessons learned from the first ships. PCU FORT WORTH (LCS 3) was launched and christened in December and is completing final construction. PCU CORONADO (LCS 4) is almost 50 percent complete and is scheduled to be launched and christened later this

year. Both LCS 3 and LCS 4 are experiencing minimal change and are scheduled to be delivered to the Navy in 2012 on cost and on schedule.

I thank Congress for approving the Navy's dual award strategy in December 2010. This strategy enables the Navy to save over $2B in acquisition costs and acquire these ships well below the congressionally mandated $480M cost cap set in 2009. It allows our Navy to acquire an additional Littoral Combat ship, increasing needed capacity in our Fleet. I am impressed and satisfied with the capabilities of both LCS designs and remain committed to procuring 55 of these ships. Consistent with the dual award strategy, our FY 2012 budget requests four LCS seaframes at a total cost of $1.8B. The budget also requests two mission packages in FY 2012. These packages provide the vital center for LCS's combat capability and we have aligned LCS mission module procurement with that of our LCS seaframes. I request your continued support as we continue to acquire the future capacity and capability the Fleet requires.

**Ballistic Missile Defense (BMD)**

The Navy's mature and proven maritime Ballistic Missile Defense (BMD) capability will play a primary role in the first phase of our nation's Phased Adaptive Approach (PAA) for the missile defense of our NATO Allies in Europe. Our FY 2012 budget requests funding to increase our current BMD ship capacity from 21 ships (five cruisers and 16 destroyers) to 41 BMD capable ships by 2016. This planned capacity expansion will eventually include all of the Navy's Arleigh Burke Class destroyers and nine Ticonderoga Class cruisers. Until we grow our BMD ship capacity, our existing BMD ships may experience longer deployment lengths and less time between deployments as we stretch our existing capacity to meet growing demands.

As part of the PAA, we are working with the Missile Defense Agency to adapt Navy's proven and flexible Aegis BMD capability for use in an ashore configuration by repackaging components of the afloat Aegis Weapons System into modular containers for deployment to pre-prepared forward sites. The Aegis Ashore Missile Defense Test Complex is currently under development, with fabrication to begin in Kauai, Hawaii in 2013. This complex is a key enabler of the Aegis Ashore capability, which will be tested prior to shore placement overseas in 2015. This phased approach provides needed technology and capacity to pace the threat; it serves as a conventional counter to trends in global ballistic missile technology; and it allows for technological maturation through 2020.

**DDG 51 Flight IIA and Flight III**

To keep pace with the evolving air and missile defense threats, we restarted the DDG 51 Flight IIA production line in the FY 2010 and FY 2011 budgets with advanced procurement buys for DDG 113, 114, and 115. The restarted DDG 51 Flight IIA destroyers provide Navy with a proven multi-mission combatant that fills critical warfighting needs across the spectrum, and is the first warship built from the keel up to conduct maritime Ballistic Missile Defense. They will be the first Aegis ships to be built with the Open Architecture Advanced Capability Build (ACB) 12 Aegis Combat System. ACB-12 will allow these surface combatants to be updated and maintained with commercial off-the-shelf (COTS) technology, yielding reduced Total Ownership Cost and enhancing the ability to adapt to future military threats. Our FY 2012

budget requests funding for the construction of DDG 116 as part of our plan to build seven more of the Flight IIA class over the FYDP (an increase of one DDG 51 over last year's budget). We also request just over $75M to support Research and Development for ACB-12, which will support the integration of this critical system on DDG 113 and our development of Aegis Ashore.

The follow-on to DDG 51 Flight IIA is the DDG 51 Flight III, which will commence with the construction of DDG 123. Flight III ships will be tailored for Integrated Air and Missile Defense (IAMD) and include the Air and Missile Defense Radar (AMDR), upgraded command and control software and hardware, and enhanced electrical power and cooling. Our FY 2012 budget requests funding for a total of eight DDG 51 Class ships, including funding for the first Flight III ship in FY 2016.

**Modernization**

To counter emerging threats, we continue to make significant investments in cruiser and destroyer modernization to sustain our combat effectiveness and to achieve the 35 year service life of our Aegis fleet. Our destroyer and cruiser modernization program includes Hull, Mechanical, and Electrical (HM&E) upgrades, as well as advances in warfighting capability and open architecture to reduce total ownership costs and expand mission capability for current and future combat capabilities. In addition to HM&E upgrades, key aspects of our Destroyer and Cruiser modernization programs include the installation or upgrade of the Aegis weapons system to include an open architecture computing environment, addition of the Evolved Sea Sparrow Missile (ESSM), an upgraded SQQ-89A(V)15 anti-submarine warfare system, and improved air dominance with processing upgrades and Naval Integrated Fire Control-Counter Air capability. Our Destroyers also receive integration of the SM-6 missile, while our Cruisers receive installation of the AN/SPQ-9B radar and an upgrade to Close In Weapon System (CIWS) Block 1B. Maintaining the stability of the cruiser and destroyer modernization program is critical to our ability to provide relevant capability and capacity in our future Fleet. Our FY 2012 budget requests funding for the modernization of four cruisers (three Combat Systems and one HM&E) and three destroyers (one Combat System and two HM&E).

**DDG 1000**

The DDG 1000 ZUMWALT guided missile destroyer will be an optimally crewed, multi-mission surface combatant optimized for long-range precision land attack. In addition to providing offensive, distributed and precision fires in support of forces ashore, these ships will serve as test-beds for advanced technology, such as integrated power systems, a sophisticated X-Band radar, and advanced survivability features, which can inform future ship designs. Following a Nunn-McCurdy breach due to the reduction in procurement to three ships, we restructured the DDG 1000 program to remove the highest risk technology, the Volume Search Radar, from integration into the platform. DDG 1000 is more than 37 percent complete and is scheduled to deliver in FY 2014 with an initial operating capability in FY 2016.

**Joint High Speed Vessel (JHSV)**

The JHSV will deliver a new level of organic logistic and maneuver flexibility for Combatant Commanders. JHSV is a high speed, shallow draft ship. Its unique design allows the ship to transport medium payloads of cargo and/or personnel to austere ports without reliance on port infrastructure. JHSV-1 and -2 are currently under construction by Austal USA in Mobile, AL and are scheduled to be delivered in FY 2012 and 2013. Our FY 2012 budget requests funding for the construction of the third JHSV. We are currently developing a Memorandum of Agreement with the Army that would transfer programmatic oversight and responsibility for the entire JHSV program, including operations and maintenance, to the Navy. Upon the signing of the agreement, all JHSVs when delivered would be operated by the Navy's Military Sealift Command and manned by civilian or contract mariners.

**Submarine Programs**

**Virginia Class SSN**

The VIRGINIA Class submarine is a multi-mission submarine designed to dominate the undersea domain in the littorals, access denied environments, and the open ocean. Now in its 14th year of construction, the VIRGINIA program is demonstrating its continued ability to deliver this critical undersea asset affordably and on time. The Navy continues to realize a return on investment in the VIRGINIA cost reduction program and construction process improvements through enhanced shipbuilder performance on each successive ship. A majority of the submarines contracted via multiyear procurement have delivered under budget and ahead of schedule, and their performance continues to exceed expectations with every ship delivered. I am pleased with the accomplishments of the combined Navy-Industry team and anticipate additional improvements as we ramp up production to two submarines per year, as requested in our FY 2011 and 2012 budget submissions.

**SSBN and OHIO Replacement**

The Navy remains committed to recapitalizing the nation's sea-based strategic deterrent, the most survivable leg of our nuclear triad. With a fleet of 14 OHIO class ballistic missile submarines (SSBN), we have been able to meet the strategic needs of the nation since 1980. This class will begin retirement after more than 40 years of service in 2027.

The 2010 Nuclear Posture Review reaffirmed that our nation will continue to rely on a reliable and survivable sea-based strategic deterrent for the foreseeable future. To ensure the Navy is able to meet the nation's demand in this critical capability, our FY 2012 budget requests research and development funds for the design of the OHIO class replacement, enabling construction of the class beginning in 2019. The OHIO Replacement will possess the endurance and stealth required for continuous, survivable strategic deterrence for decades to come. Appropriate R&D investment is essential to design a reliable and survivable submarine capable of deterring all potential adversaries. Over the past year, the OHIO replacement program has been thoroughly reviewed and all aspects of the program were aggressively challenged to drive down engineering and construction costs. Our FY 2012 request represents best balance of needed warfighting capabilities with cost. The OHIO Replacement program will leverage the

many successes of the VIRGINIA SSN program to achieve acquisition and total ownership cost goals. These efficiencies and a record of acquisition excellence are critical to minimize risk to our total force structure while recapitalizing sea-based strategic deterrence between FY 2019 and FY 2033.

## Amphibious Warfare Ships

### LPD 17 Class Amphibious Warfare Ship

The SAN ANTONIO Class LPD (LPD 17) amphibious warfare ships provide the Navy and Marine Corps the ability to embark, transport, control, insert, sustain, and extract combat marines and sailors on missions that range from forcible entry to forward deployed crisis response. These ships have a 40-year expected service life and will replace four classes of older ships: the LKA, LST, LSD 36, and the LPD 4. Of the 11 ships in our program of record, five ships have been delivered, three have completed their initial deployments, and four are under construction. We continue to resolve material reliability concerns with the class and apply the lessons learned during initial operation of the early ships to those under construction. Quality continues to improve with each ship delivered as we work closely with the shipbuilder to address cost, schedule, and performance issues. Our FY 2012 budget requests funding to procure the final ship in the program.

### LHA Replacement (LHA(R))

LHA(R) is the replacement for our aging TARAWA Class ships, which will reach the end of their extended service life between 2011-2015. LHA(R) will provide flexible, multi-mission amphibious capabilities by leveraging the LHD 8 design. The AMERICA (LHA 6) is now more than 30 percent complete and on schedule for delivery in FY 2014. Beginning with LHA 8, the Navy will reintegrate the well deck into the large deck amphibious assault ships. Our FY 2012 budget requests funding for research and development to support reintegration of the well deck into the design of the large deck amphibious ship and the construction of LHA 8 in FY 2016.

### Mobile Landing Platform (MLP)

Based on commercial technology, the Mobile Landing Platform (MLP) will enable the transfer of equipment, personnel, and sustainment at-sea, and delivery ashore in support of a wide range of contingency operations. Our FY 2012 budget requests funding for one MLP and we intend to procure a total of three MLPs. We expect the first ship to deliver in FY 2013 and project initial operating capability and incorporation into the Maritime Prepositioning Force (MPF) for 2015. In the Maritime Preposition Force, each of our existing Maritime Preposition Squadrons will be augmented by one MLP, one T-AKE combat logistics ship, and a Large Medium-Speed Roll-on/Roll-off (LMSR) cargo ship. The three T-AKE are all under contract with projected delivery dates beginning this year and going through FY 2013.

**Information Dominance Programs**

**Unmanned Systems**

Our Navy is developing a "family" of unmanned systems over, on, and under the sea to provide unique capability, in concert with our manned platforms, to rapidly secure access and establish maritime superiority at the time and place of our choosing. We are developing information architecture that will allow us to rapidly assimilate data into information for our commanders, enabling shorter decision cycles that will give us an advantage in joint and maritime operations.

**Unmanned Aircraft Systems (UAS)**

Our unmanned aircraft family of systems includes the Broad Area Maritime Surveillance (BAMS) UAS, which will enhance our situational awareness and shorten the sensor-to-shooter kill chain by providing persistent, multiple-sensor capabilities to Fleet and Joint Commanders. Through our recent memorandum of agreement with the Air Force, we are pursuing greater commonality and interoperability between BAMS and the Air Force's Global Hawk UAV. Our Vertical Take-off and Landing Tactical Unmanned Air Vehicle (VTUAV) is on its second deployment aboard the USS HALYBURTON (FFG 40) and will deploy in an expeditionary role to support combat operations in Afghanistan later this year. Our FY 2012 budget includes about $12M in research and development funding to facilitate development of a weapons-capable VTUAV ready for deployment in late FY 2012. Our FY 2012 request also includes funding to develop a medium range maritime-based UAS (MRMUAS) and a Small Tactical Unmanned Aerial System (STUAS) that will support a variety of ships, Naval Special Warfare and Navy Expeditionary Combat Command units, and Marine Corps elements.

The Navy Unmanned Combat Aircraft System Demonstration (NUCAS-D) will prove carrier suitability of an autonomous, unmanned, low-observable, carrier-based aircraft. This effort includes maturing technologies for aircraft carrier catapult launches and arrested landings, as well as integration into carrier-controlled airspace. Initial flight tests to demonstrate carrier suitability are scheduled to start next year and autonomous aerial refueling demonstrations are planned for 2014. We will leverage the lessons learned from operating the demonstrator in developing a low-observable unmanned carrier-launched airborne surveillance and strike system (UCLASS). The UCLASS program will shorten the timeline to find, fix, track, target, engage, and assess time sensitive targets. UCLASS will integrate with the carrier air wings and increase the flexibility, versatility, and capability of the carrier force. We are currently developing the UCLASS acquisition strategy with OSD.

**Unmanned Underwater Vehicles (UUV)**

UUVs provide an innovative technological solution to augment manned platforms. Our Navy has logged more than 85,000 hours of UUV operations to improve battlespace awareness. Our small-body Littoral Battlespace Sensing (LBS) oceanographic autonomous undersea gliders have demonstrated the ability to conduct six-month long autonomous operations and will achieve Initial Operating Capability this year. Our FY 2012 budget requests about $13M for research, development, and procurement of the LBS glider. We are also developing Large Diameter UUVs (LDUUVs) with the capability to autonomously deploy and manage a variety of sensors and payloads. The development of these highly capable vehicles will require investment in commercially and militarily beneficial alternative energy technologies, including refinement of fuel cell technology and cutting edge battery technologies. Our FY 2012 budget requests about $47M to develop an LDUUV, and I remain committed to conduct fully independent UUV missions with durations of two months by 2017. This capability will allow full scale employment and deployment of LDUUV squadrons in the 2020s.

**Mobile User Objective System (MUOS)**

Our Maritime Strategy demands a flexible, interoperable, and secure global communications capability that can support the command and control requirements of highly mobile and distributed U.S. and coalition forces. Satellite communications give deployed forces a decisive military advantage and often offer the only communication means to support on-going operations. Rapidly expanding joint demand for more access at ever-higher data rates requires moving beyond our current legacy Ultra High Frequency (UHF) satellite capabilities. The Mobile User Objective System (MUOS) will help satisfy those demands when initial operational capability is reached in FY 2012. The first satellite in our planned constellation of five is scheduled for on-orbit capability in May 2012. Our FY 2012 budget submission continues our investment in MUOS to replace the aging UHF Follow-On (UFO) constellation. I request your continued support of MUOS and the critical narrowband communication capability it will provide to the joint warfighter.

**Next Generation Enterprise Network (NGEN)**

The Next Generation Enterprise Network (NGEN) is a Department of the Navy (DON) enterprise network that will provide secure, net-centric data and services to Navy and Marine Corps personnel after the current Navy-Marine Corps Intranet (NMCI) network stands down. In July, Navy awarded Hewlett Packard Enterprise Services with the Navy-Marine Corps Intranet (NMCI) continuity of services contract to transition the Navy out of Navy-Marine Corps Intranet (NMCI) and into NGEN. NGEN will sustain the services currently provided by NMCI, while increasing government command and control of our network and enabling secure, reliable, and adaptable global information exchange. The initial NGEN contracts are expected to be awarded in the first quarter of FY 2012. Our FY 2012 budget requests an additional $22M to support government command and control of our networks and improve our network situational awareness and defense.

**Remain Ready to Fight Today**

Our Navy continues to experience a high tempo of global operations which I expect to continue even as combat forces draw down in Afghanistan. Global trends in economics, demographics, resources, and climate change portend an increased demand for maritime power and influence. America's prosperity depends upon the seas: 90 percent of world trade moves on the world's oceans and underwater telecommunications cables facilitate about $3.2 trillion of commerce each year. As new trade patterns emerge, such as those that will result from the expansion of the Panama Canal and the opening of the Arctic, and as disruption and disorder persist in our security environment, maritime activity will evolve and expand. Seapower allows our nation to maintain U.S. presence and influence globally and, when necessary, project power without a costly, sizeable, or permanent footprint ashore. We will continue to maintain a forward-deployed presence around the world to prevent conflict, increase interoperability with our allies, enhance the maritime security and capacity of our traditional and emerging partners, confront irregular challenges, and respond to crises.

High operational demand for our force over the last decade has led to longer deployments, lower dwell time, and reduced maintenance time for our surface ships. If these trends continue, our force will be less ready and less available than it is today because of increased stress on our Sailors and a reduction in our Fleet capacity as ships fail to reach their expected service lives. We have initiatives currently underway to address these trends. We are moving approximately 1,900 Sailors from shore billets onto our ships to meet operational demands while maintaining acceptable Fleet readiness levels and Sailor dwell time. To enhance the material readiness of our Fleet, we are improving our ability to plan and execute maintenance by increasing manning at our Regional Maintenance Centers (RMCs), and by institutionalizing our engineered approach to surface ship maintenance, converting the successes of our Surface Ship Lifecycle Maintenance (SSLCM) initiative I began two years ago into the Surface Maintenance Engineering Planning Program Activity (SURFMEPP). I remain focused on ensuring our Navy has a force that is maintained and trained to provide the capability and forward presence required in the two areas of interest identified in our Maritime Strategy, the Western Pacific and the Arabian Gulf, while preserving our ability to immediately swing from those regions and our Fleet concentration areas in the U.S. to respond to contingencies globally.

Our FY 2012 base budget and Overseas Contingency Operations (OCO) funding requests balance the need to meet increasing operational requirements, sustain our Sailors' proficiency, and conduct the maintenance required to ensure our ships and aircraft reach their full service lives. It does not address the potential impacts of a full-year continuing resolution on our ongoing operations and maintenance afloat and ashore. Highlights follow of initiatives that ensure our Navy remains ready to fight today.

**Depot Level Maintenance**

Our ships and aircraft are valuable capital assets that operate in unforgiving environments. Keeping these assets in acceptable operating condition is vital to their ability to accomplish assigned missions and reach their expected service lives. Timely depot level maintenance, based on an engineered assessment of expected material durability and scoped by actual physical condition, will preserve our existing force structure. Continued investment in

depot level maintenance is essential in achieving and sustaining the force structure required to implement our Maritime Strategy. Our combined FY 2012 base budget and OCO funding requests fulfill 94 percent of the projected ship depot maintenance requirements necessary to sustain our Navy's global presence and 95 percent of our aviation depot maintenance requirements, servicing 742 airframes and 2,577 engines. The actual extent of our depot maintenance requirements will be determined by the final funding levels for FY 2011. I request that you fully support our baseline and contingency funding requests for operations and maintenance to ensure the effectiveness of our force, safety of our Sailors, and longevity of our ships and aircraft.

**Shore Readiness**

Our shore infrastructure enables our operational and combat readiness, and is essential to the quality of life and quality of work for our Sailors, Navy civilians, and their families. High operational demands, rising manpower costs, and an aging Fleet of ships and aircraft cause us to take deliberate risk in shore readiness, specifically in sustaining our shore infrastructure. We have focused our facilities sustainment, restoration, and modernization funds on improving our housing for unaccompanied Sailors and investing in energy efficient building modifications. To source these enhancements, we have temporarily cancelled our demolition program and reduced our facilities sustainment posture to 80 percent of the modeled requirement. We have targeted our shore readiness investments in areas that have the greatest impact on achieving our strategic and operational objectives. These areas include support to our warfighting missions and capabilities, nuclear weapons security, quality of life for our Sailors and their families, and energy enhancements. We remain on track in our Homeport Ashore initiative to provide sufficient accommodations to our junior single Sailors by 2016, and we continue our support for family services. We plan to complete an expansion of 7,000 child care spaces in FY 2011, allowing us to meet OSD's mandate of providing child care for 80 percent of the potential need in FY 2012.

**Training Readiness**

Our Navy is leveraging Modeling and Simulation (M&S) extensively across the Fleet training continuum to reduce at-sea training requirements and associated operating costs and energy use. These virtual environments stress critical command and control warfare skills and fine tune basic warfighting competencies without going to sea. They provide synthetic events that are scalable and repeatable, including the ability to train multiple strike groups simultaneously. Synthetic training provides a complex, multi-faceted threat environment that cannot be efficiently recreated at sea on a routine basis. Ship command and control simulations, in conjunction with the Fleet Synthetic Training (FST) program, support unit level and integrated pre-deployment training and certification, including Joint Task Force Exercises (JTFEX), Ballistic Missile Defense Exercises (BMDEX), and LCS qualification and certification training. In FY 2012, our Navy's use of simulators will reduce steaming days by 603 days for a savings of $30M, and flying hours by 5400 hours, for a savings of $35M. The Fleet has placed FST as a top training priority with the objective to increase simulator use and synthetic training to reduce Fleet operating costs.

Although we are maximizing our use of synthetic training, it cannot completely replace our need to conduct live training. Simulators cannot replicate the physical environment, risks, stress, or experiences that live training provides. Naval units must be able to practice and hone their skills in the air and at sea. Having the right facilities and the ability to practice skill sets in a live operating environment are necessary for the proficiency and safety of our Sailors and for the warfighting effectiveness of our Fleet.

The proliferation of advanced, stealthy submarines continues to challenge our Navy's ability to guarantee the access and sustainment of joint forces. Robust Anti-Submarine Warfare (ASW) training with active sonar systems is vital for our Navy to effectively address this threat. The Navy remains a world leader in marine mammal research and we will continue our investment in this research in FY 2012 and beyond. Through such efforts, and in full consultation and cooperation with other federal agencies, we have developed effective measures that protect marine mammals and the ocean environment from adverse impacts of mid-frequency active (MFA) sonar while not precluding critical Navy training. We continue to work closely with our interagency partners to further refine our protective measures as scientific knowledge evolves. It is vitally important that any such measures ensure the continued flexibility necessary to respond to future national security requirements.

In January, we announced our plan to initially focus Joint Strike Fighter (JSF) homebasing on the West Coast in accordance with 2010 Quadrennial Defense Review direction and the JSF Transition Plan. We also announced that we are suspending work on the Outlying Landing Field (OLF) draft environmental impact statement (EIS) planned for the East Coast until at least 2014. At that time, we will re-evaluate the requirement for an OLF based on our East Coast JSF basing and training requirements. We continue to experience capacity shortfalls at our current East Coast field carrier landing practice sites that present challenges to meeting our current training requirements under both routine and surge conditions for existing Navy aircraft. We will continue to ensure we meet all our training requirements by implementing the measures necessary to use all available facilities.

**Energy and Climate Change**

The Secretary of the Navy and I are committed to advancing our energy security. I consider energy an operational imperative and I established the Navy's Task Force Energy more than two years ago to improve combat capability, assure mobility, and green our footprint. We will achieve these goals through energy efficiency improvements, consumption reduction initiatives, and the aggressive adoption of alternative energy and fuels. Reducing our reliance on fossil fuels will improve our combat capability by increasing time on station, reducing time spent alongside replenishment ships, and producing more effective and powerful future weapons.

Our tactical energy efforts fall into two categories: technical and behavioral changes that use energy more efficiently, and testing/certification of alternative fuels. We are making good progress on our efficiency initiatives. The USS MAKIN ISLAND (LHD 8) uses hybrid propulsion and we are installing the same system on LHA-6 and LHA-7. We are developing a hybrid electric drive system for the DDG-51 class and I anticipate a land-based test as early as this summer. We continue to introduce advanced hull and propeller coatings and solid state lighting in our ships, and we are developing the Smart Voyage Planning Decision Aid to achieve

more efficient ship routing. We are also implementing policies that encourage Sailors to reduce their personal energy usage. These incremental initiatives add up to significant efficiency improvements.

Our alternative energy programs are progressing. We are aggressively certifying elements of our operational force for biofuel use. To date we have operated the "Green Hornet" F/A-18 and MH-60S on camelina-based JP-5 fuel and the RCB-X riverine craft on algal-based F-76 fuel. Operational testing of energy efficiency upgrades to the Allison 501k engine completed last month and is a key milestone toward certification of our Navy combatants with marine gas turbine engines.

We have reduced our energy use ashore by more than 14 percent since 2003, as a result of our energy efficiency efforts, including energy efficiency building upgrades, energy management systems, procurement of alternative fuel vehicles, and achievement of sustainable building standards for all new construction and major renovation projects. Our continued investments in advanced metering and energy audits will help identify further opportunities for efficiency gains and alternative energy use. Our approach remains focused on integrating the right technology at the right time in the right place while transforming Navy culture and behavior for long term sustainability.

Since establishing Task Force Climate Change in 2009, our Navy has taken several actions to better understand and address the potential impacts of climate change on our Navy. We have increased our operational engagement in the Arctic, participating this past summer in Operation NANOOK/NATSIQ with Canada. We are re-assessing regional security cooperation, through our African, Southern, and Pacific Partnership station missions to include consideration of climate change adaptation, especially with respect to improving water security. We are also participating with the National Oceanographic and Atmospheric Administration (NOAA) and other federal agencies to survey in the Arctic and improve our environmental observation and prediction capability worldwide. Scientific observations indicate that current changes to the climate are occurring on a decadal scale, giving our Navy enough time to conduct the studies and assessments necessary to inform future investment decisions.

**Second East Coast Carrier-Capable Homeport**

The Navy continues to focus on achieving the 2010 Quadrennial Defense Review direction to upgrade the carrier port of Mayport. Much like the dispersal of West Coast aircraft carriers between California and Washington, a second homeport on the East Coast to maintain aircraft carriers is prudent in the event of a natural or man-made disaster in Hampton Roads. The dredging project funded in FY 2010 is underway and will ensure unimpeded access to Mayport. Our FY 2012 budget requests funding for the Massey Avenue corridor improvement projects. We plan to request funding for the Wharf F recapitalization in FY 2013, and the remaining projects within the FYDP, to establish Naval Station Mayport as nuclear carrier-capable homeport by 2019.

**United Nations Convention on the Law of the Sea**

The Navy has consistently supported a comprehensive and stable legal regime for the exercise of navigational rights and other traditional uses of the oceans. The Law of the Sea Convention provides such a regime with robust global mobility rules. I believe it essential that the United States become a full Party to the treaty. The Convention promotes our strategic goal of free access to and public order on the oceans under the rule of law. It also has strategic effects for global maritime partnerships and American maritime leadership and influence. Creating partnerships that are in the strategic interests of our nation must be based on relationships of mutual respect, understanding, and trust. For the 160 nations who are parties to the Law of the Sea Convention, a basis for trust and mutual understanding is codified in that document. The treaty provides a solid foundation for the U.S. to assert its sovereign rights to the natural resources of the sea floor out to 200 nautical miles and on the extended continental shelf beyond 200 nautical miles, which in the Arctic Ocean is likely to extend at least 600 nautical miles north of Alaska. As a non-Party to the treaty, the U.S. undermines its ability to influence the future direction of the law of the sea. As the only permanent member of the UN Security Council outside the Convention, and one of the few nations still remaining outside one of the most widely subscribed international agreements, our non-Party status hinders our ability to lead in this important area and could, over time, reduce the United States' influence in shaping global maritime law and policy. The Law of the Sea Convention provides the norms our Sailors need to do their jobs around the world every day. It is in the best interest of our nation and our Navy to ratify the Law of the Sea Convention. We must demonstrate leadership and provide to the men and women who serve in our Navy the most solid legal footing possible to carry out the missions that our nation requires of them.

**Develop and Support our Sailors, Navy Civilians and their Families**

Our Sailors, Navy civilians, and their families are the backbone of our Maritime Strategy. They make us who we are. Their skill, innovation, and dedication turn our ships, aircraft, weapons and systems into global capabilities that prevent conflict, build partnerships, and, when necessary, project combat power to prevail in war. Our investment in our Sailors, Navy civilians, and their families ensures our Navy's continued maritime dominance today and in the future.

Our FY 2012 budget requests authorization and funding for 325,700 active and 66,200 reserve end strength. This request includes the migration of more than 1,800 military billets from shore and staff activities into the Fleet to man new ships and squadrons, restore optimal manning cuts, add needed information technology and nuclear operators to our force, and restore billets for FY 2013 to extend USS PELELIU in commission. This migration will enhance our forces afloat; however, the transition will present challenges to our ability to maintain sea-shore flow for some of our enlisted Sailors and sustain manning levels across the force. We are aware of these challenges and believe the transition is manageable. Our FY 2012 end strength request also begins to move end strength previously supported by OCO funding, namely our Navy Individual Augmentees (IAs), into our baseline program. We will execute a phased draw down of our OCO end strength as we project a gradual reduction of IA demands in Iraq and Afghanistan. Should IA demand remain at current levels, or increase over time, we will be

challenged to meet manning requirements for our Fleet. Our Navy continues to size, shape, and stabilize our force through a series of performance-based measures designed to retain the skills, pay grades, and experience mix necessary to meet current and future requirements.

Our FY 2012 endstrength reflects efficiencies in our manpower account that reduce excess overhead by disestablishing several staffs, but not their associated ships and aircraft, for submarine, patrol aircraft, and destroyer squadrons, as well as one Carrier Strike Group staff. We are disestablishing the headquarters of Second Fleet and transferring responsibility for its mission to U.S. Fleet Forces Command. These efficiencies streamline our organizations and allow us to reinvest the savings into warfighting capability and capacity.

I would like to touch briefly on the issue of changes to the health care benefit. Navy Medicine has been a leader in implementing pilot testing for the Department in a new concept called the Patient-Centered Medical Home. Beneficiaries have welcomed Navy Medicine's Medical Home Port initiative and it shows in their satisfaction scores. I am convinced that our beneficiaries will readily accept very modest changes to copayments as long as we continue to invest in these transformational approaches to delivering high quality health care. The proposals in the President's budget are consistent with our efforts over the last several years: a focus on internal efficiency, incentivizing the health behaviors we want, and ensuring all of our beneficiaries are treated equitably. I request you support these timely and appropriate efforts.

The tone of our force continues to be positive. In 2010, we conducted the Navy Total Force Survey, which was the first of its kind to assess the work-related attitudes and experiences of active and reserve Sailors and Navy civilians. The survey reported that Navy personnel are, overall, satisfied with the quality of their leadership, benefits, compensation, and opportunities within the Navy for personal growth and development. The survey results reaffirmed what more than 20 national awards have recognized: that our Navy is a "Top 50" organization and an employer of choice among today's workforce.

Our FY 2012 budget request represents a balanced approach to supporting our Sailors and their families, sustaining the high tempo of current operations, and preserving Fleet and family readiness. Highlights follow of our efforts to develop and support our Sailors, Navy civilians and their families.

**Recruiting and Retention**

Our Navy has enjoyed strong recruiting success over the past three years, and we expect this trend to continue through FY 2011. FY 2010 marked the third consecutive year Navy met or exceeded its overall enlisted recruiting goals in both the Active and Reserve Components and we continue to exceed Department of Defense quality standards in all recruit categories. We accessed the highest quality enlisted force in history last year, with more than 97 percent having traditional high school diplomas. Active officer recruiting for FY 2010 also exceeded our overall goals. Reserve officer recruiting exceeded our FY 2009 levels, but achieved only 95 percent of our FY 2010 goal. Reserve medical officer recruiting continues to be our greatest challenge as the requirement for medical officers has increased by more than 100 percent since FY 2008. We continue to explore new avenues for recruiting, including expanding our social media engagement to maintain a dialogue with potential applicants and influencers nationwide.

Navy will remain competitive in the employment market through the disciplined use of monetary and non-monetary incentives. Using a targeted approach, we will continue our recruiting and retention initiatives to attract and retain our best Sailors, especially those within high-demand, critical skill areas that remain insulated from economic conditions. We are taking advantage of current high retention rates and success in accessions by reevaluating all special and incentive pays and bonuses and reducing them where possible. Judicious use of special and incentive pays remains essential to recruiting and retaining skilled professionals in the current economic environment, and will increase in importance as the economic recovery continues. Our goal remains to maintain a balanced force, in which seniority, experience, and skills are matched to requirements.

To ensure we stay within our Congressionally-authorized end strength, we are executing force stabilization measures that include Perform-to-Serve (PTS) for enlisted Sailors and a series of Selective Early Retirement (SER) boards for Unrestricted Line (URL) Captains and Commanders. PTS considers the manning levels in each enlisted rating and reviews the record of Sailors eligible for reenlistment to determine if the Sailor should remain in the rating, convert to an undermanned specialty, transition to the reserves, or separate from the Navy. The SER boards will address the excess inventory of active component Captain (O6) and Commander (O5) URL officers in our Navy to ensure sufficient senior officers are available at the right time in their careers to serve in critical fleet billets. We project approximately 100 URL Captains and 100 URL Commanders will be selected for early retirement through this process. With these performance-based measures, we expect to meet our FY 2011 authorized active end strength of 328,700 and reserve end strength of 65,500 by the end of the fiscal year. We will be challenged to meet our active and reserve end strength targets in FY 2012 using existing force shaping measures. As a result of continued high retention and low attrition across the force, we are facing increasing pressure to use involuntary force shaping measures to remain within our authorized end strength.

**Diversity**

Demographic projections estimate that today's minorities will make up more than one third of our nation's workforce by 2020; by 2050, that projection increases to about half of our workforce. Our ability to access and retain the talents of every component group in our society is critical to our mission success. Recruiting and retaining a diverse workforce, reflective of the nation's demographics at all levels of the chain of command, remains a strategic imperative and a focus area for leaders throughout our Navy. To foster a Navy Total Force composition that reflects America's diversity, we are focusing our efforts on outreach, mentoring, leadership accountability, training, and communication. Our diversity outreach efforts have contributed to our 2014 U.S. Naval Academy and NROTC classes being the most diverse student bodies in our history. We have increased diverse accessions through targeted recruiting in diverse markets, developing relationships with key influencers in the top diverse metropolitan markets, and aligning Navy assets and organizations to maximize our connection with educators, business leaders and government officials to increase our influencer base. We continue to expand our relationships with key influencers and science, technology, engineering, and mathematics (STEM)-based affinity groups to inform our nation's youth about the unique opportunities available in our Navy. We are also building and sustaining a continuum of mentorship

opportunities that includes the chain of command, individual communities, social networking, peer-to-peer relationships, and affinity groups. We will continue to ensure that all Sailors are provided with opportunities to develop personally and professionally.

**Women on Submarines**

After notifying Congress last year of our intent to assign women to submarines, the Secretary of the Navy and I have authorized female officers to serve aboard OHIO class SSBN and SSGN submarines. This will enable our submarine force to leverage the tremendous talent and potential of the women serving in our Navy. The first eighteen female submarine officers commenced the standard 15-month nuclear and submarine training pipeline in 2010, and will begin arriving at their submarines at the end of this year. These officers will be assigned to two ballistic missile (SSBN) and two guided missile (SSGN) submarines which have the space to accommodate female officers without structural modification. The plan also integrates female supply corps officers onto SSBNs and SSGNs at the department head level. In December, the Secretary of Defense notified Congress of Navy's intent to expend funds to commence design and study efforts regarding reconfiguration of existing submarines to accommodate female crew members, as well as to design the OHIO replacement SSBN with the flexibility to accommodate female crew members.

**Don't Ask, Don't Tell**

I am pleased Congress voted to repeal section 654 of Title 10, United States Code, commonly referred to as the "Don't Ask, Don't Tell" (DADT) statute. Legislative repeal affords us the time and structured process needed to effectively implement this significant change within our Armed Forces. As I testified in December, we will be able to implement a repeal of DADT in our Navy. I assess the risk to readiness, effectiveness, and cohesion of the Navy to be low. Our implementation process will be thorough, but timely. We are preparing the necessary policies and regulations to implement this change in law and training Sailors and leaders at all levels to ensure they understand what repeal means to them, their families, and the Navy. Before repeal can occur, the President, Secretary of Defense, and Chairman of the Joint Chiefs must certify that the change can be made in a manner consistent with the standards of military readiness, military effectiveness, unit cohesion, and recruiting and retention of the Armed Forces. I will provide Navy's input to the certification process and I remain personally engaged in this process.

**Sailor and Family Continuum of Care**

We remain committed to providing our Sailors and their families a comprehensive continuum of care that addresses all aspects of medical, physical, psychological, and family readiness. Our FY 2012 budget request expands this network of services and caregivers to ensure that all Sailors and their families receive the highest quality healthcare available.

Navy Safe Harbor is at the forefront in Navy's non-medical care for all seriously wounded, ill, and injured Sailors, Coast Guardsmen, and their families. We have expanded our

network of Recovery Care Coordinators and non-medical Care Managers to 12 locations across the country. Safe Harbor continues to provide exceptional, individually tailored assistance to a growing enrolled population of more than 600 individuals. Over 116,000 Sailors and their spouses have participated in Operational Stress Control (OSC) training, which actively promotes the psychological health of Sailors and their families by encouraging them to seek help for stress reactions early, before they become problems. The Warrior Transition Program (WTP) and Returning Warrior Workshops (RWW) are essential to post-deployment reintegration efforts. The WTP offers an opportunity for IA Sailors redeploying from a combat zone to decompress, turn in their gear, and receive tools that will help them ease their transition back to their home and families. The RWW is designed to address personal stress that may be generated by deployment activities and it supports and facilitates the reintegration of the deployed Sailor with his/her spouse and family. The RWW also provides a safe, relaxed atmosphere in which to identify and address potential issues that may arise during post-deployment reintegration.

**Stress on the Force**

While the overall tone of our force remains positive, current trends suggest that high operational tempo, increasing mission demands, lean manning, force shaping, and economic conditions are placing increased stress on our Navy personnel. Our FY 2012 budget requests increased funding to improve our program manager-level support of our suicide prevention and stress control programs.

Suicide dramatically affects individuals, commands and families. Over the last year, we expanded our approach to preventing suicides from historic suicide surveillance and annual awareness training to include more comprehensive resilience building and tailored suicide prevention training, peer intervention, research and analysis. We saw a reduction in our number of suicides from 46 in calendar year 2009 to 38 in CY 2010. Our calendar year suicide rate also decreased from 13.3 per 100,000 Sailors in 2009 to 10.9 per 100,000 Sailors in 2010. Our 2010 suicide rate is below the national rate of 19.0 per 100,000 individuals for the same age and gender demographic; however, any loss of life as a result of suicide is unacceptable. Suicide prevention is an "all hands, all the time" effort involving our Sailors, families, peers, and leaders. We continue to work towards a greater understanding of the issues surrounding suicide to ensure that our policies, training, interventions, and communications are meeting intended objectives.

We are integrating our suicide prevention efforts into the broader array of programs we offer to improve the resilience of our force. These programs, aimed at reducing individual stress, address issues, such as substance abuse prevention, financial management, positive family relationships, physical readiness, and family support.

We continue our efforts to eliminate sexual assault by fostering a culture of prevention, victim response and offender accountability. Sexual assault is incompatible with our Navy core values, high standards of professionalism, and personal discipline. We have organized our efforts in this critical area under the Navy Sexual Assault Prevention and Response (SAPR) program. The SAPR program and the Naval Safety Center and Alcohol and Drug Prevention Program are currently developing an integrated approach to sexual assault prevention that includes clear leadership communication, bystander intervention training for Sailors to help them

recognize and interrupt risky situations, and training for military investigators and lawyers on issues specific to sexual assault investigation and prosecution.

**Learning and Development**

Education and training are strategic investments that give us an asymmetric advantage over adversaries. To develop the highly-skilled, combat-ready force necessary to meet the demands of the Maritime Strategy and the Joint Force, we have 15 learning centers around the country providing top-notch training to our Sailors, Navy civilians and members of the other Services. In FY 2010, we completed learning and development roadmaps for all enlisted ratings, providing Sailors with detailed information about the required training, education, qualifications and assignments they need to succeed in their career fields. We continue to leverage a blended training approach, integrating experienced instructors, advanced technology, and state-of-the-art delivery systems with modularized content in order to provide the right training at the right time in a Sailor's career. We are balancing existing education and training requirements with growth in important mission areas such as cyber defense, missile defense, and anti-submarine warfare. Cultural, historical, and linguistic expertise remain essential to successfully accomplishing the Navy's global mission, and our budget request supports our Language, Regional Expertise, and Culture (LREC) program as well as the Afghanistan-Pakistan (AF-PAK) Hands Program sponsored by the Joint Staff. Last year the LREC program provided language and cultural training to more than 120,000 Sailors en route to overseas assignments. We recognize the importance of providing our people meaningful and relevant education, particularly Joint Professional Military Education (JPME), which develops leaders who are strategically-minded, capable of critical thinking, and adept in naval and joint warfare. Our resident courses at Naval War College, non-resident courses at Naval Postgraduate School and in the Fleet Seminar program, and distance offerings provide ample opportunity for achievement of this vital education.

**Conclusion**

You can be exceptionally proud of our Sailors. They are our nation's preeminent force at sea, on land, and in air, space, and cyberspace. While the future is not without challenges, I am optimistic about our future and the global opportunities our Navy provides our nation. Our FY 2012 budget request represents a balanced approach to increasing Fleet capacity, maintaining our warfighting readiness, and developing and enhancing our Navy Total Force. I ask for your strong support of our FY 2012 budget request and my identified priorities. Thank you for your unwavering commitment to our Sailors, Navy civilians, and their families, and for all you do to make our United States Navy an effective and enduring global force for good.

# Chief of Naval Operations

## 9/29/2007 - Present

## Admiral Gary Roughead

Admiral Roughead is a 1973 graduate of the United States Naval Academy.

Among his six operational commands, Admiral Roughead was the first officer to command both classes of Aegis ships, having commanded USS *Barry* (DDG 52) and USS *Port Royal* (CG 73).

As a flag officer, he commanded Cruiser Destroyer Group 2, the *George Washington* Battle Group; and U.S. 2nd Fleet/NATO Striking Fleet Atlantic and Naval Forces North Fleet East.

Ashore, he served as Commandant, United States Naval Academy, the Department of the Navy's Chief of Legislative Affairs, and as Deputy Commander, U.S. Pacific Command.

Admiral Roughead is one of only two officers to have commanded the fleets in the Pacific and Atlantic, commanding the U.S. Pacific Fleet and Joint Task Force 519, as well as U.S. Fleet Forces Command, where he was responsible for ensuring Navy forces were trained, ready, equipped and prepared to operate around the world, where and when needed.

Admiral Roughead's awards include the Defense Distinguished Service Medal, Navy Distinguished Service Medal, Defense Superior Service Medal, Legion of Merit, Meritorious Service Medal, Navy Commendation Medal, Navy Achievement Medal, and various unit and service awards.

Admiral Roughead became the 29th Chief of Naval Operations Sep. 29, 2007. He and his wife, Ellen, have an adult daughter, Elizabeth.

Not public until released by the
House Armed Services Committee

STATEMENT OF

GENERAL JAMES F. AMOS

COMMANDANT OF THE MARINE CORPS

BEFORE

THE HOUSE ARMED SERVICES COMMITTEE

ON

THE 2011 POSTURE OF THE UNITED STATES MARINE CORPS

March 1, 2011

Not public until released by the
House Armed Services Committee

## *America's Expeditionary Force in Readiness*

***The Marine Corps is America's Expeditionary Force in Readiness — a balanced air-ground-logistics team. We are forward-deployed and forward-engaged: shaping, training, deterring, and responding to all manner of crises and contingencies. We create options and decision space for our Nation's leaders. Alert and ready, we respond to today's crisis, with today's force ... TODAY. Responsive and scalable, we team with other services, allies and interagency partners. We enable and participate in joint and combined operations of any magnitude. A middleweight force, we are light enough to get there quickly, but heavy enough to carry the day upon arrival, and capable of operating independent of local infrastructure. We operate throughout the spectrum of threats — irregular, hybrid, conventional — or the shady areas where they overlap. Marines are ready to respond whenever the Nation calls ... wherever the President may direct.***

***-General James F. Amos***

***America's Expeditionary Force in Readiness.*** Today, your United States Marine Corps is foremost America's Expeditionary Force in Readiness. Established originally by an act of the Second Continental Congress on November 10, 1775, your Marine Corps has evolved over 235 years into a balanced air-ground-logistics team that is forward deployed and forward engaged: shaping, training, deterring, and responding to all manner of crises and contingencies.

Through the ongoing support of Congress and the American people, your Marine Corps is a cohesive force of 202,100 Active Duty Marines; 39,600 Selected Reserve Marines; and 35,000 Civilian Marines. At any given time, approximately 30,000 Marines are forward deployed in operations supporting our Nation's defense.[1] This year, as our Nation recognizes a decade since the tragic events of 9/11, your Marine Corps has been conducting Overseas Contingency Operations for an equal amount of time. From Task Force 58 with 4,400 Marines launching from six amphibious ships to secure critical lodgments in Afghanistan in late 2001 to our counterinsurgency efforts in the Al Anbar province of Iraq and to our current operations in the Helmand River Valley of Afghanistan, your Marines have been forward deployed in the service of our Nation.

Yet, during this time the Marine Corps has not been confined solely to major combat operations and campaigns. From our rapid response aiding fellow Americans and enabling joint and interagency relief efforts following Hurricane Katrina's floods, to our non-combatant evacuation operation of 14,000 American citizens from Lebanon in 2006, to our numerous and ongoing security cooperation missions with nations of Africa, Eastern Europe, the Pacific Rim, and Latin America, the United States Marine Corps continues to demonstrate the agility and flexibility expected of America's principal crisis response force. Over the course of the past year alone, your brave men and women who wear the Marine uniform and who bring a diversity of talent in service to our Nation, have simultaneously:

- Waged an aggressive full-spectrum counterinsurgency operation in Afghanistan while concurrently increasing combat power nearly two-fold (i.e. from 10,600 to 19,400) in accordance with the President's December 2009 Afghanistan-Pakistan strategy;

[1] As of December 2010, there were approximately 20,700 Marines in Afghanistan including Marines serving in external billets (e.g. transition teams and joint/interagency support, etc.); 6,200 at sea on Marine Expeditionary Units; and 1,600 Marines engaged in various other missions, operations and exercises. The 30,000 statistic excludes over 18,000 Marines assigned to garrison locations outside the continental United States such as in Europe, the Pacific, etc.

- Successfully completed our mission in Iraq, bringing stability to Al Anbar province. This achievement was not without sacrifice and suffering in that 1,022[2] Marines gave their lives and 8,626 Marines were wounded in action;
- Partnered with allied forces in engagement missions throughout every Geographic Combatant Commander's Area of Responsibility;
- Conducted foreign humanitarian assistance and disaster relief missions in Pakistan, Haiti, and the Philippines;
- Participated in maritime security operations to ensure freedom of navigation along vital sea lines of communication, to include the recapture of the vessel *Magellan Star* and rescue of its crew from Somali pirates; and
- Rapidly reinforced U.S. Embassies in Port au Prince, Haiti; Conakry, Guinea; Bishkek, Kyrgyzstan; and most recently Cairo, Egypt to assist and protect diplomatic personnel amidst crises in these foreign capitals.

Their actions align with the functions of our Corps as seen in the new Department of Defense Directive 5100.01, *Functions of the Department of Defense and Its Major Components,* and are a critical link to the continued prosperity and security of our Nation and the survival of our friends, allies and partners. The performance of your Marines on the global stage adds to our storied legacy of sacrifice and success — under even the most adverse conditions — inspiring a sense of pride and confidence in the American public that their Marines are able to respond quickly, ensuring the Nation's interests will be protected.

***Future Security Environment.*** Public law, defense policy, our doctrine and operating concepts, and the future security environment shape how we organize, train, and equip our forces. As we look ahead, we see a world of increasing instability, failed or failing states, and conflict characterized by:

- Poverty, unemployment, urbanization, overpopulation, and extremism;
- Competition for scarce natural resources; and
- Rapid proliferation of new technologies to include capabilities to disrupt cyber networks, advanced precision weaponry, and weapons of mass destruction.

These troubling socio-economic and geopolitical trends converge in the littorals — regions along the world's coastline where the sea joins with the land. The majority of the world's population lives near the sea. The trend towards accelerated birth rates in the developing world, coupled with ongoing migration from rural to urban landscapes, results in hyper-populated coastal regions, burdened by the cumulative stressors of criminality, extremism, and violence.

Littoral cities increasingly may assume what some have called feral qualities, raising the potential for conflict, providing a measure of sanctuary for our adversaries, and posing challenges to governmental sovereignty and regional security. It is in this complex environment that your United States Marine Corps will operate. We stand optimally postured to conduct a

[2] 1022 deaths = 851 killed in action (hostile) and 171 deceased (non-hostile).

range of operations for Joint Force commanders, bridging the gap between operations at sea and on land.

Nonetheless, we are committed to the prevention of conflict as we are to responding to it. Indeed, 21st Century security challenges require expansion of global engagement — facilitated through persistent forward naval presence — to promote collective approaches to addressing common security concerns. Accordingly, forward deployed Marine forces will increasingly conduct theater security cooperation activities and will build partnership capacity through security force assistance missions with our allies and partners around the globe. The goal of our engagement initiatives is to minimize conditions for conflict and enable host nation forces to effectively address instability as it occurs.

***Role of the Marine Corps.*** The United States is a maritime nation with global responsibilities. With a naval tradition as the foundation of our existence, we remain firmly partnered with the U.S. Navy. Forward deployed, we retain the ability to come from the sea rapidly to conduct missions across the range of military operations. Our persistent forward presence and multi-mission capability present an unparalleled ability to rapidly project U.S. power across the global commons — land, sea, air, space, and cyber.

Amphibious forces with robust and organic logistical sustainment provide a maritime Super Power significant advantages, including the ability to overcome the tyranny of distance and to project power where there is no basing or infrastructure — a strong deterrent capability for our Nation. To Marines, 'expeditionary' is a state of mind that drives the way we organize our forces, train, develop and procure equipment. By definition, our role as America's crisis response force necessitates a high state of unit readiness and an ability to sustain ourselves logistically. We must be ready to deploy today and begin operating upon arrival, even in the most austere environments. The United States Marine Corps affords the following three strategic advantages for our Nation:

- **A versatile "middleweight" capability to respond across the range of military operations.** We fill the gap in our Nation's defense as an agile force capable of operating at the high and low ends of the threat spectrum or the indistinct areas in between.

- **An inherent speed and agility that buys time for National leaders.** Our flexibility and rapid response capability present unique opportunities to develop strategic options, shape the environment, and set conditions to deploy the full capabilities of the Joint Force and other elements of National power.

- **An enabling and partnering capability in joint and combined operations.** Our unique forward posture aboard amphibious ships, manned by well trained, uniformed sailors, positions us to be the 'first to fight.'

***USMC Priorities.*** My four service level priorities informed this year's budget submission. These priorities were influenced by and derived from a number of factors to include our understanding of the 21st Century battlefield based on lessons learned over nearly a decade at war, our examination of the future security environment, our doctrine and operating concepts, and our current and future budgetary and programmatic requirements.

These priorities are aligned with the principal recommendations of the *2010 Quadrennial Defense Review*, meeting its end state of ensuring that the Marine Corps is able to "prevail in today's wars, prevent and deter conflict, prepare to defeat adversaries and succeed in a wide range of contingencies, and preserve and enhance the All-Volunteer Force." My priorities also support America's four enduring strategic interests as identified in the *2010 National Security Strategy*.[3] To that end, we will:

- ***Continue to provide the best trained and equipped Marine units to Afghanistan;***
- ***Rebalance our Corps, posture it for the future, and aggressively experiment with and implement new capabilities and organizations;***
- ***Better educate and train our Marines to succeed in distributed operations and increasingly complex environments; and***
- ***Keep faith with our Marines, our Sailors and our families.***

The above priorities guide my long-term plan for the Marine Corps; however, there are pressing issues facing our Corps today that give cause for concern.

- **Equipment:** Our equipment abroad and at home station has been "heavily taxed" in the nearly 10 years of constant combat operations. We require funding to reset equipment being utilized overseas and to reconstitute home-station equipment and modernize for the future. This is critical to maintaining readiness throughout the Corps.
- **The Short Take-Off and Vertical Landing F-35B Joint Strike Fighter:** The F-35B is vital to our ability to conduct combined arms operations in expeditionary environments. Continued funding and support from Congress for this program is of utmost importance.
- **Amphibious Combat Vehicle:** We will begin the development of an affordable and capable amphibious combat vehicle to replace the recently-cancelled Expeditionary Fighting Vehicle program. The capability inherent in a ship-to-shore connector is critical to our expeditionary nature, as affirmed by the Secretary of Defense.
- **End Strength:** The drawdown of our active component from 202,100 to 186,800 must be conditions-based, and only after completion of our mission in Afghanistan. We must keep faith with our Marine Corps family by allowing appropriate time and support for those departing the force and to ensure the resiliency of our units still engaged in war.
- **Family Readiness Programs:** Like our equipment, Marines and their families have been "heavily taxed" since 9/11. We will continue to fund family readiness and family support programs that are vital to the health and welfare of our entire Marine Corps family.
- **Amphibious Ships:** The Navy and Marine Corps have determined a minimum force of 33 ships represents the limit of acceptable risk in meeting the 38-ship amphibious force

[3] 1) Security of the United States, its citizens, and U.S. allies and partners 2) A strong, innovative, and growing U.S. economy in an open international economic system that promotes opportunity and prosperity 3) respect for universal values at home and around the world 4) and an international order advanced by U.S. leadership that promotes peace, security, and opportunity through stronger cooperation to meet global challenges. *2010 National Security Strategy* Pg, 7.

requirement for the Assault Echelon. Marines are best postured to engage and respond to the Nation's security interests from amphibious ships.

The Marine Corps needs the continued support of Congress in confronting these critical issues and the many others discussed below. My promise to Congress is that we will do our part by continuing to be good stewards of our taxpayers' dollars.

***FY 2012 Budgetary Submission.*** The Marine Corps maintains a longstanding tradition in the Department of Defense as being "Penny Pinchers." *A prime example of our many noteworthy cost-saving measures is our practice of units deploying to Afghanistan utilizing equipment sets maintained and repaired in country — a measure saving significant funds annually on costs associated with the cycle of deployment and redeployment.* Our institutionalized culture of frugality, streamlined business practices, lean structure, and multi-mission capability, position us as the "best value" for the defense dollar. This fiscal year we are seeking over $40 billion[4] to fund ongoing operations, provide quality resources for our Marines, Sailors and their families, conduct reset of equipment stressed from nearly ten years at war, and prepare our forces for future missions. *For approximately 8.5%[5] of the annual Defense budget, the Marine Corps provides the Nation approximately 31% of its ground operating forces (Combat, Combat Support and Combat Service Support), 12% of its fixed wing tactical aircraft, and 19% of its attack helicopters.*

During these times of constrained resources, the Marine Corps remains committed to streamlining operations, identifying efficiencies, and reinvesting savings to conserve scarce public funds. At the direction of the Secretary of Defense in June 2010, the services conducted an efficiencies review and our FY12 budget is the result of a thorough study of all of our business activities. Already one of the most economical of the military services, we achieved our DoD efficiency goal. We captured overhead efficiency savings by focusing on three main efforts:

- Buying smarter through acquiring platforms more intelligently
- Streamlining our operations
- Being more efficient in the way we use, produce, and acquire energy

This effort has had a marked impact on our overall budget, allowing us to invest more in our core warfighting missions and enhancing our acquisition plans. The efficiency initiative drove adjustments to our programs and ensured restoration of funding in areas where needed most. Additionally, we used funds realized from efficiencies to support programs originally not funded. We re-invested savings into critical war fighting programs to enhance readiness. We anticipate unit equipment readiness to increase by FY14 through the purchase of additional equipment beginning in FY12. This readiness increase will allow the Marine Corps to equip, train, and prepare units earlier in the pre-deployment cycle. Other expansions that we were able to address include enhancing funding for facilities with direct operational impact, energy and water

[4] This sum includes both "Blue in Support of Green" funding, Overseas Contingency Operation funding, and other Navy funding for USMC needs (e.g. chaplains, medical personnel, amphibious ships, etc)
[5] Based on provisions of the *FY10 National Defense Authorization and Appropriation Acts.*

investments at bases and installations, command and control and logistics programs, and equipment modernization.

In addition to our frugality and aggressive pursuit of finding efficiencies to enhance our warfighting capacity inherent in our budget request, your Marine Corps remains the first and only military service whose financial statements have been deemed audit ready. We are continually striving to be good stewards of the public trust and know the on-going financial audit will serve to both strengthen our financial management practices and give us actionable business intelligence to support our decision-making process in supporting our operational forces at home, abroad and in harm's way.

## Priority # 1: Continue to Provide the Best Trained and Equipped Units to Afghanistan

***Operation ENDURING FREEDOM.*** We have made great progress in Afghanistan; this effort remains our number one priority until we attain our National objectives. At present over 20,000 Marines are deployed in Afghanistan. This mission ultimately involves almost 60,000 Marines, or just under one-third of our active duty force, factoring in deployment, redeployment, training cycles and other direct support. We will continue providing forces in Afghanistan capable of full-spectrum combat and counterinsurgency operations, while balancing our capabilities to perform what the Nation will likely ask of us in the future. We will ensure that Marines, Sailors, and the units in which they serve, receive the best possible training and equipment to succeed in the many types of missions we are conducting in this complex, dynamic environment.

Our successes within Helmand Province are paving the way for economic development and governance. Marine commanders on the ground and Afghan officials indicate that freedom of movement for the local populace has improved. Bazaars and markets are flourishing; critical infrastructure projects are underway. Today, 10 of 13 districts in Helmand Province are under the control of the Afghan central government. Daily, 135,000 children attend school, which is more than a 60 percent increase from 2008 levels. Formerly dangerous places like Marjah, Now Zad, and Garmsir, un-trafficable due to improvised explosive devices just one year ago, now have significant activity occurring in commercial centers. Yet, other challenges remain as we now seek to capitalize on our 2010 successes. We are currently expanding battle-space northward into other hostile locations such as the district of Sangin, where our forces are going "head-to-head" with Taliban resistance.

As America's Expeditionary Force in Readiness, we are ready to execute any mission assigned in support of crisis and contingency response. In addition to our Afghanistan commitment, we continue to source forward-based and deployed forces to meet Geographic Combatant Commander requirements. In light of our operational demands, and through the support of Congress in authorizing our end strength of 202,100 active duty forces, our combat units are beginning to realize an approximate 1:2 dwell time.[6] Other units vary at more favorable dwell time levels depending on their mission. We anticipate the 1:2 dwell ratio for combat units to remain relatively stable provided current deployed force levels are not increased; however, increased operational demands in Afghanistan or elsewhere may result in dwell times inconsistent with fostering a resilient Total Force.

Some Marines in select military occupational specialties continue to fall into what is known as a high-demand, low-density status. This is a key indicator that the combat demand for Marines with these skills does not match, or exceeds, the current manpower requirement and/or inventory. In addition, there are currently 14 of 211 occupational specialties where the on-hand number of Marines is less than 90 percent of what is required.[7] Our recently completed force structure review addressed all these concerns. We are working actively to recruit, promote, and retain the

[6] Infantry battalions will continue to remain just below 1:2 dwell time due to relief in place/transfer of authority requirements.
[7] Our most stressed occupational specialties based on percentage of Marines beyond a 1:2 dwell are 1) Geographic Intelligence Specialist, 2) Imaging Analyst/Specialists, 3) Signals Collection Operator/Analyst, 4) Unmanned Aerial Systems Operator/Mechanic, and 5) European, Middle East, and Asia-Pacific Cryptologic Linguists.

right number of Marines in the right occupational specialties thus promoting resiliency of our Total Force.

***Training for Full Spectrum Counter-Insurgency Operations.*** Our comprehensive training program conducted at our premiere desert training base in Twentynine Palms, CA, has been credited by leaders throughout the Corps with providing a dynamic environment that replicates the many tasks, challenges, and requirements required of units in a counterinsurgency setting. Our newly-instituted Infantry Immersion Trainers are realistic, reconfigurable, and provide comprehensive training environments that develop small unit tactics and individual skills for deploying infantry squads. The Infantry Immersion Trainer supports essential training such as control of supporting arms, language, improvised explosive device recognition and defeat measures, human terrain understanding and close quarters battle. Introducing battlefield effects simulators, culturally appropriate role players, and interactive avatars at the Infantry Immersive Trainers teaches Marines to make legally, morally, ethically, and tactically sound decisions under situations of great stress. It also contributes to reducing the effects of combat stress. I view this training program to be of vital importance to our Operating Forces.

***Equipping for the Afghan Effort.*** Marine units are operating in Afghanistan with high rates of ground equipment readiness. Through the generosity of Congress, we have received funds for the rapid fielding of urgent need items in support of our Afghanistan effort. The Mine Resistant Armor Vehicle Program continues to meet urgent requirements while we actively pursue vehicle upgrades to outpace emerging threats, enhance mobility, and improve vehicle performance. We can accomplish this goal through engineering changes and capability insertions in current production, planned orders, and fielded vehicles. We have a requirement for 3,362 vehicles in the family of Mine Resistant Armor Protected vehicles, including 1,454 Mine Resistant Armor Protected All Terrain Vehicles. To date, we have fielded 1,214 Mine Resistant Armor Protected All Terrain Vehicles to our units in Afghanistan and have met the theater requirement.

To date, we have fielded 34 Assault Breacher Vehicles, five of which are in Afghanistan, to enhance the mobility of the Marine Air Ground Task Force (MAGTF). We plan to field a total of 52 Assault Breacher Vehicles. Production of the remaining eighteen vehicles remains on schedule and is fully funded with final delivery scheduled for the second quarter of FY12.

In our continuing efforts to find improvised explosive devices by all possible means, we are tripling our successful Improvised Explosive Device Dog Detection program and are also undertaking a research and development effort to train dogs with improved detection capabilities with fielding expected this fall. This year, we will have fielded 647 specially trained Labrador Retrievers who work off-leash, supporting our infantry units in ground combat operations. We also have fielded a wide array of intelligence collection sensors and analytic and processing systems to include the Multimedia Archival Analysis System, the Ground Based Observational Surveillance System, the Tactical Remote Sensor System, the Communication Emitter Sensing and Attacking System, and improvements to the Tactical Exploitation Group, to name a few.

Lastly, in December 2010, we deployed a reinforced company of 17 M1A1 Main Battle Tanks to join our efforts in Regional Command SouthWest to provide increased force protection and firepower. Today, these tanks are fully integrated with our forces operating in our most

highly-contested regions, and are rapidly proving their utility in this environment by enabling our Marines to increase operational tempo. They also demonstrate the commitment of Coalition Forces to the security of Southern Afghanistan.

## Priority # 2 Rebalance the Corps, Posture for the Future, and Aggressively Experiment with and Implement New Capabilities and Organizations

***Posture for the Future and Force Structure Review.*** The Marine Corps has deployed MAGTFs in support of irregular warfare missions such as our counterinsurgency effort in Afghanistan, humanitarian assistance and disaster relief efforts in Pakistan, Haiti, and the Philippines, and engagement missions such as our theater security cooperation exercises in support of every Geographic Combatant Commander.

Despite these and many other operational successes over the past decade, new challenges await us requiring the same spirit of innovation and institutional flexibility that have been the bedrock of our Corps for 235 years. The *2010 Quadrennial Defense Review* highlights an expanding need over the next two decades for military forces skilled at countering irregular threats,[8] and the *2010 National Security Strategy* signals a need for increased engagement activities. Both of these thrusts necessitate Marines who are not only fighters, but also trainers, mentors, and advisors. The *2011 National Military Strategy* advances the idea that "strengthening international and regional security requires that our forces be globally available, yet regionally focused."[9] Likewise, Geographic Combatant Commanders have continued to register their growing need for forward–postured amphibious forces capable of conducting security cooperation, regional deterrence, and crisis response.[10]

This past fall, we conducted a detailed force structure review to develop the optimum mix of capabilities for our role as America's Expeditionary Force in Readiness in the post-Afghanistan security environment. The force structure review addressed 21st Century challenges confronting our Nation and its Marine Corps, aiming to build on our historic role as the Nation's crisis response force. The review sought to provide the "best value" in terms of capability, cost, and readiness relative to the operational requirements of our forward-engaged Geographic Combatant Commanders. The results of that effort provide for a strategically mobile, "middleweight" force optimized for forward-presence and rapid crisis response. We will be light enough to leverage the flexibility and capacity of amphibious ships, yet heavy enough to accomplish the mission when we get there. Sea-based forces, in particular, will be invaluable for discreet engagement activities, rapid crisis response, and sustainable power projection.

Our review also aimed for a force structure that provides capability and capacity across the range of military operations, while simultaneously providing for resiliency in our Total Force. With likely reductions in forward basing and strategic transportation, the importance of regionally-focused headquarters and forces, both forward-postured and immediately deployable with a minimum of strategic lift, is paramount. We have thus built a Joint Task Force capable headquarters at several Geographic Combatant Command locations. *As we aim to implement signature outcomes of the force structure review, Marines on a day-to-day basis will be forward-deployed and engaged, working closely with our joint and allied partners. When crises or*

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[8] "The wars we are fighting today and assessments of the future security environment together demand that the United States retain and enhance a whole-of-government capability to succeed in large-scale counterinsurgency, stability, and counterterrorism operations in environments ranging from densely populated urban areas and mega-cities, to remote mountains, deserts, jungles, and littoral regions." *2010 Quadrennial Defense Review Report*, Pg 20.

[9] *2011 National Military Strategy of the United States*, pg 10.

[10] In the past 20 years, U.S. amphibious forces have responded to crises and contingencies 114 times — a response rate double that during the Cold War.

*contingencies arise, these same Marines will respond — locally, regionally, or globally if necessary — to accomplish whatever mission the Nation asks of us.*

To best meet Geographic Combatant Commander needs and ensure optimal configuration as America's Expeditionary Force in Readiness, we require Congressional support to reset our equipment, develop new organizational structures, and begin implementing initiatives from our force structure review. These measures ultimately will improve our ability to function within the Joint Force, execute distributed operations, command and control in complex environments, and conduct persistent engagement missions. *As we are entrusted with the resources and funding to posture ourselves for the future, we will continue to conduct responsible examination required of a disciplined force to ensure that we implement every refinement — from the smallest to the most sweeping — in a manner that provides the Nation with a lean force, capable of rapidly projecting the Nation's power and strategic influence.*

## *EQUIPPING*

***Reset of the Total Force.*** Resetting the Marine Corps for the future after nearly a decade at war is my number one equipping priority. This past year, we completed our mission in Iraq, effecting the retrograde of more than 25,000 Marines,[11] 382,000 items of equipment, 10,800 short tons of aviation support equipment, and nearly 11,000 containers from Al Anbar province via Jordan and Kuwait to the U.S. and elsewhere. This drawdown of equipment over the course of one year was a significant logistical and operational achievement. We also accomplished the rapid shift of critical equipment from Iraq to Afghanistan in support of the deployment of the 2d Marine Expeditionary Brigade. This shift of materiel within a theater of operation became one of the largest redeployments in U.S. history, both in terms of equipment moved and distances involved.

The Marine Corps is currently sourcing highly-trained and ready forces to meet global combatant commander requirements.

- *Approximately 98% of deployed units report the highest levels of readiness for their assigned mission.*

However, high deployed-unit readiness has come at the expense of home-station, non-deployed units, which have sourced organic equipment and personnel to meet the needs of our deployed forces.

- *Approximately 68% of non-deployed units report degraded levels of readiness. The largest contributing factor is equipment; approximately 37% of non-deployed forces report degraded levels of equipment supply. This lack of equipment impacts the ability of non-deployed forces to respond rapidly to other potential contingencies and represents lost core training opportunities early in the deployment cycle in preparation for Overseas Contingency Operations.*

The equipment redeployed from Iraq to Afghanistan in support of the 2009 surge included most of our deployed medium tactical fleet, the majority of our fleet of Mine Resistant Armor Protected vehicles, light armored reconnaissance vehicles, other hard-to-move equipment, and

[11] At present, approximately 100 Marines remain in Iraq serving in individual augment, transition team and other miscellaneous billets.

theater-specific items. While shifting this equipment directly to Afghanistan enabled the Marine Corps to meet critical operational timelines, it resulted in the deferment of previously-planned post-Operation Iraqi Freedom reset actions. These same assets comprise a significant portion of the Marine Corps' total reset liability and depot maintenance costs. Thus, a consequence of delaying reset actions on this equipment is the acceptance of considerable risk in the long-term readiness and future availability of our ground equipment. In addition, increased usage rates of our ground equipment and harsh operating environments over these many years at war have resulted in our ground equipment far exceeding planned peacetime usage rates by a factor of six.

It is vital that we reset our equipment from nearly 10 years at war to maintain the necessary levels of readiness to posture ourselves for the future.

- *We estimate the cost of reset for the Marine Corps to be $10.6 billion. $3.1 billion has been requested in FY-11 to reduce this liability, leaving a $7.5 billion deficit. $5 billion of the $7.5 billion reset liability will be incurred upon termination of the conflict in Afghanistan. (Note: $2.5 billion has been requested for reset in FY12. These estimates assume no reset generation beyond FY12 and thus do not include any reset requirements for FY13 and FY14.)*

This funding will support the depot-level maintenance of our Operation Enduring Freedom equipment, procurement of combat vehicles and major weapons systems, engineering equipment, ammunition expenditures, and combat losses. The reset estimate is based on current circumstances and will change as operational requirements are re-evaluated. Moreover, as long as the war continues, our costs for reset will grow accordingly.

***Reconstitution of Equipment.*** Our experiences in combat operations over the past decade have shown us that our legacy 20th Century tables of equipment are inadequate with regard to the demands of the modern battlefield. As we move towards finalizing our force structure review by conducting a thorough Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities assessment, we will finalize determination on the costs associated with modernization of equipment sets necessary to support our future operations.

- *However, at this time, our initial estimate of reconstituting our tables of equipment is $5 billion, which is an amount entirely separate from our reset costs. We have begun to address our reconstitution shortfall by requesting $253 million in FY12 for equipment procurement.*

As our force structure review is implemented, we will continue with deliberate assessments of the modernization requirements for equipment that optimizes our post-Afghanistan posture while simultaneously reinforcing our frugal and responsible roots. Our Service Reconstitution Equipment Strategy will guide the identification of emerging requirements for refining the capabilities of our status as a middleweight force, our support to the Geographic Combatant Commanders, our service level prioritization, and resource allocation.

***Marine Aviation.*** We are transitioning our entire inventory of fixed and rotary wing aircraft to support our future force and require ongoing support from Congress for this comprehensive aviation modernization effort. The continued development and fielding of the short take-off and vertical landing (STOVL) F-35B Joint Strike Fighter remains the centerpiece of this effort. The capability inherent in a STOVL jet facilitates our maneuver warfare doctrine and fills our need

for close air support in the many austere conditions and locations where we will likely operate in the future. Around the world, there are 10 times as many 3,000-foot runways capable of handling a STOVL jet as there are 8,000-foot runways required of conventional fighter aircraft. Additionally, we maintain the organic ability to build an expeditionary 3,000-foot runway in a matter of days in support of aviation operations. The capabilities of the STOVL F-35B enable the Marine Corps to replace three legacy aircraft types — F/A-18, EA-6B, and AV-8B — which once fielded will save the Department of Defense approximately $1 billion per year in operations and maintenance costs. *The F-35B program has made significant progress to date including 22 successful vertical landings so far this year which is more than double that achieved all last year. I am confident that we will field this aircraft in accordance with responsible timelines. This matter has my unwavering attention, and I am personally overseeing this program. With a fully-fielded fleet of F-35Bs, the Nation will maintain 22 capital ships —11 carrier and 11 amphibious assault — with fifth generation strike assets aboard — a significant deterrent and response capability for our Nation.*

Our legacy aircraft supporting operational missions are consuming service life at a rate up to three times faster than scheduled. Averaged across our complete fleet, we are consuming aircraft service life at a rate 1.85 times faster than planned. This reality results in compressed timelines between re-work events and in earlier retirement of aircraft than originally programmed. The majority of our legacy platforms are nearing the end of their service lives, and most production lines are closed. New aircraft with low average ages and robust service life projections are the future of our aviation force and its support of Marine Corps and joint operations. As we transition to these new capabilities, we are mindful of the need to ensure a fully-integrated and networked force to provide Marine aviation to the MAGTF and the Joint Force.

We are exploring the viability of transformational platforms such as the Cargo Unmanned Aircraft System. The Cargo UAS will facilitate the delivery of logistics to remote locations when weather or threat systems preclude manned aviation sorties or overland resupply convoys.

Our new aircraft will provide increased range, speed, standoff, time on station, lift capability, and will be critical to tomorrow's MAGTF. By 2020, we will transition more than 50 percent of our aviation squadrons to new aircraft and complete fielding of the tilt-rotor MV-22 Osprey assault support aircraft and the upgraded UH-1Y Huey utility helicopter. We will field new close air support platforms such as the AH-1Z attack helicopter and the STOVL F-35B. We also will have new platforms for intelligence, surveillance and reconnaissance and an entirely new family of Unmanned Aircraft Systems. Lastly, we will introduce greater lifting power to the MAGTF with a new model of the heavy-lift CH-53 cargo helicopter.

***Ground Combat and Tactical Vehicle Strategy.*** The priority for our Ground Combat Element is our ship to shore tactical mobility. The seamless transition of our Operating Forces from the sea to conduct sustained operations ashore, in particular to support three balanced Marine Expeditionary Brigades (i.e. two sea-based Joint Forcible Entry Marine Expeditionary Brigades reinforced by a third Maritime Prepositioning Force-based Marine Expeditionary Brigade) as well as for conducting irregular warfare missions, necessitates an appropriate mix of ground combat vehicles. We are focusing our efforts on developing and fielding a family of vehicles with a balance of performance, protection, payload, transportability, fuel efficiency, and affordability that supports the rapid concentration and dispersion of combat power, supports strategic deployment concepts and meets our world-wide operational commitments.

Our Ground Combat and Tactical Vehicle Strategy is currently in its third phase of development. Its overall goal is to field a ground combat vehicle portfolio structured to support the ground combat element. Vehicles in this portfolio include the Joint Light Tactical Vehicle, the Marine Personnel Carrier, and a new amphibious combat vehicle.

In the complex future security environment, the execution of amphibious operations requires the use of the sea as maneuver space. An amphibious combat vehicle is essential to our ability to conduct surface littoral maneuver and seamlessly project ready-to-fight Marine units from sea to land in permissive, uncertain, and hostile environments. As the Secretary of Defense affirmed earlier this year, the cancellation of the Expeditionary Fighting Vehicle is by no means a rejection of the Marine Corps amphibious assault mission.

The standing, validated requirement for, and development of, an amphibious combat vehicle will ensure we continue to develop the right platform — at the right price — to support rapid ship to shore movement. To that end, we are now pursuing an integrated new vehicle program with three components, crafted from inception for affordability and leveraging the investment made in the EFV. We intend to mitigate risks associated with a new vehicle program and to maximize value by use of an integrated acquisition portfolio approach. This approach will have three synchronized efforts:

- Acceleration of the procurement of Marine Personnel Carriers
- Investment in a service life extension program and upgrades for a portion of the existing amphibious assault vehicles
- Development of a new amphibious combat vehicle

We intend to manage these complementary capabilities, requirements and acquisitions from a portfolio perspective.

## *NAVY SUPPORT*

***The Navy Marine Corps Team.*** As part of the Joint Force, the Marine Corps and the Navy partner to leverage the significant advantages provided by amphibious forces — a point reinforced by joint doctrine.[12] The Navy and Marine Corps team will be postured and engaged forward to be most operationally relevant to the needs of our Nation. Together, we provide the capability for massing potent forces close to a foreign shore while maintain a diplomatically sensitive profile. And, when needed, we are able to project this power ashore across the range of military operations at a time of our Nation's choosing, collectively demonstrating the essence of naval deterrence.

[12] "Timely response to crisis situations is critical to U.S. deterrent and warfighting capabilities. The timeliness of U.S. response is a function of U.S. forward deployed forces and prepositioned forces with adequate organic movement capability…." Joint Publication 3-35, *Joint Deployment and Redeployment Operations*, 7 May 2007, pg I-8.

***Amphibious Shipping.*** The Marine Corps' requirement to deploy globally, rapidly respond regionally, and train locally necessitates a combination of tactical airlift, high-speed vessels, amphibious ships, maritime preposition shipping, organic tactical aviation, and strategic airlift. The inherent flexibility and utility of amphibious ships is not widely understood, as evidenced by the frequent — and erroneous — assumption that "forcible entry capabilities" alone define the requirement for amphibious ships. *The same capabilities that allow an amphibious task force to deliver and support a landing force on a hostile shore enables it to support forward engagement and crisis response. In fact the most frequent employment of amphibious forces is for steady state engagement and crisis response.* The Geographic Combatant Commanders have increased demand for forward-postured amphibious forces capable of conducting security cooperation, regional deterrence, and crisis response reflecting the operational value of amphibious forces for missions across the range of military operations.[13] In an era of declining access and strategic uncertainty, I anticipate that this upward demand trend will continue.

Our principal contribution to U.S. Global Defense Posture is our "rotationally responsive" forces aboard amphibious ships. These forces combine the advantages of an immediate, yet temporary, presence, graduated visibility, and tailored, scalable force packages structured around the MAGTF. Rotational Amphibious Ready Groups/Marine Expeditionary Units forward deployed in three Geographic Combatant Command areas of responsibility, not only provide the capability for crisis response, but also present a means for day-to-day engagement with partner nations. Rotational forces also offer additional flexibility for decision makers in the event that forces are required to rapidly re-deploy across divergent regions and conflicts.

In January 2009, the Navy and Marine Corps agreed that the force structure requirement to support a 2.0 Marine Expeditionary Brigade lift is 38 total amphibious assault ships. In light of the fiscal constraints, the Department of the Navy agreed to sustain a minimum of 33 total amphibious ships in the assault echelon. This number gives a capability needed for steady state operations and represents the minimum number of ships needed to provide the Nation with a sea based power projection capability for full spectrum amphibious operations — including the amphibious assault echelon of two Marine Expeditionary Brigades.

The Marine Corps is committed to the spiral development of the America Class LHA (R), which is 27 percent complete. We expect the Navy to take delivery of LHA-6 in FY14 with availability to deploy beginning in FY17. In terms of LHA-7, we anticipate the contract award in late FY11 with fabrication commencing the following year. *These two ships are maximized for aviation, and I believe it is essential that a well-deck be reintroduced in LHA-8 as currently planned.* The ongoing procurement and commissioning of the final two of our planned eleven San Antonio Class LPD-17 "Common Hull Forms" is critical to providing the lift capacities and operational capabilities to support the full range of military operations up to and including forcible entry.

***Maritime Prepositioning Assets.*** The Maritime Prepositioning Force (MPF) program exists to enable the rapid deployment and engagement of a Marine Air Ground Task Force anywhere in the world in support of our National Military Strategy. The current MPF force, which has been employed 55 times since 1985, is composed of a fleet of 16 ships divided into three Maritime Pre-Positioning Ships Squadrons located in the Mediterranean Sea, Indian Ocean (Diego Garcia),

[13] Since 9/11 U.S. amphibious forces have responded to crises and contingencies at least fifty times, a response rate more than double that of the Cold War.

and Pacific Ocean (Guam and Saipan). With the restructure of the Maritime Prepositioning Force-Future, the Marine Corps and Navy have focused on an interim solution to enhance current MPF with three new ships to enable future sea-basing concepts. The addition of three Mobile Landing Platforms (MLP) and three T-AKE auxiliary dry cargo ships to the Maritime Prepositioning Ship Squadrons, coupled with existing Large, Medium-Speed, Roll-On, Roll-Off (LMSR) cargo ships, will enable the MPS squadrons to conduct at-sea, sea-state three, selective offload of vehicles, personnel, and equipment without complete reliance on fixed ports ashore. The introduction of MLPs, T-AKEs, and LMSRs provide the Navy and Marine Corps team a substantial step in enhancing our current sea-basing capabilities.

The Department of the Navy is currently funding the full MPF program of 16 ships through FY12; however, the DoN POM-13 places one Maritime Prepositioning Squadron (six ships) in a Reduced Operational Status beginning in FY13. We will continue to optimize the MPF program to remain responsive and relevant to Geographic Combatant Commander requirements.

***Naval Surface Fire Support.*** The Marine Corps has an enduring requirement for fire support from naval vessels in the range of 41-63 nautical miles to support amphibious operations in the littorals. These fires are needed by tactical commanders to maneuver towards battlefield objectives once ashore, contributing to joint doctrine for assured access. They serve as a component of the balanced and complementary joint triad of fires. Yet, unlike tactical aviation and ground fire systems, naval surface fires are unique and vital for their volume, lethality, accuracy and all-weather capability.

Planned reductions in the procurement of certain naval ships along with cancellation of specific weapons programs over the past few years have led to a deficiency in systems available for naval surface fires. Completed in 2009, the Joint Expeditionary Fires Analysis of Alternatives identified the optimum U.S. Navy programs to support Marine Corps naval surface fire support requirements. This study established the baseline capabilities of the current naval surface fire support program of record (13nm projectile of the 5-inch gun and the Advance Gun System of the DDG-1000) to be insufficient in mitigating fire support gaps. The study determined that extended range 5-inch munitions would serve as a complementary alternative to the three DDG 1000s. Dramatic improvements in 5-inch projectiles can extend the naval surface fire support maximum range, across the 106 guns in the surface fleet, from 13 to 52 nautical miles with precision, high angle attack for use in operations in urban terrain, and potential effectiveness against moving targets. We also support ongoing research and development of transformational technologies like the Electro-Magnetic Rail Gun with its potential to revolutionize the reach, coverage, and responsiveness of ship-based naval gunfire to ranges in excess of 200 nautical miles.

***Assured Access.*** We remain vigilant of burgeoning anti-access/area denial threats proliferating around the globe, particularly in the Pacific Rim. The family of guided rockets, artillery, mortars, missiles and subsurface systems like mines and quiet submarines, pose a challenge to the power projection capability of seaborne expeditionary forces and threatens DoD's ability to prevent and deter conflicts and prepare for a wide range of contingencies.

Marine Air Ground Task Forces ashore and aboard amphibious shipping will support operations to ensure the freedom of action of U.S. and Allied forces by establishing expeditionary bases and airfields or defending advance bases. Marine Short Take-off and Vertical Landing aviation assets will be of particular value in overcoming adversary anti-access and area denial capabilities

since they can operate from short or degraded airfields, can be rapidly dispersed, and can utilize both large carriers and amphibious ships for attack, maintenance, force protection, and dispersal purposes. The Joint Force Commander can leverage these unique capabilities to ensure the sea control necessary for the conduct of subsequent joint operations, whether they be power projection, forcible entry, or freedom of navigation.

In this regard, we are partnered with the joint community to develop an overarching concept to attain operational access. This year, we will employ our war-gaming capability in Expeditionary Warrior 2011 to examine operations designed to overcome anti-access challenges. We are partners with the U.S. Navy and the U.S. Air Force in the development of the Air-Sea Battle Concept aimed at integrating capabilities to defeat these advanced weapon systems in maritime areas of strategic interest. We also continue to participate in the U.S. Army's Joint Forcible Entry Warfighting Experiment, examining capabilities to conduct airborne and amphibious forcible entry operations.

## *PERSONNEL & ORGANIZATONAL INITIATIVES*

***People***. Today's Marine Corps represents less than 1/10 of 1 percent of the US population, and the individual Marine remains our most valuable asset. Our 202,100 Active Duty and 39,600 Selected Reserve end strength allow us to meet current operational commitments while promoting resiliency throughout our Total Force. In FY10 Marine Corps Recruiting Command accessed 1,703 officers (100.18 percent of the 1,700 officer goal). Our FY11 accession mission is 1,650 active duty officer accessions with the same goal projected in FY12. In terms of enlisted accessions, we are exceeding our internal quality standards of 95 percent enlisted recruits entering the Marine Corps possessing a high school diploma and 63 percent qualifying in the DoD I-IIIA mental group categories (DoD quality standards are 90 percent and 60 percent respectively). We will achieve our mission of 31,500 enlisted active component non-prior service recruits in FY11. Enlistment Bonuses remain vital to meeting the continuing requirement for high demand skills. We are continuing to experience unprecedented retention in both first-term and career Marines.

We will continue to shape our Total Force to provide the ideal grade and military occupational specialty mix needed for sustainment. Our force structure review developed ways to increase unit readiness within our operating forces to ensure 99 percent manning of enlisted billets and 95 percent manning of officer billets. At the close of the Future Years Defense Program, we will work with the Secretary of Defense on a responsible drawdown of our end strength that is aligned with the future mission demands of a post-Operation Enduring Freedom security environment. I am determined to "keep faith" with our Marines and their families by designing and executing a responsible drawdown from our current 202,100 end strength such that we avoid reduction-in-force actions and early retirement boards.

The Marine Corps is committed to making concerted efforts to attract, mentor, and retain the most talented men and women who bring a diversity of background, culture and skill in service to our Nation. Our diversity effort is structured with the understanding that the objective of diversity is not merely to achieve representational parity, but to raise total capability through leveraging the strengths and talents of each and every Marine. The success of our pioneering Female Engagement Team program in Afghanistan, which is an offshoot of a similar effort we

employed in Iraq, is one way that the Marine Corps utilizes diversity within our ranks for operational benefit.

We are currently developing a comprehensive, Service-wide strategy on diversity, an effort facilitated through our standing Diversity Review Board and a Diversity Executive Steering Committee chartered to establish the foundations for diversity success in the Total Force. The Marine Corps has established minority officer recruiting and mentoring as the highest priority in our recruiting efforts. Along with the other Services, we have provided timely input to the Congressionally-sanctioned Military Leadership Diversity Commission and look forward to release of the Commission's final report scheduled for March 2011.

***Marine Air Ground Task Force Enhancements.*** To further posture ourselves for the future, we are evaluating the internal workings of our MAGTFs to account for the distributed operations, decentralized command and control, dispersed forces and diffuse threats inherent on the modern battlefield. We are implementing a diverse suite of command and control systems within all elements of the MAGTF. We continue to work to build the capacity of new organizations like the Marine Corps Information Operations Center to achieve non-lethal effects in today's irregular and complex environments. We are ensuring the rapid analysis, fusion, and dissemination of intelligence down to the tactical level by continuing implementation of the Marine Corps Intelligence, Surveillance, and Reconnaissance Enterprise. We also aim to reorganize our intelligence collection and exploitation capabilities, increasing the ratio of resources to users. We will also capitalize on the capabilities of unmanned aircraft systems via an increase in capacity.

We are developing regionally-focused Marine Expeditionary Brigade command elements that are joint task force capable, with habitually aligned subordinate elements, to improve Geographic Combatant Commander effectiveness and speed of response. We have recently stood up one such element in Bahrain in support of U.S. Central Command. To better standardize operations and training for units and staff in our ground combat element, we established the Marine Corps Tactics and Operations Group, which reached full operational capability in May 2010. Among other measures, this organization's mission is to support the refinement of our doctrine, including how our infantry companies will fight in the future. Building on the successes of the Marine Corps Tactics and Operations Group for the ground combat element, we are also developing and establishing a Marine Corps Logistics Operations Group capability for the Logistics Combat Element along with reorganizing Marine Logistics Groups to establish standing Combat Logistics Battalions habitually aligned to specific Marine Expeditionary Units and infantry regiments.

Over the past decade, we have become more reliant on equipment sets resulting from the emergence of new threats, perhaps most notably the improvised explosive device. This trend has resulted in the acquisition of some resources that are incompatible with the ethos of an agile, expeditionary force. To that end, we have begun an effort known as "*Lightening the MAGTF,*" a measure aimed at reducing the size, weight, and energy expenditure of our forces from the individual rifleman to wholesale components of the MAGTF.

Sustained combat operations and worldwide theater security cooperation and training commitments over the last decade point towards an essential requirement for the Marine Corps Reserve to continue focusing at the operational, rather than strategic level of warfare. Since 9/11, our Marine Corps Reserve has engaged continuously in combat operations as well as in

regional security cooperation and crisis prevention activities in support of the Geographical Combatant Commanders. This operational tempo has built a momentum among our war fighters and a depth of experience throughout the ranks that is unprecedented in generations of Marine Corps Reservists. In fact, today's Marine Corps Reserve is more highly trained, capable, and battle-tested than at any time since the Korean War.

*The transition in utilization of the Marine Corps Reserve from a strategic to operational Reserve, as affirmed by our force structure review, expands our ability to perform as America's Expeditionary Force in Readiness.* Sharing the culture of deployment and expeditionary mindset that has dominated Marine Corps culture, ethos and thinking since our beginning more than two centuries ago, the Marine Corps Reserve is optimally organized, equipped, and trained to perform as an operational Reserve.

***Institutions for Irregular Warfare.*** Irregular operations (e.g. Counterinsurgency, Stability Operations, Foreign Internal Defense, Unconventional Warfare and Counterterrorism) often occur in response to crisis and are executed in austere conditions — situations often entailing employment of Marines. Our experiences countering irregular threats in "Small Wars" is a result of responding to complex crises involving a mix of security, economic, political, and social issues — usually under austere physical conditions. Our approach to irregular warfare is based on the understanding that people, ideas and organizations — not platforms and advanced technology — are the keys to success in operating in complex and irregular warfare environments. Naval forces conducting theater security operations and security force assistance to build partnership capacity also provide the Nation the potential for immediate crisis response capability and options for escalation or de-escalation. *Building on our lessons learned in Iraq and Afghanistan, we are developing options to re-organize, consolidate, and strengthen our institutions that emphasize our irregular warfare and multi-mission capability such as the Center for Advanced Operational Culture and Learning, the Security Cooperation Training and Education Center, and the Center for Irregular Warfare. The objective is to gain unity of effort, increase effectiveness and efficiency, and reduce redundant capacity.*

We established the Marine Corps Training and Advisory Group (MCTAG) within the past five years to train, equip, and deploy Marines for Security Force Assistance missions in support of Geographic Combatant Commander theater security cooperation plans. The MCTAG provides conventional training and advisor support to Host Nation Security Forces. This organization also offers planning assistance to Marine regional component commands in developing and executing partner nation training programs. The MCTAG is scheduled to reach full operating capability in September 2011 and to date has directly trained more than 180 Marines and Sailors and assisted in the training of more than 600 Marines and Sailors, who themselves have conducted in excess of 150 deployments to more than 50 countries worldwide. The MCTAG has also developed programs of instruction to train joint service advisors/trainers deploying on theater security cooperation missions as well as programs of instruction to train light infantry battalions from the Republic of Georgia in executing combat operations in Afghanistan.

Because the Marine Corps functions in an integrated fashion throughout all traditional domains — land, sea, air, and space — it is a logical step forward for us to be optimally organized, trained and equipped to operate synergistically on the modern battlefield, which now includes the cyber domain. As U.S. Cyber Command matures and sponsors initiatives to

increase cyber operational capacity, we are taking deliberate steps to build additional Marine Corps cyber capability and capacity to meet joint and service-level demands.

We see the continued development of organic cyber capabilities, capacities, and awareness as a critical element to retain speed, precision, and lethality across the entire spectrum of operations. We are working to incorporate scenarios into our exercises to increase opportunities for Marines to leverage cyber capabilities while also training Marines to operate where cyber-enabled warfighting capability may be degraded and/or contested. Additionally, we are integrating tailored cyber education into our officer and enlisted professional education programs. *We are continuing to examine our options for recruiting, training and retaining our cyber workforce. This is especially challenging given the highly specialized skill sets and the competition for such in both the Federal and Private sectors.*

Formed in 2006, Marine Special Operations Command (MARSOC) is currently conducting an internal reorganization into three mirrored battalions. Upon completion of this reorganization in FY14, Marine Special Operations Command will have one regiment consisting of three battalions, 12 companies, and 48 Marine Special Operations Teams. Since December 2009, MARSOC has maintained an enduring battalion-level Special Operations Task Force headquarters and two companies in Afghanistan along with persistent Marine Special Operations Team engagements in other high priority regions.

Since its inception, the Marine Corps has resourced Marine Special Operations Command with significant investments in military construction for training facilities, barracks and headquarters. In the near term, MARSOC will have 2,678 personnel. Our force structure review recently evaluated ways to increase the number of combat support and combat service support Marines (e.g. logisticians, intelligence personnel, etc.) enabling MARSOC's operations. I intend to add 1,001 Marines to MARSOC, which will increase its capacity by 44 percent. These Marines, who are above and beyond the planned FY14 personnel increase, will better enable it for effective special operations.

The Marine Corps serves as the Department of Defense Non-Lethal Weapons Executive Agent responsible for developing program recommendations and stimulating non-lethal weapons requirements. Non-lethal effects are part of the Department of Defense portfolio of capabilities that enhance the Joint Force Commander's ability to act in a timely manner to detect, deter, prevent, defeat, or, if necessary, mitigate the effects of an attack. Non-lethal capabilities provide the Joint Force the ability to selectively target hostile threats, covered or concealed by civilian assets, while avoiding collateral damage. Geographic Combatant Commands are registering increased demand for non-lethal weapons options to include items such as arresting nets, dazzler lasers, acoustic hailing devices, electric stun guns, blunt impact munitions, and non-lethal warning munitions. The Joint Non-Lethal Weapons Program continues to support joint and combined non-lethal weapons research, development, training and exercises in support of all Geographic Combatant Commands.

***Expeditionary Energy.*** The Marine Corps is leading the development of expeditionary energy solutions for DoD and the Department of the Navy — reducing energy demand in our platforms and systems, increasing the use of renewable energy, and instilling an ethos of energy and water efficiency in every Marine. *Our priority is force protection — saving lives by reducing the number of Marines at risk on the road hauling fuel and water. We also aim to help Marines*

*travel lighter and move faster through the reduction in size and amount of equipment and the dependence on bulk supplies.*

In February 2011, we issued a "Bases to Battlefield" Expeditionary Energy Strategy Implementation Planning Guidance, which sets goals, performance metrics, and a plan for implementation by 2025. This strategy supports Congressional and Department of the Navy goals to increase energy security through the use of alternative fuels and energy efficiency. Since 2009 we have aggressively pursued renewable energy and energy efficient capabilities that will make Marine units more energy self-sufficient, and ultimately increase our combat effectiveness.

Within a year, we stood up an Experimental Forward Operating Base, sourced commercial and government technologies, trained an infantry company with renewable energy technology, and deployed them to Afghanistan in the winter of 2010 where they operated two patrol bases entirely on renewable energy. As a result, our forces required less fuel and batteries, reducing risk to Marines and saving money. This year, the Experimental Forward Operating Base will focus on the requirements of a major battlefield energy user — the Command Operations Center and the Command Element — and will evaluate a second round of energy technologies to support expeditionary operations.

In FY12 we are devoting more resources — in current programs and new areas — to build a foundation to achieve our goals for increased energy efficiency and renewable energy by 2025. As a starting point, we anticipate savings of petroleum over the Future Years Defense Program in our Overseas Contingency Operations of 100,000 to 150,000 barrels. For example this year, we are procuring mobile electric power sources to achieve 17 percent fuel efficiency using U.S. Army funded development and Marine Corps funded procurement monies. We are also fielding Enhanced Efficiency Environmental Control Units to achieve 15-30 percent power efficiency improvements.

***Installation Energy.*** We are also devoting more resources to our Energy Investment Program than ever before. These funds will be used to implement the results of recent and ongoing energy audits at our installations; install more efficient systems and reduce overall energy consumption. Additionally, new facilities will continue to incorporate the latest energy sustainability and efficiency features. This effort aboard our installations complements our Corps-wide initiative to develop an energy ethos and culture of conservation.

## *TRAINING*

***Training MAGTFs.*** We are utilizing our Marine Corps Service Campaign Plan as a roadmap to strengthen and maintain our core competencies and to ensure we remain America's Expeditionary Force in Readiness well into the future. This effort also will also help synchronize our Service level security cooperation activities in support of national strategy and guide the type of training and exercises we must conduct, in particular at the Marine Expeditionary Brigade level.

Our amphibious core competency figures prominently in our Service Campaign Plan, and as a result we have undertaken an array of exercise planning in this critical skill area. We will soon be conducting a MAGTF Large Scale Exercise that will refine our capability to conduct amphibious power projection and sustained operations ashore in a joint and inter-agency

environment. In late-2010 we conducted *Exercise Bold Alligator 2011*, the first large-scale amphibious training exercise with the Navy on the East Coast in almost 10 years. This synthetic training event practiced planning for forcible entry operations against conventional and asymmetric threats and a large scale non-combatant evacuation operation. We will take lessons learned from this exercise and build upon them for the next iteration of this important exercise with the U.S. Navy scheduled in the coming year.

We are reviewing the core functions of our organizations and, where appropriate, adding irregular warfare capabilities to reflect the full spectrum of possible employment options as a core task set for the Marine Expeditionary Brigade. We view integration with other government agencies and coordination with non-government organizations as essential to our success in irregular warfare and have significantly increased interagency participation in numerous exercises and training venues such as Expeditionary Warrior-09/10, Emerald Express, Joint Urban Warrior-09, and Joint Irregular Warrior-10. We aim to capitalize on our current theater security cooperation and partnership capacity building activities with our allies and partners in all operational environments providing our National leaders with strategic options to shape outcomes, prevent and deter conflicts, strengthen "at risk" states, and deny enemy safe-havens.

## Priority #3 Better Educate and Train our Marines to Succeed in Distributed Operations and Increasingly Complex Environments

***Professional Military Education and Small Unit Leader Development.*** We are planning more investments in the education of our non-commissioned officers and junior officers, as they have assumed vastly greater responsibilities in both combat and garrison. This focus on education will better train them for decision-making during distributed operations against more diffused threats over broader areas of the battlefield. The primary initiative to address this priority is to increase markedly their opportunities to attend resident professional military education. We are currently evaluating ways to increase throughput at resident professional military education courses with options for both constrained and unconstrained manpower and resource increases. We are evaluating traditional paradigms relative to course lengths and instructional methodology, with the specific objectives of tripling throughput at the Expeditionary Warfare School (Career level) and doubling resident Command and Staff College (Intermediate Level) throughput.

These key leaders also impact unit cohesion and our overall effectiveness in combat. Introducing these leaders into a unit at the right time and stabilizing them in a life cycle continuum of a unit positively impacts a unit's effective training, performance and resiliency during pre-deployment training and post combat. These leaders are in the best position to influence our cultural ethos with its emphasis on intangible qualities such as esprit de corps, integrity, and "service to country during time of war." We are currently reviewing manpower policies and models and will ensure these key leaders are present and able to lead a cohesive unit throughout its life-cycle continuum, including rigorous pre-deployment training and post deployment actions. This effort will ready our units for any fight, whether irregular or combat.

We also intend to infuse Values Based Training, rooted in our core values of Honor, Courage and Commitment, at all levels of professional development to foster resilience and to enable effective operations, especially in complex irregular environments. *Our overall goal is to institutionalize efforts to develop more mature, educated, and capable non-commissioned officers and maneuver unit squad leaders. As these concepts mature, there will be costs in terms of military instruction and facilities for which we will require Congressional support.*

***Regionalization and Specialization.*** The increased call for engagement, as seen in our force structure review and in strategic guidance, requires Marines with improved cultural and language skills and formal education. To develop better specialization for anticipated future missions and operating environments, we will expand our Foreign Area Officer and Regional Affairs Officer programs, as well as opportunities to send more officers through graduate level training, fellowships and research opportunities — ideas supported by findings and recommendations of the *2010 Quadrennial Defense Review* and the *2010 Quadrennial Defense Review Independent Panel Report*.[14] This effort will extend to our "Whole of Government" approach toward irregular warfare as we seek greater exchanges and fellowships with the elements of the Interagency.

***Marine Corps University.*** We are continuing to implement recommendations of our 2006 Officer Professional Military Education Study (*the Wilhelm Report*) and are making significant strides in terms of resources and facilities enhancing the campus of the Marine Corps University

[14] *2010 Quadrennial Defense Review Report*, pg 54; *2010 QDR Independent Panel Report*, pgs 75-77.

(MCU). We have programmed approximately $125 million in Military Construction between FY11-FY12 for new academic facilities for the Marine Corps War College, Command and Staff College, and the School of Advanced Warfighting. In addition, we will expand the Staff Noncommissioned Officer Academy at the main campus in Quantico. These funds represent only a down payment on a larger commitment to double the size of the University campus and to upgrade our enlisted academies world-wide. Completion of the MCU master plan will require the demolition and relocation of tenant units aboard the campus. Detailed documentation of costs associated is on-going; however, we estimate over $400 million is needed to complete the master plan. Our ultimate goal is to develop the MCU into a premier institution with world-class faculty, facilities, students, and curricula; we will require the assistance of Congress in this goal.

## Priority #4 Keep Faith with our Marines, our Sailors and our Families

***Keeping Faith.*** We expect and demand extraordinary loyalty from our Marines — a loyalty to Country, family, and Corps. Our Nation has been at war for a decade, placing unprecedented burdens on Marines, Sailors, families, Wounded Warriors, and the families of the fallen. They have all made tremendous sacrifices in the face of danger. We owe them all a reciprocal level of loyalty. Our approach to caring for their needs is based on the same unwavering faithfulness they have demonstrated to the Marine Corps. We will ensure their needs are met during times of deployment and in garrison by providing the services, facilities, and programs to develop the strength and skills to thrive on the challenges of operational tempo. When needed, we will restore them to health. We will also transition them back to civilian life, and in the cases of our fallen Marines, we will support and protect their surviving spouses and dependents. We will do this by focusing on several areas this fiscal year.

***Combat Stress, Resiliency, Medical and Mental Health Care.*** We continue to advocate for the highest quality medical care and facilities for our service members, retirees, and their families. To ensure the Department can continue to provide the finest health care benefits in the country to our beneficiaries, we fully support the medical efficiencies and adjustments in TRICARE included in the President's budget proposal.

The evolving security environment requires a physically and mentally resilient Marine able to endure extended exposure to ambiguous, stressful, and ever-changing situations. Young leaders find themselves on the vanguard of a protracted war, adapting to a variety of situations and scenarios. To improve their resilience, we are working aggressively and creatively to build a training continuum that better prepares them for the inevitable stress of combat operations and to equip them with the necessary skills required to cope with the challenges of life as a Marine.

Instruction founded and focused on our core values helps provide some of this resilience, especially in irregular warfare and complex environments. A program combining the "best practices" of mental, emotional and physical fitness will best instill in our Marines the resiliency needed to endure the stressors of combat and enhance their ability to perform effectively across the range of military operations. *We are developing a comprehensive program to improve the resiliency of our Marines both in garrison and in combat.*

We are partnered with the Navy to address the nation-wide dearth of qualified mental health care providers, which challenges our ability to provide care at some of our bases and stations and, in some cases, to our reservists in remote locations. During Calendar Year 2010, we saw a nearly 30 percent decrease in the number of suicides within our Total Force.[15] We are too early in our suicide studies to identify what specific initiative(s) have resulted in this dramatic turnaround. However, we have implemented a number of measures on multiple fronts. Some of these include the following:

- **Evocative Peer-led Training Program**: "Never Leave a Marine Behind" suicide prevention program for non-commissioned officers and Junior Marines. We are expanding this training to include staff non-commissioned officers and commissioned officers this year.

[15] CY10 suicides = 37 whereas CY09 suicides = 52.

- **DSTRESS Line Pilot Program with TRICARE West:** "By Marines-For Marines" call center designed to assist with problems at an early stage. The call center is staffed by veteran Marines, providing anonymous service to all current Marines, veteran Marines, their families and loved ones.
- **Combat and Operational Stress Control and Operational Stress Control and Readiness Teams:** Utilizing unique training programs across the Total Force and ensuring the presence of mental health professionals in front-line units as a primary prevention tool to help Marines identify and mitigate stress.
- **Marine Resilience Study to Assess Risk and Resilience:** We are participating in a longitudinal research study that will examine risk across three domains: biological, psychological and social. The outcome of this study will inform our future work in the area of building and maintain resiliency across the Corps.

We will continue advocating to the medical community for better diagnostic and increased treatment options for Marines with severe injuries including Post Traumatic Stress and Traumatic Brain Injury. In collaboration with the other services, we developed a set of events-based parameters, mandating that our leaders search out Marines who have experienced a concussive event. This measure no longer relies on identification of impacted service members solely on their willingness to seek help on their own initiative. These protocols are in place now in Afghanistan, and we are already seeing a culture change in the attitude of Marines about being treated early for a Traumatic Brain Injury.

We have established an in-theater Restoration Center that brings comprehensive concussion diagnosis and management as close to the front lines as possible to ensure that appropriate care is available as quickly as possible. We are currently developing policy and applications to track Traumatic Brain Injury from "point of injury" to "return to full duty" separately but in parallel with medical documentation. These measures will empower commanders with the information they need to monitor the health of a Marine who has suffered a concussive event and intervene appropriately for the duration of a Marine's career and long after the initial injury."

***Transition Assistance.*** We believe transition assistance should be a process not an event. We have established a goal to make the Marine Corps Transition Assistance Management Program more value added for our departing Marines. From 2009 to 2010, we conducted functionality assessments of the Transition Assistance Management Program and the Lifelong Learning Program and noted many deficiencies. In response, we established two Transition Assistance Operational Planning Teams in 2010 to assess existing programs. We have developed an "end to end" process improvement plan that will begin at the point of initial accession into the Marine Corps and continue through post separation. We are initiating actions and integrating existing capabilities that will most directly improve the quality of support provided to Marines within six months prior to separation and those who have been separated at least six months.

Marines have expressed a desire for assistance navigating Department of Veterans Affairs benefit processes such as in cases of enrollment for and access to education benefits. We will modify existing websites to improve access and enhance opportunity for separating Marines to speak directly to Marine Corps support personnel who are trained to remove administrative benefit processing barriers. We will improve networking opportunities to help Marines find

meaningful employment and are adapting our current job fairs to support increased networking opportunities that will allow them to meet mentors and employers.

Marines have asked for an opportunity to connect with employers and learn how to translate their intangible and tangible attributes. Our transition workshops will be overhauled to address these needs. Marines are also seeking help to simplify enrollment processes for the Post 9/11 Montgomery GI bill and to gain access to academic institutions that will provide the quality and level of business education and skills private industry demands. We have initiated a Leader-Scholar Program, which includes academic institutions who value Marines' service commitment and pledge special enrollment consideration. While the support varies from school to school, we now have 75 participating institutions with the goal of an additional 25 by the end of this year. As we gain momentum, we will continue to change the transition assistance program from its current event focus to that of a process that reintegrates Marines into the civilian sector with the knowledge, skills, and abilities to leverage and communicate their Marine Corps time and experience.

***Family Readiness Programs.*** We increased baseline funding for family support programs beginning in FY10 to ensure appropriate wartime footing. Programs benefitting from this measure include the Unit, Personal and Family Readiness Program; Marine Corps Family Team Building Program; Exceptional Family Member Program; School Liaison Program; and other miscellaneous Marine Corps Community Services Programs supporting remote and isolated commands, deployed Marines, and independent duty Marines and families. We are currently conducting a complete review to ensure effectiveness and efficiency of these programs. Our goal is to determine where expansion may be needed to further assist our families and where programs can be streamlined to reduce redundancy.

***Wounded Warrior Care.*** Marines continue to suffer numerous wounds, trauma, and injuries during operations in combat and during training missions. Many of these brave heroes with significant injuries are convalescing at military treatment facilities here in the National Capital Region and across our Nation at other major military treatment facilities. Our Wounded Warrior Regiment provides non-medical care management services to wounded, ill, and injured Marines and their families. The Wounded Warrior Regiment continues to improve existing programs and add new support mechanisms. We have increased support to wounded, injured, and ill reserve Marines through additional Recovery Care Coordinators, enhanced family support at military treatment facilities, and one-on-one orientation sessions. We also provide Integrated Disability Evaluation System Support through Regional Limited Duty Coordinators and Wounded Warrior Attorneys. We have also initiated a mandatory Warrior Athlete Reconditioning Program. Outreach is an important aspect of the Regiment's non-medical care delivery and management. The Sergeant Merlin German Wounded Warrior Call Center extends support to Marines and families through advocacy, resource identification and referral, information distribution, and care coordination, 24 hours a day, seven days per week.

The comprehensive care coordination provided by the Wounded Warrior Regiment throughout the phases of recovery has been highly successful. The results of internal assessments have substantiated that creation of the Wounded Warrior Regiment has had a positive impact on the support offered wounded, injured and ill Marines and families. The Marine Corps will continue to honor the commitment to our Wounded Warriors and to help them return to full duty or successfully reintegrate into their communities.

***Behavioral Health Integration.*** Behavioral health needs since 9/11 have become increasingly complex with individuals often requiring assistance in a number of areas at one time. Marines with more than two deployments have been identified as a higher risk population. According to the Joint Mental Health Assessment Team, psychological health problems remain steady at 11 percent of Marines for the first and second deployments, but increase to 22 percent for those who have deployed three or more times. Sixty-five percent of Marines are under 25 years old. Associated with this young force are high-risk factors that include communication and coping skills, isolation, combat-related wounds and substance abuse. Drawdown of end strength following Operation ENDURING FREEDOM and return to garrison life will likely result in additional behavioral healthcare requirements as Marines redeploy and adjust to the garrison environment. We continue to move forward with our integration of prevention and intervention programs initiated in 2009. We have established a Behavioral Health Branch at our headquarters for Manpower & Reserve Affairs. Headquarters Marine Corps Health Services also has created and filled a new billet for a Director of Psychological Health.

***Military Construction.*** The Marine Corps maintains its commitment to facilities and infrastructure supporting both operations and quality of life. Our military construction and family programs are important to success in achieving and sustaining our force structure and maintaining readiness. For many years, we funded only our most critical facility needs. As a result, our installations were challenged to properly house and operate the additional forces required to meet our planned end strength increase. Between FY07-FY10, we received $6.9 billion in new construction and design. With this funding, we are providing new quality of life facilities, improved operational and training facilities, and more modern utility infrastructure systems.

Our FY12 military construction budget request is $1.4 billion. With these requested funds, we will provide Bachelor Enlisted Quarters, aviation support facilities, and improvements to quality of life, utilities and infrastructure, and professional military education facilities. Additional family housing efforts in FY12 include improvements to existing housing units and funding for the operations, maintenance, and leasing of 1,100 units worldwide and oversight of 22,000 privatized units.

## Conclusion

The United States Marine Corps remains the Nation's crisis response force-of-choice. Our continued success in Afghanistan and throughout the globe is made possible by the loyal sacrifice of our incredible men and women in uniform, Civilian Marines, and our Marine Corps family. The personnel, equipment, and training that have given us success over the nearly past 10 years at war has come through the ongoing support of Congress and the American people. I promise that your Marine Corps understands the value of each dollar provided and will continue to provide maximum return for every dollar spent.

In the coming year, we will begin a deliberate transformation into a force optimized for the likely threats of the next two decades. We understand and appreciate the contribution that each Marine has made for this great Nation, and we recognize the heavy burden it has placed on their loved ones. We remain "Always Faithful" to our Marine Corps family, to Congress, to our chain of command and to the American people.

## General James F. Amos
## Commandant of the Marine Corps

On October 22, 2010 General James F. Amos assumed the duties of Commandant of the Marine Corps. General Amos was born in Wendell, Idaho and is a graduate of the University of Idaho. A Marine Aviator, General Amos has held command at all levels from Lieutenant Colonel to Lieutenant General.

General Amos' command tours have included: Marine Wing Support Squadron 173 from 1985-1986; Marine Fighter Attack Squadron 312 - a component of Carrier Air Wing 8 onboard USS Theodore Roosevelt (CVN-71) - from 1991-1993; Marine Aircraft Group 31 from 1996-1998; 3rd Marine Aircraft Wing in combat during Operations IRAQI FREEDOM I and II from 2002-2004; II Marine Expeditionary Force from 2004-2006; and Commanding General, Marine Corps Combat Development Command and Deputy Commandant, Combat Development and Integration from 2006 to July 2008. Additional operational tours have included Marine Fighter Attack Squadrons 212, 235, 232, and 122.

General Amos' staff assignments have included tours with Marine Aircraft Groups 15 and 31, the III Marine Amphibious Force, Training Squadron Seven, The Basic School, and with the MAGTF Staff Training Program. Additionally, he was assigned to NATO as Deputy Commander, Naval Striking Forces, Southern Europe, Naples Italy where he commanded NATO's Kosovo Verification Center, and later served as Chief of Staff, U.S. Joint Task Force Noble Anvil during the air campaign over Serbia. Transferred in 2000 to the Pentagon, he was assigned as Assistant Deputy Commandant for Aviation. Reassigned in December 2001, General Amos served as the Assistant Deputy Commandant for Plans, Policies and Operations, Headquarters, Marine Corps. From 2008-2010 General Amos was assigned as the 31st Assistant Commandant of the Marine Corps.

General Amos' personal decorations include the Navy Distinguished Service Medal, Defense Superior Service Medal, Legion of Merit with Gold Star, Bronze Star, Meritorious Service Medal, Joint Service Commendation Medal, and the Navy and Marine Corps Achievement Medal.

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

March 1, 2011

## RESPONSE TO QUESTION SUBMITTED BY MR. SMITH ON BEHALF OF MS. GIFFORDS

Secretary MABUS and Admiral ROUGHEAD. To avoid duplication of efforts, Navy is collaborating with the other Services to develop and implement the use of energy efficient and alternative energy technologies. Specifically, Navy is fostering synergies in the following areas:

Fuels: Navy is an active participant in, and former chair of, the Tri-Service Petroleum, Oil and Lubricants Users Group. This Group brings together technical fuels experts from the research, test & evaluation, and logistics communities to address operational issues at the service user level. Navy and the other services are also involved in the Interagency Working Group (IAWG), an information-sharing organization chaired by the Defense Logistics Agency and the Department of Energy that deals with alternative energy issues, including biofuels.

Aviation: As a member of the Joint Propulsion Coordinating Committee, Navy coordinates with propulsion leadership and technical experts from the three Services to address propulsion technology issues. In addition, Navy is working with representatives from Army, Air Force, NASA, and private industry to advance the Variable Affordable Advanced Turbine Engine Initiative, which focuses on the development of aircraft propulsion and related systems technology.

Maritime: Military Sealift Command (which provides services to Navy, U.S. Transportation Command, Army, Air Force, Marine Corps, Missile Defense Agency, and other U.S. Government Agencies) and Naval Sea Systems Command are collaborating on a number of initiatives such as Hybrid Electric Drive, shore power metering, HVAC system efficiency modifications, ship energy surveys, and development of energy dashboards to provide users with real time ship energy consumption information. These two organizations are also working together to develop an energy portfolio manager position to prioritize and track the progress of existing and future energy initiatives.

Expeditionary: Navy and Army have joined forces to test an innovative hybrid hydraulic energy recovery system for use in military heavy construction equipment. Once operational, this system should result in significant energy savings for amphibious and expeditionary forces around the world. In addition, Navy anticipates a partnership with Army's Tank Automotive Research, Development and Engineering Center (TARDEC) to test a hybrid bulldozer in the near future. [See page 15.]

General AMOS. The Marine Corps is supported by the Naval Facilities Engineering Command (NAVFAC ) and energy efficiency efforts across the Department of Navy are implemented in both Military Construction, where U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Silver is a standard for new construction, and renovations and repairs. In addition, NAVFAC carries out a "technical Evaluation" program that evaluates promising technologies for larger scale use across the Services. Additionally, the Geothermal Program Office assists in geothermal resource exploration with both technical and geological expertise in the search for commercially viable geothermal resources on Marine Corps installations.

The Marine Corps participates in Working Group efforts hosted by the Office of the Deputy Under Secretary of Defense (Installations and Environment) (DUSD(I&E)). These groups ensure that ideas are shared across the Services. DUSD(I&E) also develops policies that apply to all Services. The annual GovEnergy Conference enables the Services to share information with other Federal Agencies. Under this OSD oversight, the Marine Corps executes projects using funds from the DoD Energy Conservation Investment Program (ECIP). The ECIP program also funds demonstrations of "pre-commercial" facility energy technologies for demonstration through the Environmental Security Technology Certification Program (ESTCP). The Marine Corps is currently participating in a "Smart Grid" demonstration with General Electric that will result in valuable information on smart grid implementation as well as some of the practical aspects of implementing grid monitoring and control for energy conservation, reliability and support to critical infrastructure. [See page 15.]

## RESPONSE TO QUESTIONS SUBMITTED BY MRS. DAVIS

Admiral ROUGHEAD. Our Sailors use their education benefits for professional and personal development. The Navy has partnered with accredited public, non-profit and for-profit colleges to offer rating-related associate's and bachelor's degrees for all of our enlisted ratings. This approach enables our Sailors to improve knowledge and skills relevant to their profession, while providing them a valuable degree for transition to civilian life. For example, one of our newest partners, Bismarck State College in North Dakota, provides an on-line associate's degree in Energy Management for our Gas Turbine System (GS) rating. We award advancement points to our junior enlisted Sailors for satisfactory completion of an accredited associate's or bachelor's degree. Degree completion may be considered during advancement selection board deliberations for senior enlisted Sailors. Our Enlisted Sailors may also use their degrees to apply for officer commissioning programs.

We do not currently differentiate among the degrees obtained from different schools provided the institutions are accredited by the Department of Education. We are working with the Office of the Secretary of Defense (OSD) to establish a process to conduct third-party quality assessments of all schools that receive Tuition Assistance funding. This will help us identify schools, regardless of the type, that may not be providing a quality education for our Sailors. We have also supported OSD in establishing a formal complaint tracking process that will help us identify problem schools and take corrective action. [See page 44.]

General AMOS. We continue to provide tuition assistance to our Marines. For FY10, the Marine Corps paid $51M in tuition assistance. FYTD11 (though 1 March 2011), we have paid $27M from an annual budget of $48M.

We do not plan to eliminate the program. The Tuition Assistance Program budget for FY12 has been reduced to $29.9M due to budget cuts and to better align with the Post 9/11 education benefit. [See page 44.]

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## RESPONSE TO QUESTIONS SUBMITTED BY MR. LANGEVIN

Secretary MABUS and Admiral ROUGHEAD. Vulnerabilities to the Navy's infrastructure and facilities are reviewed through threat assessment analyses and incorporated into our force protections plans. Similarly, we conduct cyber vulnerability assessments to protect the Navy's utility distribution systems (electricity, steam, natural gas, fuel, water) and facility control systems (heating, ventilating, air conditioning).

These assessments have led the Navy to identify the need for deployment of an Industrial Control System (ICS) sensors on a secure framework, to provide monitoring and prevent unauthorized access. The architecture of the secure framework is a closed network that carries all alarms, sensors, controlled access points, intrusion prevention/detection systems and security against malware and viruses. Secure ICS integration is currently being piloted and will inform enterprise-wide implementation. The envisioned enterprise-wide implementation will be a phased plan to integrate all ICSs, including over 685 unique legacy and new shore sensor systems. We are validating the security and robustness of this system with Department of Homeland Security's cyber security experts working at the Idaho National Laboratory.

Operationally, Fleet Cyber Command (FCC)/10th Fleet takes additional measures to ensure network security and reduce overall risk to the Navy's Command and Control infrastructure. FCC/10th Fleet manages stand-alone emergency power and HVAC systems at over 50 discrete mission critical sites, which warrant added protection. [See page 32.]

General AMOS. [The information was not available at the time of printing.] [See page 32.]

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## RESPONSE TO QUESTION SUBMITTED BY MR. LARSEN

Admiral ROUGHEAD. Next Generation Jammer is on track to achieve Block I Initial Operational Capability (IOC) in the fourth quarter of fiscal year 2019 on the EA–18G. This first block will cover the majority of the electromagnetic spectrum with which we are concerned. We will IOC Blocks II and III in 2021 and 2024, respectively, again on the EA–18G. [See page 50.]

## QUESTIONS SUBMITTED BY MEMBERS POST HEARING

MARCH 1, 2011

## QUESTIONS SUBMITTED BY MR. MCKEON

Mr. MCKEON. The Navy estimates that its annual shipbuilding budget requirement, on average, is $15.0 billion per year, to attain its minimum floor of 313 battle-force ships. However, the Congressional Budget Office (CBO) estimates that the Navy will require, on average, $19.0 billion per year to attain its minimum floor of 313 ships. Given that there will be minimal to no real budget growth in the upcoming years, are you concerned with the Navy's ability to reach its required force structure?

Secretary MABUS. No. The requirement of 313 ships remains the floor and the Navy is committed to building to that floor. The disparity of funding requirements in Congressional Budget Office's (CBO) assessment of the Fiscal Year (FY) 2011 Long-Range Shipbuilding Plan results from the difference in Navy and CBO estimating methods and assumptions about the design and capabilities of future ships. In the near term, CBO's and Navy's cost estimates are similar, however the differences become more pronounced over time as CBO acknowledges they have made different assumptions about both the size and capabilities of ships that led to different cost estimates.

The Navy recognizes that building the required force structure will largely depend on controlling shipbuilding costs (including combat systems) within an affordable range. Navy is committed to maintaining stability in requirements, funding, and profiles in an effort to control costs. This will require the combined efforts of the Navy, the shipbuilding industry and the combat systems industry. Working in conjunction with Congress, the Navy will procure and sustain the force structure necessary to deliver the naval capabilities needed to support our national interests.

Mr. MCKEON. Northrop-Grumman plans to spin-off its shipbuilding portfolio at some point in the near future. Can you provide us your view on how that will affect shipbuilding infrastructure and workforce, and what challenges the Navy may confront as it relates to maintaining cost, schedule and delivery times for ships currently under contract with Northrop-Grumman?

Secretary MABUS. Having performed due diligence through extensive analysis and protracted discussions, and following appropriate adjustments, the Navy does not object to Northrop Grumman Corporation's (NGC) spin-off of its shipbuilding business. The Navy recently awarded Huntington Ingalls Industries, Inc. (HII) the contract for LPD 26, and we are in negotiations with HII for the DDG 113 contract. The Navy's decision not to object to the spin-off is based on a critical review of HII's proposed capital structure, current contract financials, required capital investment and proprietary forward-looking projections. Ultimately, the Navy has been able to resolve concerns about the risk involved to this important segment of our shipbuilding industrial base with appropriate adjustments made by NGC. These adjustments were a result of the Navy's findings and captured within an agreement between NGC and the Navy. The Navy's concern with HII's credit rating, driven by its initial debt, has been offset by NGC's agreement to relieve HII of first quarter 2011 debts, to provide a starting cash balance of $300 million, and to assign retentions, performance incentives, and economic price adjustment (EPA) payments that the Navy might owe under current shipbuilding contracts with NGSB to HII. The Navy regards HII as a responsible contractor and is proceeding to finalize the negotiations with the intent to award the contracts for construction of DDG 113 to HII.

Mr. MCKEON. Navy officials testified last year that the Department would be conducting a ship Battle-Force, Force Structure Assessment over the course of the past year to evaluate whether or not a force inventory floor of 313 ships is adequate to meet the National Military Strategy requirements applicable to the Navy. Can you provide us an update as to when we can expect to be provided the new Force Structure Assessment, and can you share with us any insight to its preliminary conclusions and recommendations?

Secretary MABUS. The 2010 Force Structure Assessment has been completed and is currently in staffing. We expect to be able to provide the results to Congress within 30–60 days.

Mr. MCKEON. Last year, the Navy testified that sea-based missile defense requirements for surface combatants (cruisers and destroyers) were still in the review. Has

there been any progress in determining sea-based missile defense requirements as it relates to Navy surface combatant requirements, and if so, can you describe what the forward-based requirements are for Navy surface combatants and what that means to the battle-force inventory requirements regarding destroyers and cruisers?

Secretary MABUS. Each Geographic Combatant Commander (GCC) determines its own requirements for surface combatants in each mission area. These requirements are adjudicated through the Department of Defense's Global Force Management process, which allocates the available Aegis ships. The Navy currently has sufficient capacity to meet the most critical demands for multi-mission surface combatants; however, Navy does not have the capacity to meet GCC demands for Ballistic Missile Defense (BMD) surface combatants without breaking established deployment length redlines. Based on threat analysis and steady state presence indications from the GCCs, the Navy, working with Missile Defense Agency, have concluded that the demand for BMD-capable Aegis ships will outpace capacity through approximately 2018, assuming standard six month deployment lengths.

Sea-based BMD requirements in the United States Central Command and European Command are sourced through the rotation of Aegis ships home-ported in the United States. The Pacific Command's sea-based BMD requirements are sourced primarily from the Forward Deployed Naval Force in Japan.

As the demand for these ships increase, either the inventory of Aegis BMD-capable ships or deployment lengths must increase. Accordingly, Navy, in conjunction with MDA, has established a plan to increase the total number of Aegis BMD-capable ships across the FYDP from 21 to 41, of which 27 will be deployable in FY16. This plan includes the increase in capacity and capability of surface combatants either through the installation of the Aegis BMD 3.6.1/4.0.1 suite or Aegis Modernization program, as well as through new construction (commencing with DDG 113). The addition of BMD capabilities to the Aegis Fleet provides improved operational flexibility to GCC and Fleet Commanders to fulfill their various missions.

Mr. MCKEON. The Navy's budget documentation notes that, "the Department's budget increases by over $900 million across the FYDP to address a significant increase in the cost of [the] solid rocket motor (SRM) component of the Trident II D5 SLBM as a result of a shrinkage and reorganization of the national SRM industrial base." Do you share these concerns about the solid rocket motor industrial base, what are their impacts, and how is the Navy mitigating these impacts?

Secretary MABUS. Yes, the Navy shares these concerns as there has been an increase in the unit cost of Solid Rocket Motor (SRM) due to a decline in customers (end of NASA's Space Shuttle Rocket Booster and end of Air Force Minuteman III) for Solid Rocket Motors. Additional Weapons Procurement, Navy funding is required in FY 2012 to fund an increase in the unit cost of TRIDENT II D5 rocket motor production from $10.7M to $19.2M. Also included in the $191.3M are increases for production requalification, HMX procurement, and tooling. The Navy's TRIDENT II D5 rocket motor production program is now responsible for a significantly larger portion of the industrial base fixed costs. The Navy's PB12 submit estimate is based on the assumption that NASA continues RDT&E investment at $400M per year and the Air Force maintains a warm line production investment of $40M per year for Minuteman III to maintain critical skills. In an effort to mitigate impacts, Navy Strategic Systems Programs is working closely with Lockheed Martin Missile Space Corporation and Alliant Techsystems Inc.

Mr. MCKEON. Can you provide the committee with more detail about how the FY12 budget request increases research and development of capabilities to increase satellite communications bandwidth and survivability for off-ship connectivity?

Secretary MABUS. Navy SATCOM RDT&E budget supports three major efforts to increase bandwidth and survivability for off-ship connectivity, eXtended Data rate (XDR) testing with the Advanced Extreme High Frequency (AEHF) satellite, development of AEHF Time Division Multiple Access Internet Protocol (ATIP), and the Split Internet Protocol (Split IP) capability.

In FY12, both the AEHF satellite and the XDR waveform become available. Coupled with these capabilities, the Navy Multi-band Terminal (NMT) system will provide a four-fold increase in the off-ship survivable bandwidth. The RDT&E budget supports the formal testing of the NMT terminal with the AEHF satellite and the resolution of discrepancies discovered as a result of this testing.

ATIP is an ancillary NMT component that allows the bandwidth from a single AEHF Satellite spot beam to be dynamically shared amongst multiple Navy NMT users. The dynamic sharing increases off-ship survivable bandwidth on one ship when needed, but reallocates the bandwidth to other ships when not needed. With the ATIP enabled bandwidth sharing, the Navy NMT users can fully leverage the DoD's space investments to effectively increase survivable off-ship bandwidth to all users.

The Split IP effort develops the software to allow tactical units to transmit Internet Protocol traffic over one type of satellite link and receive the traffic over a different type of satellite link. Separating the transmit and receive paths efficiently uses the full array of DoD satellite systems for maximum off-ship bandwidth while increasing the survivability of these communications.

Both ATIP and Split IP initiatives mitigate the limitations in bandwidth posed in a hostile satellite communications environment.

Mr. MCKEON. The Navy estimates that its annual shipbuilding budget requirement, on average, is $15.0 billion per year, to attain its minimum floor of 313 battle-force ships. However, the Congressional Budget Office (CBO) estimates that the Navy will require, on average, $19.0 billion per year to attain its minimum floor of 313 ships. Given that there will be minimal to no real budget growth in the upcoming years, are you concerned with the Navy's ability to reach its required force structure?

Admiral ROUGHEAD. No. The requirement of 313 ships remains the floor and the Navy is committed to building to that floor. The disparity of funding requirements in Congressional Budget Office's (CBO) assessment of the Fiscal Year (FY) 2011 Long-Range Shipbuilding Plan results from the difference in Navy and CBO estimating methods and assumptions about the design and capabilities of future ships. In the near term, CBO's and Navy's cost estimates are similar, however the differences become more pronounced over time as CBO acknowledges they have made different assumptions about both the size and capabilities of ships that led to different cost estimates.

The Navy recognizes that building the required force structure will largely depend on controlling shipbuilding costs (including combat systems). Navy is committed to maintaining stability in requirements, funding, and profiles in an effort to control costs. This will require the combined efforts of the Navy, the shipbuilding industry and the combat systems industry. Working in conjunction with Congress, the Navy will procure and sustain the force structure necessary to deliver the naval capabilities needed to support our national interests.

Mr. MCKEON. The Air Force Chief of Staff, General Schwartz, testified last week to this committee that an "Air-Sea Battle Plan" is being jointly developed, between the Air Force and Navy, for future operations. Can you provide us your perspective of the plan, why you feel it is necessary to implement, and an estimate of when we can expect to receive the plan's details?

Admiral ROUGHEAD. Air-Sea Battle is a limited operational concept that focuses the development of integrated air and naval forces on addressing the evolving anti-access/area denial (A2/AD) environment. ASB encompasses three key elements:

- Institutional cooperation will be enhanced by establishing an enduring organizational construct that will continue formal collaboration to address the A2/AD environment as it evolves over time.
- Conceptual alignment will be perpetuated through the operational design that describes how capabilities and forces are integrated to accomplish operational objectives in an A2/AD environment.
- Materiel solutions and innovations will be collaboratively vetted to ensure they are complementary where appropriate; redundant when mandated by capacity requirements; fully interoperable; and fielded with integrated acquisition strategies seeking efficiencies where they can be achieved.

Air-Sea Battle is necessary because various states and their surrogates are developing capabilities specifically designed to deny access and challenge freedom of action. Failure to effectively address this threat could increase risk to our forces or compel them to operate at extended distances from an area of conflict. Either circumstance threatens the ability of joint and allied forces to accomplish assigned operational objectives. ASB identifies and characterizes specific A2/AD challenges presented to the joint force, and provides solutions to those challenges. We expect to be able to brief key stakeholders on the ASB Concept in the coming months.

Mr. MCKEON. The LPD–17 San Antonio-class of amphibs has been plagued by quality workmanship and reliability issues. Can you provide us an update on how the Navy is progressing on addressing these deficiencies and to what extent these issues have been addressed with the shipyard to preclude future issues?

Admiral ROUGHEAD. The Navy has completed thorough reviews and assessments of the LPD 17 Class that revealed issues in the areas of construction oversight, manning, and training. Corrective actions are being implemented and lessons learned from earlier ships in the class have been incorporated into later new-construction ships.

Specifically, quality assurance (QA) and production oversight during ship construction were not sufficient by the Navy Supervisor of Shipbuilding, Conversion

and Repair (SUPSHIP) and the shipbuilder, which impacted Main Propulsion Diesel Engines, lube oil systems, piping welds, and foundation bolts and power train alignment. The shipbuilder has since developed new procedures and training for its personnel and added additional QA checkpoints to the shipbuilding inspection process. We have added additional staffing to the SUPSHIP staff with a focus on compliance, and we have instituted comprehensive quality audits of both SUPSHIP and the shipbuilder.

The Navy is strengthening LPD 17 Class crew training by establishing more traditional schoolhouse training that will result in a blended approach of classroom, shipboard and computer based training, rather than relying on the previous model of extensive computer-based shipboard training.

Initial system reliability issues with the engine controls, ship controls and interior communications systems have been addressed through major software upgrades to each system as well as the replacement of critical obsolete parts with rugged current technology hardware. We are replacing the ships' 1990s-era technology asynchronous transfer mode (ATM) shipboard wide area network (SWAN) with a current Gigabit Ethernet technology network hardware and software.

An LPD 17 Class Wholeness Task Force was formed by the Fleet to undertake a comprehensive assessment of the overall state of readiness for the entire LPD 17 Class. The task force is addressing shipboard manning, adequacy of shore-based infrastructure support, performance of critical mission and propulsion systems, spare parts support, and adequacy of maintenance resources.

The actions taken are resulting in better reliability and operational availability of the commissioned ships of the class, while improving the projected operational availability of the ships currently under construction. Recent examples are USS NEW YORK (LPD 21) completing, in February 2011, a highly successful Board of Inspection and Survey (INSURV) Final Contract Trials and USS MESA VERDE (LPD 19), in March 2011, departing early for its second overseas deployment in response to world events.

Mr. MCKEON. Last year, the Navy testified that sea-based missile defense requirements for surface combatants (cruisers and destroyers) were still in the review. Has there been any progress in determining sea-based missile defense requirements as it relates to Navy surface combatant requirements, and if so, can you describe what the forward-based requirements are for Navy surface combatants and what that means to the battle-force inventory requirements regarding destroyers and cruisers?

Admiral ROUGHEAD. The Navy currently has sufficient capacity to meet the most critical demands for multi-mission surface combatants; however, Navy does not have the capacity to meet expected future GCC demands for Ballistic Missile Defense (BMD) surface combatants without breaking established deployment length redlines. Based on threat analysis and steady state presence indications from the GCCs, the Navy, working with Missile Defense Agency, has concluded that the demand for BMD-capable Aegis ships will outpace capacity through approximately 2018, assuming standard six month deployment lengths.

Sea-based BMD requirements in the United States Central Command and European Command are sourced through the rotation of Aegis ships home-ported in the United States. The Pacific Command's sea-based BMD requirements are sourced primarily from the Forward Deployed Naval Force in Japan.

With the President's decision to pursue a phased adaptive approach (PAA) for the missile defense of Europe, the Navy has been working within the Department of Defense to identify the most efficient method to provide the required afloat BMD capability. The establishment of a forward deployed force in Europe is one of the options being assessed, however, no final decision has been made.

As the demand for these ships increase, either the inventory of Aegis BMD-capable ships or deployment lengths must increase. Accordingly, Navy, in conjunction with MDA, has established a plan to increase the total number of Aegis BMD-capable ships across the FYDP from 21 to 41, of which 27 will be deployable in FY16. This plan includes the increase in capacity and capability of surface combatants either through the installation of the Aegis BMD 3.6.1/4.0.1 suite or Aegis Modernization program, as well as through new construction (commencing with DDG 113). The addition of BMD capabilities to the Aegis Fleet provides improved operational flexibility to GCC and Fleet Commanders to fulfill their various missions.

Mr. MCKEON. Can you discuss how the missile defense mission and the multi-mission capability of Aegis ballistic missile defense (BMD) ships are affecting the overall force structure requirements for the Aegis fleet? How is the Navy managing the limited number of Aegis BMD ships when demand is greater than supply?

Admiral ROUGHEAD. The Navy currently has sufficient capacity to meet the most critical demands for its multi-mission Aegis ships; however, we do not have the capacity to meet all Geographic Combatant Commander (GCC) demands for Ballistic

Missile Defense (BMD) without exceeding established Personnel Tempo program limits for deployment lengths, dwell tempo, or homeport tempo. Based on threat analysis and current indications from GCCs, and assuming standard six month deployment lengths, the Navy and the Missile Defense Agency (MDA) concluded that GCC demand for surface combatants with Aegis BMD capability will outpace capacity through approximately 2018.

To meet the increasing demand for these ships and reduce the risk to our long term force structure caused by the increased operational tempo from longer deployment lengths, the Navy, working in conjunction with MDA, has established a plan **(see Figure 1 on page 165)** to increase the number of BMD-capable Aegis ships from 23 in FY2011 to 41 in FY2016. This plan balances the need for meeting current operational requirements against the need to upgrade existing BMD-capable Aegis ships to pace the future threat. Included in this plan are increases in the Navy's capacity and the capabilities of Aegis ships through the installation of an Aegis BMD 3.6.1/4.0.1 suite, the Aegis Modernization program, or new construction (commencing with DDG–113).

To mitigate the impact of the BMD mission, Navy has implemented an operating concept for AEGIS ship's conducting BMD missions that features a graduated readiness posture that allows BMD-capable surface combatants to be on an operational tether and available for other tasking when not directly involved in active BMD operations. Surface combatants operating in support of a BMD mission do not lose the capability to conduct other missions; however, specific mission effectiveness may be affected by ships' position and/or application of ship resources to those missions.

Navy analysis of evolving BMD and other mission area requirements indicates that the current Navy BMD upgrade plan will support BMD Global Force Management requirements while simultaneously fulfilling Navy's requirements in other mission areas.

Mr. MCKEON. Aegis ships support multiple Navy missions such as maritime security, anti-submarine warfare, surface warfare, etc. It has also been noted in previous committee hearings that when an Aegis ship is in missile defense mode, it has less capability for ship self-defense and therefore requires support from a second Aegis ship.[1] Please discuss some of these mission optimization challenges and tradeoffs, and how the Navy is addressing them.

Admiral ROUGHEAD. All Aegis BMD capable ships have the ability to defend themselves against both traditional and advanced air and cruise missile threats while also executing the BMD mission. Simultaneous BMD and Anti-Air Warfare engagements were demonstrated by USS LAKE ERIE on June 22, 2006 and this capability is the current BMD Fleet standard. It is proven and remains ready today. Navy continues to work with the MDA to ensure that future BMD upgrades will further improve the multi-mission capabilities of our BMD ships.

Mr. MCKEON. Admiral Roughead, according to a Defense News article in June 2010, "U.S. Aegis Radars' Readiness Plunges," the Aegis radar systems are "in their worst shape ever, raising questions about the surface fleet's ability to take on its high-profile new mission next year defending Europe from ballistic missiles." Discuss any Aegis readiness concerns you may have and how it might impact the Navy's ability to meet missile defense mission requirements.

Admiral ROUGHEAD. I am confident in Navy's ability to meet our missile defense requirements, and I am pleased to report that the USS MONTEREY (CG 61) is currently deployed in the Mediterranean Sea as the first ship on station in support of the first phase of the President's European Phased Adaptive Approach to Ballistic Missile Defense.

While several reports and studies, completed last year as part of Navy's ongoing self-assessment and continuous improvement efforts, indicated the beginning of some declining trends in various elements of Aegis readiness, the overall readiness of our Aegis Fleet remains high. A product of their ongoing success, these assessments reflected the elevated standards we are employing in measuring Aegis readiness, which may have led to the misperception that these ships are having difficulty meeting their assigned missions; nothing could be further from the truth.

To ensure continued readiness in the future, we have initiated a study that will integrate previous assessment findings and provide a holistic assessment of Aegis readiness in terms of interoperability, maintainability, test & evaluation, manpower, training, and current development efforts. We will use the results to inform our continued improvement of Aegis readiness in a targeted, affordable manner to ensure that Aegis warships remain ready for tasking.

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[1] Hearing of the House Armed Services Committee, "New Plan for Missile Defenses in Europe and Implications for International Security," October 1, 2009, p. 25 from the hearing transcript.

Mr. McKEON. The Navy's budget documentation notes that, "the Department's budget increases by over $900 million across the FYDP to address a significant increase in the cost of [the] solid rocket motor (SRM) component of the Trident II D5 SLBM as a result of a shrinkage and reorganization of the national SRM industrial base." Do you share these concerns about the solid rocket motor industrial base, what are their impacts, and how is the Navy mitigating these impacts?

Admiral ROUGHEAD. Yes, the Navy shares these concerns as there has been an increase in the unit cost of Solid Rocket Motor (SRM) due to a decline in customers (end of NASA's Space Shuttle Rocket Booster and end of Air Force Minuteman III) for Solid Rocket Motors. Additional Weapons Procurement, Navy funding is required in FY 2012 to fund an increase in the unit cost of TRIDENT II D5 rocket motor production from $10.7M to $19.2M. Also included in the $191.3M request are increases for production requalification, HMX procurement, and tooling. The Navy's TRIDENT II D5 rocket motor production program is now responsible for a significantly larger portion of the industrial base fixed costs. The Navy's PB12 budget submission is based on the assumption that NASA continues RDT&E investment at $400M per year and the Air Force maintains a warm line production investment of $40M per year for Minuteman III to maintain critical skills. In an effort to mitigate deleterious fiscal impacts, Strategic Systems Programs (SSP) is working closely with Lockheed Martin Missile Space Corporation and Alliant Techsystems Inc toward cooperative solutions that support the industrial base and the nation's strategic needs.

Mr. McKEON. Can you provide the committee with more detail about how the FY12 budget request increases research and development of capabilities to increase satellite communications bandwidth and survivability for off-ship connectivity?

Admiral ROUGHEAD. The Navy SATCOM RDT&E budget supports three major efforts to increase bandwidth and survivability for off-ship connectivity: eXtended Data rate (XDR) testing with the Advanced Extreme High Frequency (AEHF) satellite, development of AEHF Time Division Multiple Access Internet Protocol (ATIP), and the Split Internet Protocol (Split IP) capability.

In FY12, both the AEHF satellite and the XDR waveform become available. Coupled with these capabilities, the Navy Multi-band Terminal (NMT) system will provide a four-fold increase in the off-ship survivable bandwidth. The RDT&E budget supports the formal testing of the NMT terminal with the AEHF satellite and the resolution of discrepancies discovered as a result of this testing.

ATIP is an NMT component that allows the bandwidth from a single AEHF Satellite spot beam to be dynamically shared amongst multiple Navy NMT users. The dynamic sharing increases off-ship survivable bandwidth on one ship when needed, but reallocates the bandwidth to other ships when not needed. With ATIP enabled bandwidth sharing, the Navy NMT users can fully leverage DoD's space investments to effectively increase survivable off-ship bandwidth to all users.

The Split IP effort develops the software to allow tactical units to transmit Internet Protocol traffic over one type of satellite link and receive the traffic over a different type of satellite link. Separating the transmit and receive paths efficiently uses the full array of DoD satellite systems for maximum off-ship bandwidth while increasing the survivability of these communications.

Both ATIP and Split IP initiatives mitigate the limitations in bandwidth posed in a hostile satellite communications environment.

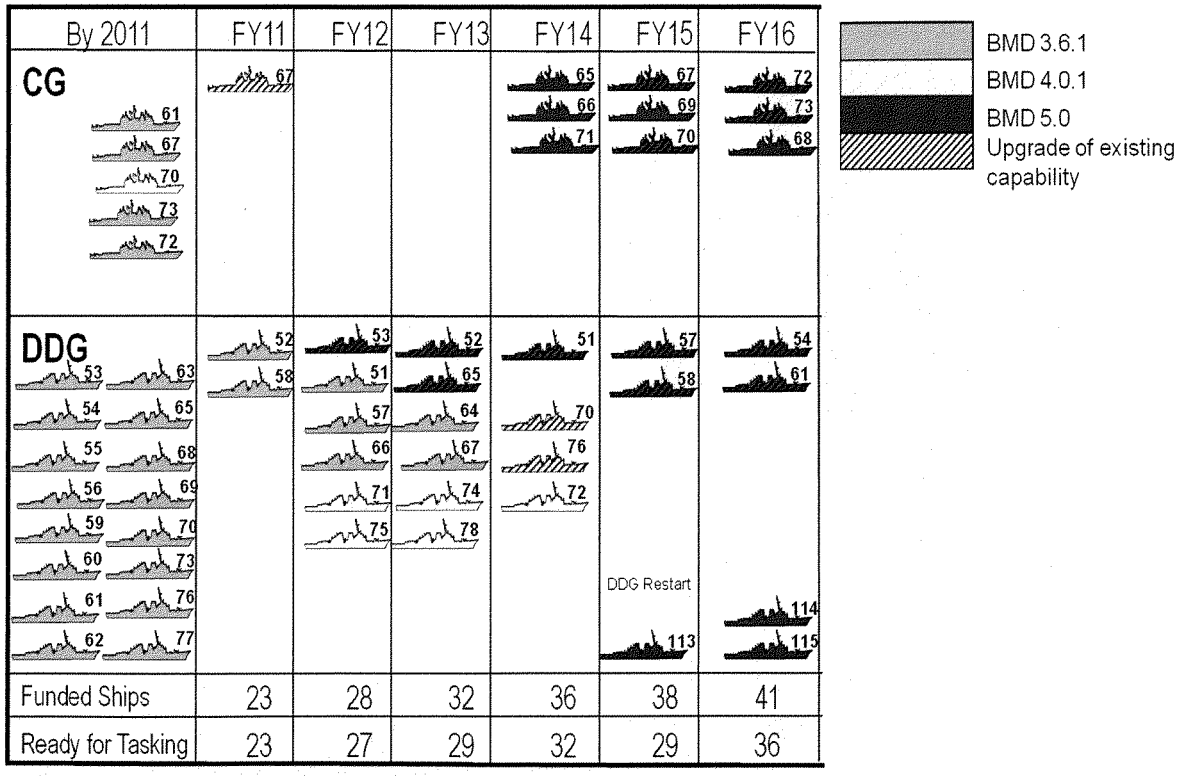


Figure 1: Aegis BMD Ship Profile, Presidential Budget for FY2012

## QUESTION SUBMITTED BY MR. SMITH

Mr. SMITH. The USMC LAV Program Manager met with HASC staff in January 2010 and reported significant benefits associated with Side and Wheel-well Armor added to the USMC fleet of LAV's. These kits were developed by Armatec and installed at the Barstow and Albany USMC Depots.

The HASC understands that several allied countries are incorporating, into their LAV fleets, additional technologies developed by this company such as Mine Blast floor and Underbelly Protection Kits, Roof Mounted Blast Attenuating Seats, and Armored Self-sealing Fuel Tanks. Given this, along with the success of the past LAV Side and Wheel-well Armor Kit upgrades, the Committee believes these additional technologies should be evaluated as part of the LAV Survivability II Upgrade Program.

- Has the USMC LAV Program evaluated these additional vehicle and occupant survivability technologies? If so, report to the HASC all findings and follow-on actions. If an evaluation has not taken place, the Committee recommends that the LAV Program evaluate these technologies and requests a report of the findings be submitted to the Committee.
- When does the USMC LAV program expect to release RFP's for the Survivability II Upgrade program?
- Will these RFP's allow for full and open competition?

General AMOS. The Marine Corps Light Armored Vehicle Program Manager's Office (PM LAV) has an open dialogue with Armatec, as well as with other companies offering survivability capabilities, to evaluate follow-on vehicle and occupant survivability technologies for the LAV program.

The PM LAV Office has evaluated incorporating Mine Blast Floor and Underbelly Protection Kits, Roof Mounted Blast Attenuating Seats and Armored Self-sealing Fuel Tanks as a part of the LAV Survivability II Upgrade Program. The Marine Corps Survivability II Upgrade Program will be contracting for Blast Attenuating Seats and structural reinforcement in the vehicle chassis. A Request for Proposal (RFP) is anticipated to be announced for the second quarter of FY12 under full and open competition. As an interim solution, the Armatec driver's seat has been procured for LAV use, in Operation Enduring Freedom (OEF), to improve driver survivability. Additionally, a contract for Self-sealing Fuel Tanks was awarded in September 2010. The RFP was issued as full and open competition with no restrictions on who could submit a proposal. The contract was awarded from a competitive source selection.

Regarding Mine Blast Floor and Underbelly Protection Kits, the USMC LAV currently uses an underbody protection kit designed by the PM LAV engineering staff that has proven to be effective in the field. Our Light Armored Reconnaissance Battalion in OEF currently uses this kit. At their request, our Australian allies also are now procuring the PM LAV underbody solution on their vehicles in OEF.

PM LAV's survivability upgrade evaluation efforts are fluid and ongoing. We will continue to evaluate increasing occupant survivability technologies through (1) market research across industry; (2) participating in a bi-annual LAV User Nation's Group meeting with the U.S. Army, Canadian Forces, New Zealand Army and Australian Army to collaborate on LAV survivability technologies that include the Armatec product line; and (3) participating in annual survivability technology review meetings with the Office of Naval Research and the Army Research Laboratories at which time we provide research direction to the science and technology community so that they can better tailor their efforts to meet our projected needs.

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## QUESTIONS SUBMITTED BY MR. AKIN

Mr. AKIN. For the last ten years we have been operating our aircraft carriers and battle group in the Arabian Gulf and Indian Ocean regions leaving a power vacuum in the Mediterranean. With the recent uprising in Tunisia, Egypt and now Libya do you see a need for our carrier navy to reassert itself in the Mediterranean Ocean and what affect will that have on our Fleet Readiness Plan and carrier Cycles?

Secretary MABUS. Carrier Strike Groups are deployed in the Mediterranean several times per year. There are several factors involved in the timing and duration of those deployments, all of which require the approval of our senior civilian leadership. At this time, bolstered by the deployments of our coalition partners, there is no requirement for continuous Carrier Strike Group deployment in the Mediterranean. If additional Carrier presence is required in the Mediterranean Sea, carriers would have to shift from other areas of the world or curtail time for training and maintenance.

Mr. AKIN. The QDR independent panel recommended a fleet size of roughly 340 ships. What kind of budget would you need to get to a 340 ship fleet?

Secretary MABUS. The 2010 QDR Independent Panel recommended an Alternate Force Structure of 346 ships, the number found in the 1993 Bottom-Up Review (BUR). However, the BUR occurred as the US Navy and the other three Services were trying to establish the force structure floor for the post-Cold War drawdown. The 346 ships called for in the BUR represented a simple projection of the size of the Navy in Fiscal Year 1999 (FY99), not a statement of long-term steady-state requirements. For example:

- The FY99 fleet projection was for 52 SSNs, but the BUR's long-term goal for SSNs was 45 boats.
- Similarly, the FY99 fleet projection included over 40 amphibious ships, against a long-term goal of 36 ships, and over 40 combat logistics force ships, against a long-term goal of 30–35 ships.

Indeed, less than six months after the BUR was published, the Navy dropped the FY99 fleet target by 16 ships—primarily tenders and obsolete amphibious ships. In testimony, Navy leaders assured Congress that "This difference will not affect our warfighting and forward presence capabilities." Moreover, the BUR fleet included ships not normally included in official battle force counts. For example, the BUR fleet included 27 mine warfare vessels. However, 11 of these ships were to be maintained in Mobilization Category B status, which do not count in official fleet numbers.

If one focuses on the BUR's long-range steady-state fleet requirements rather than the FY99 projection, and only those ships that contribute to official battle force counts, the BUR essentially called for a fleet of some 300–305 ships. The differences between the BUR fleet and the Navy's current 313-ship plan are thus minor.

- The nucleus of the BUR fleet included 11 active and one reserve aircraft carrier; 45–55 SSNs, with a long-term goal of 45 SSNs; 110–116 active surface combatants, 8–10 reserve frigates, and 27 mine warfare vessels (some in reserve), for a total of 145–153 surface warships; and 36 amphibious ships to carry 2.5 MEBs.
- The steady-state 313-ship fleet includes 11 CVNs; 48 SSNs; 88 large surface combatants and 55 Littoral combat ships, for a total of 143 surface warships; and 33 amphibious ships to carry 2.0 MEBs.
- The biggest difference between the BUR and 2010 QDR fleets is found in combat logistics, mobile logistics, and support ships. The 1993 BUR Combat Logistics Force (CLF) included single-purpose ships like the Ammunition Ships (AEs) and Combat Stores Ships (AFS) that have been replaced by multi-purpose/multi-product ships in the fleet today. Moreover, although today's fleet includes fewer ships in these categories, most are now more efficiently manned and operated by Military Sealift Command, and meet all fleet requirements.

Navy is confident that 313 ship force structure requirements in the long-range shipbuilding plan reflect the latest approved Naval Force Structure Assessment and should be considered the baseline vice those articulated in the 1993 BUR.

The Chief of Naval Operations has stated that the Navy requires a minimum of 313 ships to meet operational requirements globally, and, as detailed in the Long-Range Plan for Construction of Naval Vessels for FY 2011, the Department of the Navy remains committed to reaching this ship number by 2020. While this minimum number remains the current target for force planning, the Department continues to examine this requirement to address the increased operational demands and expanding requirements for ballistic missile defense, intra-theater lift, and forces capable of confronting irregular challenges.

Mr. AKIN. The Navy has seen a steady decline in their manning numbers through such force shaping tools such as Perform-To-Serve (PTS). This has been occurring at the same time as their OPTEMPO has been steadily increasing through the War on Terror, our other Deployed Assets and Humanitarian response. At what point do you believe the Navy will reach their breaking point with regards to dwell time?

Secretary MABUS. The various metrics that may be used to assess how we are doing, suggest that we are operating within acceptable parameters, and that we are not approaching a breaking point, nor do we see that occurring on the horizon. While we are currently experiencing high tempo thresholds, particularly in certain units or missions areas, Navy expects to remain above Dwell limits based on current and projected operational requirements.

Mr. AKIN. What are the costs associated with the purchase and later SLAP of an F–18E/F over a current SLEP of a current F–18C? Is it not more cost effective long

term to purchase a more capable platform that can last for 9000 hours then to extend a legacy system for 1400 additional hours?

Secretary MABUS. The weapon systems procurement cost of an F/A–18E/F is an average of $84.4 million (CY11$), based on the current multiyear procurement (FY10–13). The current planned service life of the F/A–18E/F is 6,000 hours ($14,000 per planned flight hour). At this time, the cost for a future SLEP of F/A–18E/F aircraft from 6,000 to 9,000 hours is yet to be determined. A Service Life Assessment Program (SLAP) is underway and will identifying the critical areas required to be addressed, which will inform future costs of E/F SLEP. The estimated average cost to extend the service life (SLEP) of 150 F/A–18A–D Legacy Hornets from 8,600 to 10,000 hours is an average of $14.1 million (CY11$) per aircraft ($10,000 per planned flight hour).

The Department of the Navy conducted a cost benefit analysis to compare alternatives to mitigate the Strike Fighter Shortfall considering cost, technical risk and operational requirements. The result of the analysis shows that the shortfall cannot be mitigated to a manageable level without Service Life Extension Program (SLEP) of some legacy F/A–18s to meet operational requirements; procuring additional F/A–18E/F alone will not mitigate the shortfall to a manageable level. Moreover, overbuying F/A–18E/Fs now is not consistent with the DoN strategy to procure one squadron of F–35C Joint Strike Fighters for each active Carrier Air Wing (CVW). SLEPing legacy aircraft as a bridge to the JSF is a much better transition strategy.

Consistent with this thinking, and as presented in the Fiscal Year 2012 President's Budget request, the DoN planned to procure a total of 556 F/A–8E/Fs and extend the service life (SLEP) of 150 F/A–18A–D aircraft. The plan balances the strike fighter inventory requirement within the Department's limited financial resources within the Future Years Defense Plan (FYDP), mitigates the shortfall to a manageable level with acceptable risk. The addition of nine aircraft by Congress in the Fiscal Year 2011 Appropriations Act will increase the number of F/A–18E/Fs to 565, which will further reduce the risk associated with the inventory shortfall.

Mr. AKIN. Assuming that we cannot fill the strike fighter shortfall what is your aircraft allocation plan for squadrons and airwings in the future?

Secretary MABUS. The Department of the Navy (DON) has an existing inventory of 628 Navy and Marine Corps F/A–18A–D aircraft that will comprise over half of Naval Aviation's TACAIR force structure until 2013. They are scheduled to remain in the inventory through 2023. The Navy has also received 418 F/A–18E/Fs to date.

In December 2010, the Secretary of Defense made changes to the Programs of Record (POR) for both the F–35B/C and F/A–18E/F programs. Compared to Fiscal Year 2011 President's Budget, the DON's procurement of F–35B/C aircraft was decreased by 60 and the F/A–18E/F procurement was increased by 41. This action also extended the last year of procurement for the Super Hornets from Fiscal Year 2013 to Fiscal Year 2014. By adding 41 Super Hornets and extending the life of 150 F/A–18 A–D aircraft to 10,000 flight hours, the strike fighter shortfall estimate has been reduced from about 100 aircraft to a peak of 65 aircraft, occurring in 2018. The Department has testified that this level of aircraft shortfall is manageable.

DON's procurement objectives are presented in the FY–12 President's Budget. The budget reflects the optimum balance of procuring new aircraft for a total of 556 F/A–18E/Fs, extending the service life of 150 existing legacy Hornets, and procuring F–35B/Cs. This balanced approach will address the Department's need for Tactical Aircraft to meet requirements.

Mr. AKIN. Have we included the savings in fuel costs of a Super Hornet over a legacy Hornet in the long term cost analysis/benefit of SLEPing a legacy Hornet versus a new Super Hornet purchase?

Secretary MABUS. The fuel consumption of a Super Hornet is approximately 100 gals per hour more than a Legacy Hornet; this is driven by engine design and aircraft weight. Hence, there are no fuel savings. Fuel consumption for both Super Hornets and legacy Hornets has been included in the Operations & Support cost estimates for each respective aircraft in the Cost Benefit Analysis in support of the FY 2011 National Defense Authorization Act.

Mr. AKIN. How many planes will the Department of the Navy be short of its requirement of 1240 strike fighters at the peak of the strike fighter shortfall?

Secretary MABUS. The Department of the Navy (DoN) is challenged with a Strike Fighter Shortfall due to the current F/A–18A–D aircraft reaching the end of their service life before the replacement aircraft (the F–35B/C) can be delivered into service. To address this shortfall, 41 additional F/A–18E/F aircraft and 150 F/A–18A–D service life extensions (SLEP) were added to the Fiscal Year 2012 President's Budget request. These actions, in conjunctions with the Joint Strike Fighter post-Technical Baseline Review procurement rate, reduces the inventory shortfall to 65 aircraft in 2018. Congress' addition of 9 F/A–18E/F in the FY11 appropriations proc-

ess further reduces the predicted shortfall peak to 52 aircraft in 2018. The DoN has determined that this shortfall is a manageable level.

Mr. AKIN. With ISR requirements increasing across the whole of the DOD and the Navy specifically, the Air Force appears to be maxed out in their ability to provide 24 hours coverage across the globe. What is the Navy's need and capability to provide ISR for the short and long term future?

Secretary MABUS. The Global Commons, which comprises the littoral regions and the contiguous brown water and inshore areas, contains over three-quarters of the world's population, over eighty percent of all capital cities, and nearly all the marketplaces of international trade. The United States ability to operate in the Global Commons is of critical importance for all nations of the world who wish to be part of the global economy and who wish to have free access to the markets of the world. The United States Navy's ability to operate on the high seas in the conduct of future operations requires an increasingly robust maritime domain awareness of these waters and is the key driver for future Navy ISR requirements. The United State's ability to influence those regions and to win Overseas Contingency Operations (OCO), as well as future conflicts, requires not only control of the littorals, but rest upon a clear understanding of what is happening on those waters. The ability of existing and projected U.S. forces to gain access and conduct sustained operations in this near-land battlespace can be limited by the demanding natural environment (including restrictive features such as choke points, high shipping densities, and shallow waters) and a considerable adversary area-denial competency. All of which necessitates a robust Maritime Domain Awareness (MDA) capability.

Another essential requirement exists to sustain and improve maritime ISR capabilities for U.S. Naval forces in traditional, Joint and combined roles to counter changing and emerging threats. Maritime and littoral ISR demands already outstrip the capacities of available naval ISR assets. The importance of establishing the capability of launching ISR assets from a Sea Base cannot be understated. Sea Basing offers an alternative to basing forces ashore in host nations that is less vulnerable to attack from the opposition. Sea Basing also offers the ability to quickly establish an ISR capability anywhere in the world at a moment's notice.

The Navy's ISR "Family of Systems" integrates land-based and sea-based, manned and unmanned air systems to increase capability across a full spectrum of maritime and littoral missions while adhering to fiscal restraints in a challenging budgetary environment. The legacy platform, EP–3, will be sustained until the system is fully recapitalized in accordance with the FY11 National Defense Authorization Act and the 2008/2009 Consolidated Intelligence Guidance. All aircraft will be sustained through the Special Structural Inspections and Special Structural Inspection Kits. The Joint Airborne SIGINT Common Configuration (JCC) includes the Signals Intelligence (SIGINT) spiral upgrades. The latest upgrade, JCC Spiral 3, will meet current threat and supportability challenges with advances in technology, and will be the baseline for any EP–3 follow-on capability.

Currently, the Navy is focused on five land- and ship-based UAS platforms:

**1) Broad Area Maritime Surveillance (BAMS) UAS:** An ACAT 1D program with an FY16 IOC, the land-based BAMS will provide persistent (24 hours/day, 7 days/week), multi-sensor (radar, EO/IR, ESM) maritime surveillance capability with worldwide access, enhancing situational awareness of the battlespace and shortening the sensor-to-shooter kill chain. BAMS UAS mission operations, which are adjunct to P–8A, will share facilities and personnel between the manned and unmanned assets. Additionally, Navy and Air Force are working together to exploit synergies between the BAMS UAS and Global Hawk UAS programs. The FY12 President's Budget (PB 12) requests $ $548.5M in research, development, testing, and evaluation (RDTEN).

**2) Unmanned Carrier Launched Airborne Surveillance and Strike (UCLASS):** The UCLASS program will build upon technologies and lessons learned from the Unmanned Combat Air System Demonstration (UCAS–D). Utilizing the Northrop Grumman X–47B demonstrator air vehicles, UCAS–D will perform catapult launches, arrested landings, flight operations in the vicinity of a carrier, and automated air refueling by the end of 2013. The program of record, UCLASS, will enhance the Navy's Information Dominance mission and will shorten the timeline to find, fix, track, target, engage, and assess time sensitive targets. With an initial capability in FY18 timeframe, the UCLASS system will integrate with the carrier air wings to increase the flexibility, versatility, and capability of the carrier force. PB12 provides $121.2M in RDTEN funding for UCLASS and $198.3M in RDTEN funding for the UCAS–D.

**3) MQ–8 Fire Scout Vertical Takeoff UAV (VTUAV):** The MQ–8 system is designed to operate as an integral component of the Littoral Combat Ship (LCS) Mis-

sion Modules and from hangar-equipped, air-capable ships with an FY12 Initial Operational Capability (IOC). OSD directed Navy to support interim Special Operations Force (SOF) maritime sea-based urgent needs through FY18 using MQ–8 until a new Medium Endurance Maritime UAS is fielded. Support includes increasing aircraft and ship control station procurement, integration onto twelve additional ships, and implementing an Engineering Change that increases MQ–8 endurance (the larger airframe VTUAV+) and integrates mission specific payloads. Also, Navy is using the Rapid Deployment Capability process to integrate a weaponization capability. The PB12 funding request includes $108.2M in RDTEN and $192.0M in APN.

**4) Medium Range Maritime UAS (MRMUAS): MRMUAS** is a planned FY11/12 new start program to develop a multi-intelligence ISR and targeting platform capable of operations from any hangar-equipped, air-capable ship in support of MDA and Irregular Warfare mission sets, including maritime ISR in support of SOF. The PB12 funding request includes $15.0M in RDTEN.

**5) Small Tactical UAS (STUAS): STUAS** is an organic ISR asset for Navy Special Warfare (NSW) and LSD–41 class ships with an FY13 IOC. It provides the deployed unit the capability to control its own ISR capability for use at the tactical level. The Navy plans to buy four systems. USMC still plans to buy 32 systems and shares RDTEN costs with the Navy. PB12 funding includes $12.8M in APN and $22.7M in RDTEN.

Mr. AKIN. For the last ten years we have been operating our aircraft carriers and battle group in the Arabian Gulf and Indian Ocean regions leaving a power vacuum in the Mediterranean. With the recent uprising in Tunisia, Egypt and now Libya do you see a need for our carrier navy to reassert itself in the Mediterranean Ocean and what affect will that have on our Fleet Readiness Plan and carrier Cycles?

Admiral ROUGHEAD. Carrier Strike Group's are deployed in the Mediterranean several times per year. There are several factors involved in the timing and duration of those deployments. At this time, bolstered by the deployments of our coalition partners, there is no requirement for continuous Carrier Strike Group deployments in the Mediterranean. If additional carrier presence is required in the Mediterranean Sea, carriers could be shifted from other areas of the world or we could adjust training and maintenance schedules.

Mr. AKIN. The QDR independent panel recommended a fleet size of roughly 340 ships. What kind of budget would you need to get to a 340 ship fleet?

Admiral ROUGHEAD. The cost of a 340-ship Navy depends upon the capabilities and mix of ships desired in the Fleet; the associated effects and costs related to the shipbuilding industrial base, including second and third tier suppliers; and the manpower and operations and maintenance funding necessary to operate a 340-ship Navy. These factors must be determined before addressing the resources required to get to a 340-ship Navy.

Mr. AKIN. The Navy has seen a steady decline in their manning numbers through such force shaping tools such as Perform-To-Serve (PTS). This has been occurring at the same time as their OPTEMPO has been steadily increasing through the War on Terror, our other Deployed Assets and Humanitarian response. At what point do you believe the Navy will reach their breaking point with regards to dwell time?

Admiral ROUGHEAD. The metrics we use to assess impact to the force on high operating tempo and lower dwell time, indicate we are operating within acceptable parameters, and that we are not approaching a breaking point for our sailors. While we are currently experiencing high tempo with particular units or within certain mission areas, Navy expects to remain above established Dwell limits based on current and projected operational requirements.

Mr. AKIN. What are the costs associated with the purchase and later SLAP of an F–18E/F over a current SLEP of a current F–18C? Is it not more cost effective long term to purchase a more capable platform that can last for 9000 hours then to extend a legacy system for 1400 additional hours?

Admiral ROUGHEAD. During the five-year timeframe in which our strike fighter shortfall will peak, there is not a significant yearly cost difference between performing SLEP on our F/A–18A–D aircraft and procuring new F/A–18E/F aircraft when the costs are amortized over 5 and 20 years respectively. Costs associated with extending the F/A–18A–D aircraft and operating them for an additional five years is estimated at $10.2 million a year, per aircraft. Procuring additional F/A–18E/F aircraft and operating them for five years is estimated to be $10.8 million per year. The Navy's decision to SLEP 150 F/A–18A–D aircraft and procure 41 additional F/A–18E/F aircraft and the Joint Strike Fighter is the most viable and cost effective strategy to mitigate the impact of the projected strike fighter shortfall. (Costs provided in CY11$.)

The Service Life Assessment Program (SLAP) for F/A–18E/F is underway; however there is no cost estimate on extending F/A–18E/Fs to 9,000 flight hours. F/A–18E/F SLAP effort has not produced data yet to support a cost estimate for SLEP of E/F, therefore those costs are not included in the comparison.

Mr. AKIN. Assuming that we cannot fill the strike fighter shortfall what is your aircraft allocation plan for squadrons and airwings in the future?

Admiral ROUGHEAD. Navy's peak strike fighter shortfall of 65 aircraft in 2018 is manageable. With the fidelity and understanding we possess today, we do not plan to develop an alternative allocation plan for dealing with our anticipated strike fighter shortfall. Should Navy experience a greater strike fighter shortfall than expected, we will investigate a variety of options for dealing with the projected shortfall.

Mr. AKIN. Have we included the savings in fuel costs of a Super Hornet over a legacy Hornet in the long term cost analysis/benefit of SLEPing a legacy Hornet versus a new Super Hornet purchase?

Admiral ROUGHEAD. Fuel consumption for both Super Hornets and Legacy Hornets has been included in the Operations & Support cost estimates in the SLEP Cost Benefit Analysis conducted in support of the FY 2011 National Defense Authorization Act. Because the fuel consumption of a Super Hornet is approximately 100 gals per hour more than a legacy Hornet, we do not anticipate any fuel-related cost savings.

Mr. AKIN. How many planes will the Department of the Navy be short of its requirement of 1240 strike fighters at the peak of the strike fighter shortfall?

Admiral ROUGHEAD. Based on the 2012 President's Budget, the Department of the Navy projects it will experience a peak inventory shortfall of 65 aircraft in 2018, should the following conditions exist: accelerated transition of ten F/A–18 legacy Hornet squadrons into Super Hornets; the service life extension of approximately 150 legacy Hornets; and procurement of a total of 556 F/A–18E/F Super Hornets. As I testified, this aircraft shortfall is manageable.

Mr. AKIN. With ISR requirements increasing across the whole of the DOD and the Navy specifically, the Air Force appears to be maxed out in their ability to provide 24 hours coverage across the globe. What is the Navy's need and capability to provide ISR for the short and long term future?

Admiral ROUGHEAD. The Navy's need to conduct current and future operations in service, Joint and combined roles requires robust maritime domain awareness and is the primary driver for Navy Intelligence, Surveillance and Reconnaissance (ISR) requirements.

Current demand for maritime and littoral ISR exceeds existing Navy ISR capacity. We are investing in an ISR "Family of Systems" that integrates land-based and sea-based, manned and unmanned, air systems to increase ISR capability and capacity for the full spectrum of maritime and littoral missions. Programs essential to improving our ISR capability and capacity include: Broad Area Maritime Surveillance (BAMS) Unmanned Aerial System (UAS), Unmanned Carrier Launched Airborne Surveillance and Strike (UCLASS) system, MQ–8 Fire Scout Vertical Takeoff UAV (VTUAV), Medium Range Maritime UAS (MRMUAS), and Small Tactical UAS (STUAS). Our Presidential Budget FY12 submission funds development and/or procurement of each of these systems. We will continue to sustain and modernize our EP–3 aircraft, including spiral upgrades of SIGINT capability, until a replacement capability can be fielded.

Mr. AKIN. What is your goal for the cost of the replacement for the EFV?

General AMOS. We will assess affordability of future vehicles based on assumptions of a declining budgetary environment. Historically, ground combat and tactical vehicle procurement has accounted for 33% of our overall Service level procurement account. The addition of the EFV alone at a projected $17M cost per vehicle in a continuously forecasted declining budgetary environment would have consumed the preponderance of our procurement account and 100% of our operations and maintenance account through 2025. Procuring a modern amphibious vehicle at a unit cost of $8M (calculated in FY11 dollars) is affordable based on procurement budget projections. Operations and maintenance allocations are expected at 7% annually of the vehicle price, or $560K/year per vehicle. A vehicle of $12M also is affordable if funding continues at the projected FY16 level. Therefore, we judge that a range of $8–12M per vehicle is affordable

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## QUESTIONS SUBMITTED BY MS. BORDALLO

Ms. BORDALLO. Secretary Mabus, there seems to be some confusion here on the Hill about the Administration's position on the realignment of Marines from Oki-

nawa, Japan to Guam. Can you detail the rationale behind the current budget of $155 million for military construction on Guam directly related to the military build-up? This direct U.S. funding for the realignment is significantly smaller than the Government of Japan contributions. Why is there a discrepancy and does this mean there is any shift in position by the Obama Administration for the realignment of Marines? In my opinion, the current funding level seems consistent with concerns that were raised by this Committee last year and are concurrent with the Adaptive Program Management mitigation measure outlined in the Record of Decision but we would appreciate your insights on this matter.

Secretary MABUS. In determining the request for FY–12, the Department considered the concerns noted by Congress in the FY–11 National Defense Authorization Act Joint Explanatory Statement. The Department is committed to executing the realignment in a deliberate manner and 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 Department of Defense (DOD) funding and $54 million in United States Department of Agriculture financing; improve roadways using Defense Access Road funding ($49M authorized in FY10 and $67M authorized 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.

At $167 million, the Government of Japan's direct cash contribution for Japanese Fiscal Year (JFY) 2011 is comparable to DOD's $156 million request. The Japanese Diet is currently considering $415 million in utilities financing in JFY–11 in addition to the direct cash contribution. $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.

Ms. BORDALLO. My top legislative priority is the passage of H.R. 44 the Guam World War II Loyalty Recognition Act. We advanced the bill forward with the Senate by agreeing to some compromises but that was due in large part to the Department of Defense's support. As you know, the people of Guam are expected to concede additional land for a firing range for the Marines and I would be remiss if I didn't point out that the resolution of Guam war claims is important to getting the build-up done right. To that end, Secretary Mabus and General Amos can we count on both of you to support H.R. 44? Is there recognition of the importance of this bill's passage to getting the build-up done right?

Secretary MABUS. The Department understands the importance of resolving war reparations to the people of Guam. In December 2010, Deputy Secretary of Defense William Lynn sent a letter to Senate Armed Services Committee chairman Senator Carl Levin in support of the Guam Loyalty Recognition Act. The Department remains in support of the Guam Loyalty Recognition Act as stated in the letter.

Ms. BORDALLO. Under Secretary Work outlined 4 key pillars for the military build-up and one of those was 24/7, unimpeded access to the Pagat cave and nearby historical and cultural sites. Can you tell me what is being done to reconfigure to the potential firing range to meet this pillar? I remain skeptical that the Department of Defense will be able to obtain the land necessary for this firing range and so, again, I urge the Marines and the Department of the Navy to seriously consider using Tinian for the firing range to meet the full spectrum of individual and unit-sized training that is necessary. Are the Marines continuing to look into Tinian to meet the full spectrum of training requirements?

General AMOS. The Department of the Navy has not yet issued the Training Record of Decision finalizing the location of the firing ranges at Route 15. When that decision is made and a follow-on survey of the Route 15 area occurs, the Marine Corps will be able to finalize a range design that allows 24/7 unimpeded access to the Pagat historical site. The ranges planned in the Final Environmental Impact Statement (FEIS) for Guam are critical to meeting Marine Corps individual training

requirements. The Tinian ranges outlined in the FEIS complement, rather than replace, the Guam ranges and provide limited small unit common skills training utilizing up to 5.56mm ammunition only.

Ms. BORDALLO. My top legislative priority is the passage of H.R. 44 the Guam World War II Loyalty Recognition Act. We advanced the bill forward with the Senate by agreeing to some compromises but that was due in large part to the Department of Defense's support. As you know, the people of Guam are expected to concede additional land for a firing range for the Marines and I would be remiss if I didn't point out that the resolution of Guam war claims is important to getting the build-up done right. To that end, Secretary Mabus and General Amos can we count on both of you to support H.R. 44? Is there recognition of the importance of this bill's passage to getting the build-up done right?

General AMOS. The Marine Corps fully supports the Department of Defense position in support of the *Guam World War II Loyalty Recognition Act* as stated by the Deputy Secretary of Defense in his December 8, 2010 letter to Chairman Levin. The Marine Corps lauds the courage and fidelity displayed by the people of Guam during this dark chapter in their history and acknowledges this legislation as a significant step forward in providing closure for the People of Guam who endured unimaginable hardship, but who never lost faith in the United States.

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## QUESTIONS SUBMITTED BY MR. FORBES

Mr. FORBES. 1. Given predicted FY12 shortfall of $367 million and deferral of 44 maintenance availabilities, how do you plan to maintain a ready surface fleet that meets estimated service life and reduces INSURV failure rate?

Secretary MABUS. Although it would be desirable not to defer maintenance, most of the work being deferred are the small, non-docking, pier-side surface ship maintenance periods that we know by experience can be temporarily delayed without substantial risk to achieving expected service life. The Surface Maintenance Engineering Planning Program (SURFMEPP) enables the Navy to mitigate risk by using available funding to schedule and complete the most critical maintenance in FY12. SURFMEPP also formally tracks deferred work and reschedules it for future maintenance periods, allowing future budget requirements to accurately reflect the full surface ship maintenance requirement. The FY12 President's Budget represents the best balance of risk and available resources across the Navy Enterprise portfolio.

Mr. FORBES. 2. With regards to your ongoing Force Structure Assessment:

a. What assurances will you provide Congress that your conclusions on required force structure are based on the totality of threats and the strategy to handle those threats rather than driven by budgetary constraints?

b. In light of numerous recent INSURV failures and clear evidence that the expected service lives of our ships are being reduced due to deferred and unperformed maintenance, can we expect the Force Structure Assessment to consider shorter service lives of our current fleet in assessing the future requirements?

c. On Feb 3, 2010, the Secretary of Defense testified that the "outyears toward the end of the 2030's" of the 30-year shipbuilding plan "is mainly fantasy." Given this assessment, should we be prepared to see a lowering of the current "floor" of 313 ships, driven by budgetary pressures, when the Force Structure Assessment is released?

Secretary MABUS. a. In addition to *A Cooperative Strategy for 21st Century Seapower* and the *Naval Operations Concept 2010,* the Quadrennial Defense Review, Nuclear Posture Review and Ballistic Missile Defense Review provided strategic guidance, threat assessments and analysis that validated Navy's force structure requirements. This guidance supports a global posture of distributed, mission-tailored ships, aircraft, and units capable of regionally concentrated combat operations and peacetime theater security cooperation.

The Long-Range Plan for Construction of Naval Vessels projects the affordable procurement and available inventory of ships over the next 30 years. This shipbuilding plan is where the Navy balances the demands for naval forces with expected future resources.

b. The Navy force structure requirements provide sufficient rotation base to sustain global posture indefinitely without jeopardizing service lives of platforms. Additionally, the Navy will carefully manage and closely monitor the material condition of these legacy ships during the various maintenance and modernization periods as they progress through their service lives. The Navy intends to utilize spiral upgrades to the maximum extent possible to help modernize existing ships and prevent block obsolescence causing unacceptable gaps in capability and capacity.

c. 313 remains the floor. Since the release of the Maritime Strategy, the Chief of Naval Operations has stated that the Navy requires a minimum of 313 ships to meet operational requirements globally. This minimum remains valid. The Navy will continue to examine this requirement in conjunction with the increased operational demands and expanding requirements for ballistic missile defense, intra-theater lift, and irregular challenges.

Mr. FORBES. Regarding the Department of the Navy proposal to base a carrier in Mayport, FL beginning in 2019:

a. In testimony before the House Armed Service Committee on January 26th, 2011, VADM Greenert stated that the move to Mayport was considered when the Department of the Navy evaluated it's efficiency initiatives and that the strategic necessity of the move outweighed the cost. In a conversation with Under Secretary of the Navy Work on January 6th, I was informed that the Mayport proposal was not considered in the efficiency decision. Which of these statements is accurate?

b. If the Navy evaluated this proposal as part of its efficiency determination, please provide this analysis.

c. How does the strategic priority of basing a carrier at Mayport compare with the priority of fully funding the maintenance of our existing fleet to ensure that our current inventory of ships achieve their intended service life? Please provide details.

d. Given that the FY12 budget proposal includes $15 million for road improvements at Naval Station Mayport in anticipation of future carrier basing, along with an additional $549 million in other related MILCON over the next 3 years, why is the Navy willing to accept a $367 million shortfall in its ship repair account and the deferral of 44 maintenance availabilities?

Secretary MABUS. a. Admiral Greenert testified that the costs associated with moving a nuclear carrier to Mayport were considered as part of the Navy's "budget preparation", vice as an efficiency. This is not contradictory with Under Secretary Work's statement that the costs associated with moving a nuclear carrier to Mayport were not considered in the efficiency initiatives.

b. This proposal was not evaluated as part of the efficiency initiatives.

c. Both are strategic priorities. The Navy's budget submission represents the best balance of funding amongst all priorities.

d. The Navy's FY12 budget submission, which includes $15M for road improvements at Naval Station Mayport, and an additional $398M in other related MILCON across the FYDP for completing the remaining projects necessary to homeport a carrier there, represents the best balance of funding amongst all the Navy's priorities. Although we will defer $367M of maintenance, primarily in the Surface Force, the work accomplished by the Surface Maintenance Engineering Planning Program (SURFMEPP) enables us to mitigate risk by scheduling and completing the most critical maintenance in FY12.

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## QUESTIONS SUBMITTED BY MS. GIFFORDS

Ms. GIFFORDS. In relation to the Navy's "Green Hornet" Program, where a Navy F/A–18 successfully completed test flights using a 50/50 bio-fuel blend and the Marines Corps' 3rd Battalion 5th Marines employment of the Experimental Forward Operating Base (ExFOB) in Afghanistan can you answer the following questions:

- How do these types of programs fit within the context of the Navy's overall Operational Energy Strategy?
- What is the inter-service process for sharing these operational energy lessons learned?
- Can you describe the strategic impact of access to a scaleable bio-fuel on the Department of the Navy's global roles and responsibilities?

Secretary MABUS and Admiral ROUGHEAD. The Navy's Biofuels Program and the Marine Corps' Experimental Forward Operating Base Program are on the leading edge of our Operational Energy initiatives. In order to achieve the SECNAV goal of having 50% of Department of the Navy's energy come from alternative sources by 2020, we need to be bold and innovative. Our operational energy strategy relies on programs like these to continually push the envelope.

Within our biofuels program, we are sharing data and information on our testing and certification process on our hydrotreated renewable jet fuels. We are going to work together on the CV–22/MV–22 airframe since Navy and Air Force both fly it. With the lessons learned in our Experimental Forward Operating Base, we are sharing the technologies and information with the Navy Expeditionary Warfare Group and the Army.

The Department of the Navy's switch to biofuels, in and of itself, will not reduce the nation's total energy consumption by a significant margin. To achieve this and extend our tactical reach, the Department of the Navy is pursuing energy efficiency initiatives, which together with the use of alternative fuels will achieve significant cost savings, guarantee energy supply, and reduce operational risk.

Benefits of our approach include:

- **Cost savings.** Increasing our use of alternative energy sources helps us achieve a level of protection from energy price volatility. For every $10 increase in the cost of a barrel of oil, the Navy spends an additional $300 million dollars a year. Operating more efficiently saves money by reducing the amount we spend for fuel. Savings can be reinvested to strengthen combat capability. The cheapest barrel of fuel afloat or kilowatt-hour ashore is the one we will never use.
- **Guaranteed Supply**. Our reliance on energy can be exploited by potential adversaries. Efficiency and alternatives may be our best countermeasure. Energy efficiency increases our mission effectiveness by expanding our range and endurance, and reducing our need for logistics support. Efficiency improvements minimize operational risks of that logistics tether, saving time, money, and lives. Alternative fuels provide the Navy an 'off-ramp from petroleum,' mitigating the risk to a volatile and ever more expensive petroleum market.
- **Early Adopter of Technologies**. The military has often led in the development of new technologies where there was a compelling military use, even if the civilian use was ultimately greater (ex. GPS, the Internet). The operational use of alternative fuels by the Department of the Navy will be hastened by collaborating with federal agencies and private industry at every step of the research, development, and certification process. The alternative fuel program establishes the Department of the Navy as an early adopter for investors in a nascent industry that could significantly enhance energy security, and thereby national security, in the mid- to long-term.
- **Fossil Fuel Independence**. The Navy recognizes that our dependence on fossil fuels and foreign sources of oil makes us more susceptible to price shocks, supply shocks, natural and man-made disasters, and political unrest in countries far from our shores.
- **Combat Capability**. Making our ships and aircraft more efficient improves their fuel economy. We can increase the days between refueling for our ships, improving their security and combat capability. We can also extend the range of our aircraft strike missions, allowing us to launch our aircraft farther away from combat areas. Increasing our efficiency and the diversity in our sources of fuel improves our combat capability strategically and tactically.

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## QUESTION SUBMITTED BY MR. MILLER

Mr. MILLER. Secretary Mabus, according to recent media reports, the Secretary of the Army has halted the insourcing of contractor positions within his department because the expected cost savings were not realized. Do you plan to implement a similar freeze within the Department of the Navy?

Secretary MABUS. The DON is not abandoning all in-sourcing, but re-evaluating priorities and all workforce balancing efforts to meet FY 2012 budget expectations.

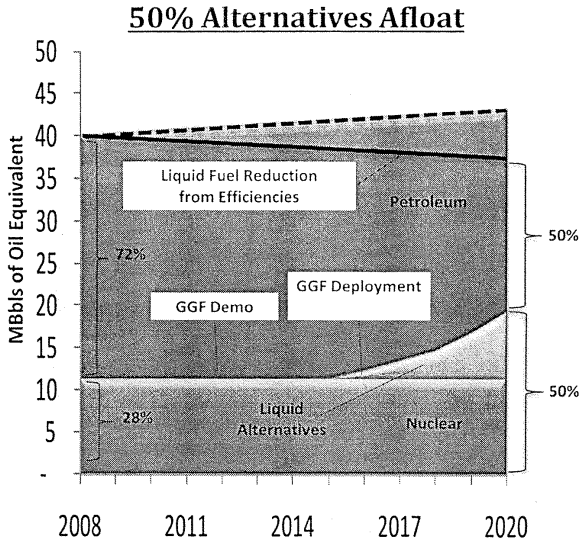
## QUESTIONS SUBMITTED BY MR. KISSELL

Mr. KISSELL. 1. When will the Navy achieve a 50% bio-fuel usage level?

Admiral ROUGHEAD. DoN does not have a specific bio-fuel usage goal. The Secretary of the Navy's goal is for DoN tactical energy use to consume at least 50% alternative energy, to include nuclear, by 2020.

Mr. KISSELL. 2. What percent of Navy fuel is nuclear? What percentage will be nuclear once we achieve 50% bio-fuel usage level?

Admiral ROUGHEAD. Tactical fuel usage is defined as all fuel usage to maintain operations of our ships (including logistics ships), submarines, aircraft, and expeditionary ground vehicles/equipment. The Navy currently utilizes nuclear propulsion only for its aircraft carriers and submarines. As the below graph indicates, the Navy's tactical energy usage today is 72% petroleum and 28% nuclear power. Nuclear power's contribution is not projected to change appreciably as the Navy goes about achieving the Secretary of the Navy's energy goal of 50% alternatives by 2020. As is graphically depicted, Navy's Energy Vision is multi-faceted: enhancing our combat capability through operational efficiencies, an ethos towards energy that saves us 5M barrels of oil per year by 2020, and supplanting 8M barrels of petroleum with 'drop-in' biofuels to give us an 'off-ramp', in terms of price and availability, from petroleum. Much of this fuel, particularly for our local training needs, could be domestically produced. Together with nuclear, these new fuels will reduce our risk to petroleum volatility.



Mr. KISSELL. 3. What type of bio-fuel is being utilized?

Admiral ROUGHEAD. The Navy is currently testing and evaluating hydrotreated renewable fuels. These fuels are derived from algae and camelina.

Mr. KISSELL. 4. What is the Navy's/DOD's primary source of bio-fuel?

Admiral ROUGHEAD. The Navy is currently testing and evaluating hydrotreated renewable fuels derived from algae and camelina. Defense Logistics Agency—Energy (DLA Energy) procures all fuels for the Navy through competitive procurement.

Mr. KISSELL. 5. What is the daily percentage of bio-fuel consumption in all Department of the Navy operations?

Admiral ROUGHEAD. Bio-fuel usage for tactical systems is limited to test and evaluation only. It is not yet approved for operational use and therefore not currently incorporated into the DON fuel supply.

Mr. KISSELL. 6. What percentage of total naval fuel consumption is this (bio-fuel usage)?

Admiral ROUGHEAD. Currently 0% of total naval tactical fuel consumption is from biofuel. In FY09 and FY10, 285,000 gallons of bio-fuel were procured for test and evaluation purposes only.

Mr. KISSELL. 7. What is the Navy's current capability to produce bio-fuels? If the Navy is not the lead on production then what efforts are the Navy and the Department of Defense taking to establish a production capacity that will facilitate a 50% bio-fuel usage by 2020?

Admiral ROUGHEAD. The Navy is only testing and evaluating biofuel to support the Secretary of the Navy's goal for 50% alternative energy use (including nuclear) by 2020. The Navy is not producing and does not plan to produce bio-fuel. The Navy and the Department of Defense are partnering with commercial entities that use biofuels to establish a demand signal that demonstrates industry viability. Additionally, the Navy and Department of Defense are partnering with the Department of Energy and the US Department of Agriculture to spur biofuel development.

Mr. KISSELL. 8. What generation bio-fuel is being utilized?

Admiral ROUGHEAD. The classification system used to categorize the generation of bio-fuels has not been standardized; however, the Navy is testing a range of biofuels, which include those considered to be second or third generation fuels.

Mr. KISSELL. 9. What efforts/initiatives is the Navy implementing to address the Chinese anti-ship missile?

Admiral ROUGHEAD. The Navy has made significant investment in kinetic and non-kinetic capabilities to counter the threat of anti-ship ballistic missiles and advanced cruise missiles, including increased investment in Aegis modernization, which will upgrade our existing Aegis technology to continually improve our Integrated Air and Missile Defense capability. I would be pleased to provide a classified briefing for you to address our efforts in more detail.

Mr. KISSELL. What is the impact to the 3–1 dwell time effort by the Marine Corps, once the Marine Corps achieves their target reduction of at least ~15,000 Marines?

General AMOS. Our overall objective is a 1:3 deployment-to-dwell ratio for the Marine Corps Active Component and a 1:5 deployment-to-dwell ratio for the Reserve Component in a post-Operation ENDURING FREEDOM (OEF) environment. Currently, my stated goal, in concert with the Office of the Secretary of Defense, is for deployment-to-dwell ratios in support of combat operations in Afghanistan to be 1:2 for the Marine Corps Active Component and 1:4 for the Reserve Component.

Based on our current force level in support of OEF and other global force requirements, the Marine Corps could achieve a 1:2 deployment-to-dwell ratio across the Service within 18–24 months following the scheduled OEF draw-down. The Marine Corps' deployment-to-dwell ratio will continue to improve in a post-OEF environment and reach the stated goals of 1:3/1:5 as we balance requirements in support of the Geographic Combatant Commanders and the President's draw-down plan for Afghanistan.

Establishing a sustainable deployment-to-dwell ratio is based upon forces available and the need to meet our global operational demands. We will closely monitor the pace of reduction in our end strength to best support Geographical Combatant Commander requirements while also fostering the best health and resiliency of our Total Force.

Mr. KISSELL. If the Marines are going to maintain their amphibious, assault capability following the cancellation of the EFV (Expeditionary Fighting Vehicle). What efforts are currently ongoing by the Marine Corps to maintain this capability? How quickly will the Marines introduce a proposal to take the EFV's place or refurbish their current fleet of amphibious assault vehicles? What is the expected refurbishment and maintenance cost to ensure an operational capability with an older fleet and what is the timeline for refurbishment?

General AMOS. Instead of procuring the EFV, the Marine Corps will pursue an integrated new vehicle program crafted from the beginning for affordability and taking advantage of the investment made in the EFV. As we move forward, the Marine Corps intends to mitigate risks associated with a new vehicle program and to maximize value by the use of an integrated acquisition portfolio approach. This approach will have three efforts: 1) an acceleration of the planned procurement of Marine Personnel Carriers (MPC); 2) investment in a service life extension program (SLEP) and upgrades for a portion of the existing amphibious assault vehicles (AAV); and 3) the development of a new amphibious combat vehicle (ACV). We will manage the overall requirements and acquisition of these from a portfolio perspective. From an investment perspective, and understanding the imperative for a modern amphibious vehicle capability, the Amphibious Combat Vehicle emerges as a priority effort.

From the perspective of current operations and near term relevance, the AAV SLEP is a near-term operational priority. We must upgrade a portion of the current inventory of AAVs now in order to provide a more survivable capability until the ACV is fielded. The complementary capability to achieve greater protection for our forces is the Marine Personnel Carrier.

The Amphibious Combat Vehicle and the Marine Personnel Carrier represent the modern and enduring capability solution. The ACV will provide the surface amphibious assault capability and will be the heavy armored combat vehicle during sustained operations ashore. The MPC will provide armored mobility for the reinforcing element of the amphibious assault and will also provide armor protected mobility during sustained operations ashore. As the MPC is a wheeled vehicle, we envision it as a versatile platform capable of employment across the Range of Military Operations and in urban settings, and it will incorporate the high levels of underbody protection needed in an irregular warfare environment. Together, the ACV and MPC will satisfy the Marine Corps' lift requirement for 12 infantry battalions– 8 Battalions supported by ACV and 4 Battalions supported by MPC.

Prior to EFV cancellation, we funded a basic AAV Survivability Improvement Program which would add armor and blast protective seats, and also would move the fuel tank. Early analysis in support of that effort has begun and will proceed to research and development in FY12. We are now developing an additional upgrade for the AAV. This new initiative is intended to improve the AAV's mobility, lethality, communications, environmental and habitability capabilities and provide a bridge in capability until the Amphibious Combat Vehicle enters service. The timing of the decision for a comprehensive SLEP is dependent on how rapidly we can acquire a replacement amphibious vehicle.

The Marine Corps released a series of "Requests for Information" (RFI) to industry in February covering the three vehicles that comprise the Amphibious Vehicle portfolio. Responses to the RFI, received in May, will provide a better understanding of available technology and associated costs.

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## QUESTIONS SUBMITTED BY MR. WILSON

Mr. WILSON. General Amos, the Joint Chiefs of Staff signed off on a letter conveying their "strong support for the military health care program changes that are included in the President's proposed fiscal year 2012 budget."

a. Please explain in your own words why you support the proposed changes.

b. These changes will go beyond the beneficiaries and will impact the people who support the Department of Defense health system. Are you concerned about the implications these changes will have on hospital employees, pharmacists, vendors, just to name a few? In your opinion, will these effects harm the quality and access to care for our service members, military retirees, and their families?

c. For example, there are hospitals located very close to Camp Lejeune, New River Air Station, Beaufort Air Station, Parris Island and Yuma Air Station that will be significantly affected by the plan to reduce the rate that TRICARE pays them to care for our beneficiaries. Does that concern you?

General AMOS. I support the proposed changes because I believe they will allow the Department of Defense to continue providing the finest health care benefits in the country for our active and retired service members and their families while also ensuring that the Department remains a responsible financial steward of the taxpayers' investment in our military. The Marine Corps, along with the other Services, will actively monitor any negative trends on access to or quality of care, but I do not anticipate any unfavorable impacts in these parameters as a result of the military health care program proposals outlined in the President's FY12 budget.

The proposed changes will facilitate the application of current Medicare criteria to determine which hospitals that provide access to service members should receive

special designations to ensure that they are appropriately compensated. These criteria are applied to all hospitals in the United States that request a special status from Medicare. TRICARE has similarly adopted these criteria to appropriately compensate hospitals that regularly support service member care.

Some hospitals that regularly receive TRICARE funding, including some that serve Marines, have received a special designation in the past for which they may no longer qualify due to changes peculiar to their local conditions. In these cases, a level playing field would dictate that they be re-classified.

Mr. WILSON. General Amos, in light of the results of the F–35's technical baseline review and the previous initial operating capability date of 2012, when does the Marine Corps now plan to achieve F–35B initial operating capability?

General AMOS. Our plan is to maintain our operational requirements, field the aircraft, train to the capabilities as they are cleared for operational use and achieve Initial Operating Capability (IOC) when the program office and contractor delivers the aircraft without limitations. IOC will depend on the results of the Joint Program Office technical and sustainment reviews. It also will depend on when we have a more clear understanding on flight test plans, software development improvements, and aircraft delivery schedules.

Delivery of aircraft to the first training squadron will occur later this year. Delivery of our first operational aircraft is anticipated in 2012.

Mr. WILSON. General Amos, what risks do you see of the F–35B not meeting its cost, schedule, and performance objectives in the two-year probationary period?

General AMOS. The current two-year probationary period brings with it a reduced rate of production. In turn, this slows down our rate of transition from legacy tactical fighter aircraft—F/A–18 and AV–8B—all of which are nearing the end of their service lives. While we are pursuing Service Life Extension Programs of these older 4th generation planes to mitigate risk and be a bridging capability until we fully field the F–35B, extended delays in this transition process will place greater burdens on our already operationally stressed legacy platforms.

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## QUESTIONS SUBMITTED BY MS. SUTTON

Ms. SUTTON. A key component of modernizing our infrastructure, preserving our military assets, and saving money in the process is adopting a robust corrosion prevention and mitigation strategy. It is not a glamorous topic, but it's one that is worth our time and attention, especially given the potential savings if we address it in a smart and appropriate way.

The San Diego Business Journal reported on Monday, February 28 about the struggles the Navy faces with respect to rust and corrosion. The article quotes retired Navy captain Pat Garrett, who spoke of the early decommissioning of ships in the Spruance class partly due to decay of the vessels.

If you could, I'd like to hear—with respect to the Navy and Marine Corps—what potential issues you may face with corrosion.

Are there any specific programs or assets currently experiencing these problems due to corrosion? How can this committee best support DoD prevention and mitigation efforts to tackle corrosion and do you believe sufficient funding and resources have been devoted to address this issue?

Secretary MABUS and General AMOS. Due to the location of many of our bases near significant bodies of water and the amphibious nature of our operations, Marine Corps maintenance efforts against corrosion are critical to extending the lifecycle and preserving the readiness of the fleet. Our assets stationed in Japan and Hawaii are most susceptible to corrosion due to the humid environment. One of the assets most damaged by corrosion is the quad container, often requiring extensive repair or disposal and procurement of new assets.

Over the past several years, the Marine Corps has developed a robust Corrosion Prevention and Control Program (CPAC) focused on the identification of corrosion levels on our ground tactical equipment; followed by correction of the corrosion damage identified; and finally by the prevention and management of corrosion levels on ground tactical equipment. Our CPAC protocol is currently tracking and maintaining corrosion levels on more than 71,000 assets. We globally employ eight Mobile Corrosion Service Teams that update corrosion assessment data and apply Corrosion Prevention Compounds to preserve and protect Marine Corps equipment from harsh operating environments.

The Marine Corps also maintains a field-level repair capability that repairs corrosion related damage when identified through the corrosion assessments completed by the Marine Corps CPAC Program Office. The field-level Corrosion Repair Facilities provide the operational commander with the capability to repair equipment.

The Marine Corps has also developed a robust on-the-lot Dehumidification Program which provides the unit commander with dehumidified space for staging equipment when not in-use. Previous reports identify an investment return at a minimum of 9:1, with the use of dehumidification in protecting equipment.

The Marine Corps CPAC Program Office maintains an aggressive research and development program to locate, identify, evaluate and/or develop best corrosion prevention materials and procedures. These efforts support both the acquisition community and the field user.

Our investment in corrosion prevention and control over the past several years will continue to pay dividends by decreasing total ownership costs and improving equipment readiness. However, as budgets become increasingly constrained, a major challenge will be maintaining sufficient operations and maintenance funding in the baseline budgets for corrosion control.

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## QUESTIONS SUBMITTED BY MR. TURNER

Mr. TURNER. Secretary Mabus, can you discuss how the missile defense mission and the multi-mission capability of Aegis ballistic missile defense (BMD) ships are affecting the overall force structure requirements for the Aegis fleet? How is the Navy managing the limited number of Aegis BMD ships when demand is greater than supply?

Secretary MABUS. Navy force structure accounts for the employment of Aegis ships in multi-mission roles rather than for exclusive missions, such as BMD, on an enduring basis. Single mission use, as for BMD, may result in shortages in other mission areas and a loss of operational flexibility for the Geographic Combatant Commander (GCC).

The preferred Navy operating concept for maritime BMD features a graduated readiness posture that would allow BMD-capable surface combatants to be on an operational tether and available for other tasking when not directly involved in active BMD operations. Surface combatants operating in support of a BMD mission do not lose the capability to conduct other missions; however, specific mission effectiveness may be affected by ships' position and/or application of ship resources to those missions.

Navy analysis of evolving BMD and other mission area requirements indicates that the current Navy BMD upgrade plan will support BMD Global Force Management requirements while simultaneously fulfilling Navy's requirements in other mission areas.

Mr. TURNER. Secretary Mabus, according to a Defense News article in June 2010, "U.S. Aegis Radars' Readiness Plunges," the Aegis radar systems are "in their worst shape ever, raising questions about the surface fleet's ability to take on its high-profile new mission next year defending Europe from ballistic missiles." Discuss any Aegis readiness concerns you may have and how it might impact the Navy's ability to meet missile defense mission requirements.

Secretary MABUS. I am confident in Navy's ability to meet our missile defense requirements. While several reports and studies completed last year, as part of Navy's ongoing self-assessment and continuous improvement initiative, did indicate the beginning of some declining trends in various elements of Aegis readiness, the overall readiness of the Aegis Fleet remains high. A product of their ongoing success, the elevated standards employed in measuring Aegis readiness can lead to the misperception that these ships are having difficulty meeting their assigned missions—nothing could be further from the truth. However, in light of Aegis' role in ballistic missile defense, a study was initiated to integrate previous study efforts and provide a holistic assessment of Aegis readiness in terms of interoperability, maintainability, test & evaluation, manpower, training, and current development efforts. As has always been the case, Navy will continue improving Aegis readiness in a targeted, affordable manner to ensure that Aegis warships remain ready for tasking. I remain confident in the ability of Aegis ships' to meet warfighter requirements today and in the future.

Mr. TURNER. Secretary Mabus, what specific changes in nuclear deterrence requirements or change in nuclear strategy have allowed the Navy to further reduce SSBN missile tubes from 20, as specified in May 2010 by the Secretary of Defense, to 16 missile tubes?

Secretary MABUS. There have been no changes in nuclear deterrence requirements or nuclear strategy following the submission of the New START Treaty implementation plan (NDAA FY10 Section 1251 Report) in May 2010. While the Department of Defense's implementation plan reduced the number of operational missile tubes from 24 to 20 on the current OHIO Class SSBNs, the OHIO Replacement SSBN will

be operational in the 2030 to 2080 timeframe beyond the period of treaty governance (2011–2021 with an option for a single extension to 2026).

Coincident with the submission of the New START implementation plan, the Navy conducted an in-depth, extensive review of the capability requirements for the OHIO Replacement SSBN in parallel with development of the Service Cost Position required at Milestone A. This analysis concluded that even if the number of operationally deployed warheads assigned to the sea-based leg of the Triad remains constant after the New START treaty expires (an assumption that does not reflect a policy supporting downward reliance on nuclear weapons outlined in the Nuclear Posture Review), a force of 12 OHIO Replacement SSBNs with 16 missile tubes can carry all the sea-based warheads and maintain excess capacity in the event of a fundamental deterioration of the security environment or as a hedge against technical challenges within one or more of the other legs of the triad.

It is the Navy's judgment that the Nation's sea-based strategic requirements can be met with a force of 12 OHIO Replacement SSBNs with 16 tubes and that a 20 tube variant would inappropriately sacrifice other conventional shipbuilding requirements for unneeded excess capacity. OSD, Joint Staff and U.S. Strategic Command have since concurred with the Navy's position on this military requirement.

Mr. TURNER. Secretary Mabus, the SSBN(X) is expected to have a service life of over 60 years. The threat and strategic environment can change significantly over the course of 60 years. What planning assumptions—both nuclear and nonnuclear—are being made? How do they affect the number of missile tubes per hull and what sensitivity analysis has been done?

Secretary MABUS. The OHIO Replacement SSBN is being developed as a replacement for the current OHIO Class SSBN. The OHIO Replacement SSBN force is planned to consist of 12 SSBNs which will replace the current 14 OHIO SSBNs. The concept of operations for the OHIO Replacement SSBN is similar to the current OHIO Class SSBN, employing in-port and at-sea rotational patrols using a two-crew concept designed to meet U.S. Strategic Command at-sea presence and generation requirements. A force of 12 OHIO Replacement SSBNs will maintain the same presence level as 14 OHIO SSBNs due to elimination of nuclear refueling and maintenance items during the mid-life maintenance period.

The survivability of individual SSBNs as well as the SSBN force is a key attribute to meet the requirement for a survivable assured response. The current OHIO class with the TRIDENT II D5 Life Extension (LE) missile is the nation's most survivable leg of the US nuclear deterrent force and will serve in strategic service from 1982 to 2040. To ensure the SSBN force remains survivable, the SSBN Security Program in collaboration with the Office of Naval Intelligence and Johns Hopkins Applied Physics Laboratory has, over the past 40 years, anticipated potential threats and developed appropriate countermeasures to enhance survivability and protect SSBNs. Consistent with direction in the 2010 Nuclear Posture Review (NPR) and FY12–16 Defense Planning and Programmatic Guidance, the SSBN Security Program is an integral part of the development of the key survivability characteristics for the OHIO Replacement SSBN. This process included an extensive review of current and future threats as well as potential submarine vulnerabilities. The resultant acoustic and non acoustic performance of the OHIO Replacement SSBN will deter an adversary from attempting to hold a platform or the SSBN force at risk on patrol.

The Navy conducted an in-depth, extensive review of the capability requirements for the OHIO Replacement SSBN in parallel with development of the Service Cost Position required at Milestone A. This analysis concluded that even if the number of operationally deployed warheads assigned to the sea-based leg of the Triad remains constant after the New START treaty expires (an assumption that does not reflect the 2010 NPR recommendation for decreasing reliance on nuclear weapons), a force of 12 OHIO Replacement SSBNs with 16 missile tubes can carry all the sea-based warheads and maintain excess capacity in the event of a fundamental deterioration of the security environment or as a hedge against technical challenges within one or more of the other legs of the triad.

Mr. TURNER. Secretary Mabus, the committee understands the Navy has completed an updated cost estimate for SSBN(X). What is the new cost estimate for the average follow-on unit end cost, what is the margin of error in this cost estimate, and what is the estimate for the cost savings attributable to the reduction from 20 to 16 missile tubes?

Secretary MABUS. The Department has assigned an affordability target for the average procurement for hulls 2–12 of $4.9 billion (CY 10$, using Navy inflation/deflation indices, excluding outfitting and post delivery).

Mr. TURNER. Secretary Mabus, what would be the costs to construct additional SSBN(X)-class submarines if it is determined in the future that the U.S. has insuffi-

cient capacity to meet its nuclear strategy and mission requirements? For example, what would the cost of one additional submarine be in the 2035 timeframe?

Secretary MABUS. The Department has assigned an affordability target for the average procurement for hulls 2–12 of $4.9 billion (CY 10$, using Navy inflation/deflation indices, excluding outfitting and post delivery).

Mr. TURNER. Admiral Roughead, can you discuss how the missile defense mission and the multi-mission capability of Aegis ballistic missile defense (BMD) ships are affecting the overall force structure requirements for the Aegis fleet? How is the Navy managing the limited number of Aegis BMD ships when demand is greater than supply?

Admiral ROUGHEAD. The Navy currently has sufficient capacity to meet the most critical demands for its multi-mission Aegis ships; however, we do not have the capacity to meet all Geographic Combatant Commander (GCC) demands for Ballistic Missile Defense (BMD) without exceeding established Personnel Tempo program limits for deployment lengths, dwell tempo, or homeport tempo. Based on threat analysis and current indications from GCCs, and assuming standard six month deployment lengths, the Navy and the Missile Defense Agency (MDA) concluded that GCC demand for surface combatants with Aegis BMD capability will outpace capacity through approximately 2018.

To meet the increasing demand for these ships and reduce the risk to our long term force structure caused by the increased operational tempo from longer deployment lengths, the Navy, working in conjunction with MDA, has established a plan **(see Figure 1 on page 165)** to increase the number of BMD-capable Aegis ships from 23 in FY2011 to 41 in FY2016. This plan balances the need for meeting current operational requirements against the need to upgrade existing BMD-capable Aegis ships to pace the future threat. Included in this plan are increases in the Navy's capacity and the capabilities of Aegis ships through the installation of an Aegis BMD 3.6.1/4.0.1 suite, the Aegis Modernization program, or new construction (commencing with DDG–113).

To mitigate the impact of the BMD mission, Navy has implemented an operating concept for AEGIS ship's conducting BMD missions that features a graduated readiness posture that allows BMD-capable surface combatants to be on an operational tether and available for other tasking when not directly involved in active BMD operations. Surface combatants operating in support of a BMD mission do not lose the capability to conduct other missions; however, specific mission effectiveness may be affected by ships' position and/or application of ship resources to those missions.

Navy analysis of evolving BMD and other mission area requirements indicates that the current Navy BMD upgrade plan will support BMD Global Force Management requirements while simultaneously fulfilling Navy's requirements in other mission areas.

Mr. TURNER. Admiral Roughead, according to a Defense News article in June 2010, "U.S. Aegis Radars' Readiness Plunges," the Aegis radar systems are "in their worst shape ever, raising questions about the surface fleet's ability to take on its high-profile new mission next year defending Europe from ballistic missiles." Discuss any Aegis readiness concerns you may have and how it might impact the Navy's ability to meet missile defense mission requirements.

Admiral ROUGHEAD. I am confident in Navy's ability to meet our missile defense requirements. While several reports and studies completed last year, as part of Navy's ongoing self-assessment and continuous improvement initiative, did indicate the beginning of some declining trends in various elements of Aegis readiness, the overall readiness of the Aegis Fleet remains high. A product of their ongoing success, the elevated standards employed in measuring Aegis readiness can lead to the misperception that these ships are having difficulty meeting their assigned missions—nothing could be further from the truth. In light of Aegis' role in ballistic missile defense, a study was initiated to integrate previous study efforts and provide a holistic assessment of Aegis readiness in terms of interoperability, maintainability, test & evaluation, manpower, training, and current development efforts. As has always been the case, Navy will continue improving Aegis readiness in a targeted, affordable manner to ensure that Aegis warships remain ready for tasking. I remain confident in the ability of Aegis ships' to meet warfighter requirements today and in the future.

Mr. TURNER. Admiral Roughead, in his January 6th efficiencies announcement Secretary Gates stated that "analysis by the Navy and Marine Corps" suggests that the most plausible scenarios requiring power projection from the sea could be handled through a mix of existing air and sea systems employed in new ways along with new vehicles—scenarios that do not require the exquisite features of the EFV."

Can you describe the analytical work Secretary Gates is referring to in his statement?

Admiral ROUGHEAD. The Navy and Marine Corps have conducted campaign analysis and war gaming examining scenarios requiring power projection from the sea using the Expeditionary Fighting Vehicle (EFV) as well as the legacy Amphibious Assault Vehicle (AAV) and our current and projected suite of air assault connectors. The analysis used official threat assessments and modeled battlespace preparation in order to define threats to landings.

Using fielded and planned capabilities to conduct pre-assault battlespace preparation, the Navy assessed that U.S. weapons and sensors will allow amphibious ships to operate at 12 nm from the coast with acceptable risk against any residual threats. This analysis suggests a 25 nm assault range of the EFV may not be required.

Mr. TURNER. Admiral Roughead, what specific changes in nuclear deterrence requirements or change in nuclear strategy have allowed the Navy to further reduce SSBN missile tubes from 20, as specified in May 2010 by the Secretary of Defense, to 16 missile tubes?

Admiral ROUGHEAD. There have been no changes in nuclear deterrence requirements or nuclear strategy following the submission of the New START Treaty implementation plan (NDAA FY10 Section 1251 Report) in May 2010. Coincident with the submission of the New START implementation plan, the Navy conducted an in-depth, extensive review of the capability requirements for the OHIO Replacement SSBN in parallel with development of the Service Cost Position required at Milestone A. This analysis concluded that a force of 12 OHIO Replacement SSBNs with 16 missile tubes can carry all the sea-based warheads and maintain sufficient excess capacity for the future. It is the Navy's judgment that the nation's sea-based strategic requirements can be met with a force of 12 OHIO Replacement SSBNs with 16 tubes and that a 20 tube variant would inappropriately sacrifice other conventional shipbuilding requirements for unneeded excess capacity. OSD, Joint Staff and U.S. Strategic Command concur with the Navy's position on this military requirement.

Mr. TURNER. Admiral Roughead, the SSBN(X) is expected to have a service life of over 60 years. The threat and strategic environment can change significantly over the course of 60 years. What planning assumptions—both nuclear and nonnuclear—are being made? How do they affect the number of missile tubes per hull and what sensitivity analysis has been done?

Admiral ROUGHEAD. The Navy plans to build 12 OHIO Replacement SSBNs to replace the 14 OHIO SSBNs currently in the Fleet. The concept of operations for the OHIO Replacement SSBN is similar to the current OHIO Class SSBN in that it will employ in-port and at-sea rotational patrols, using a two-crew concept, to meet U.S. Strategic Command at-sea presence and force generation requirements. A force of 12 OHIO Replacement SSBNs will maintain the same presence level as 14 OHIO SSBNs due to elimination of nuclear refueling and maintenance items during the mid-life maintenance period.

The survivability of individual SSBNs and the SSBN force as a whole is a key attribute to meeting the requirement for a survivable assured response. The current OHIO class with the TRIDENT II D5 Life Extension (LE) missile is the nation's most survivable leg of the US nuclear deterrent force and will serve in strategic service from 1982 to 2040. To ensure the SSBN force remains survivable, the SSBN Security Program in collaboration with the Office of Naval Intelligence and Johns Hopkins Applied Physics Laboratory has, over the past 40 years, anticipated potential threats and developed appropriate countermeasures to enhance survivability and protect SSBNs. Consistent with direction in the 2010 Nuclear Posture Review (NPR) and FY12–16 Defense Planning and Programmatic Guidance, the SSBN Security Program is an integral part of the development of the key survivability characteristics for the OHIO Replacement SSBN. This process included an extensive review of current and future threats as well as potential submarine vulnerabilities. The resultant acoustic and non acoustic performance of the OHIO Replacement SSBN will deter an adversary from attempting to hold a platform or the SSBN force at risk on patrol.

The Navy conducted an in-depth, extensive review of the capability requirements for the OHIO Replacement SSBN in parallel with development of the Service Cost Position required at Milestone A. This analysis concluded that even if the number of operationally deployed warheads assigned to the sea-based leg of the Triad remains constant after the New START treaty expires (an assumption that does not reflect the 2010 NPR recommendation for decreasing reliance on nuclear weapons), a force of 12 OHIO Replacement SSBNs with 16 missile tubes can carry all the sea-based warheads and maintain excess capacity in the event of a fundamental deterio-

ration of the security environment or as a hedge against technical challenges within one or more of the other legs of the triad.

Mr. TURNER. Admiral Roughead, the committee understands the Navy has completed an updated cost estimate for SSBN(X). What is the new cost estimate for the average follow-on unit end cost, what is the margin of error in this cost estimate, and what is the estimate for the cost savings attributable to the reduction from 20 to 16 missile tubes?

Admiral ROUGHEAD. The OHIO Replacement Milestone (MS) A Service Cost Position for the average follow-ship end cost (hulls 2–12) in CY10$ is $5.6B (using Navy inflation/deflation indices, excluding outfitting and post delivery). Additionally, the MS A Acquisition Decision Memorandum assigned an affordability target for the average follow-ship end cost (hulls 2–12, using Navy inflation/deflation indices, excluding outfitting and post delivery) of $4.9B in CY10$.

The cost savings associated with a 16-tube vs. a 20-tube OHIO Replacement SSBN design is expected to be approximately $0.2B per ship (CY10$; average follow-ship hulls 2–12), which when combined with a reduction of approximately $0.5B of non-recurring engineering costs for the first ship plus lead ship construction, result in a total class acquisition cost savings of approximately $3B (CY10$). These cost savings are in addition to those associated with decreased missile inventory requirements for the 16 tube variant.

Mr. TURNER. Admiral Roughead, what would be the costs to construct additional SSBN(X)-class submarines if it is determined in the future that the U.S. has insufficient capacity to meet its nuclear strategy and mission requirements? For example, what would the cost of one additional submarine be in the 2035 timeframe?

Admiral ROUGHEAD. The OHIO Replacement Program has a Milestone (MS) A Service Cost Position of $5.6B CY10 and an affordability target of $4.9B CY10 for average follow-ship end cost (hulls 2–12, including Navy inflation/deflation indices, excluding outfitting and post delivery). Assuming the cost target is achieved, an additional hull awarded at the end of the current planned production line would be expected to cost less than $4.9B (CY10$). A force of 12 OHIO Replacement SSBNs meets U. S. Strategic Command's at-sea presence requirements.

Mr. TURNER. General Amos, what effect will a reduction of 15,300 Marines have on individual dwell time ratios? Do you expect to meet the 1 to 3 dwell time goal?

General AMOS. Our overall objective is a 1:3 deployment-to-dwell ratio for the Marine Corps Active Component and a 1:5 deployment-to-dwell ratio for the Reserve Component in a post-Operation ENDURING FREEDOM (OEF) environment. Currently, my stated goal, in concert with the Office of the Secretary of Defense, is for deployment-to-dwell ratios in support of combat operations in Afghanistan to be 1:2 for the Marine Corps Active Component and 1:4 for the Reserve Component.

Based on the current USMC force level in support of OEF and other global force requirements, the Marine Corps could achieve a 1:2 deployment-to-dwell ratio across the Service within 18–24 months following the scheduled OEF draw-down. The Marine Corps deployment-to-dwell ratio will continue to improve in a post-OEF environment and reach the stated goals of 1:3/1:5 as we balance requirements in support of the Geographic Combatant Commanders and the President's draw-down plan for Afghanistan.

Establishing a sustainable deployment-to-dwell ratio is based upon forces available and the need to meet our global operational demands. We will closely monitor the pace of reduction in our end strength to best support Geographical Combatant Commander requirements while also fostering the best health and resiliency of our Total Force.

Mr. TURNER. General Amos, in his January 6th efficiencies announcement Secretary Gates stated that "analysis by the Navy and Marine Corps" suggests that the most plausible scenarios requiring power projection from the sea could be handled through a mix of existing air and sea systems employed in new ways along with new vehicles—scenarios that do not require the exquisite features of the EFV." Can you describe the analytical work Secretary Gates is referring to in his statement?

General AMOS. The Navy and Marine Corps conducted campaign analysis[1] and a war game examining scenarios[2] requiring power projection from the sea using the Expeditionary Fighting Vehicle (EFV) as well as the legacy Amphibious Assault Vehicle (AAV) and our current and projected suite of rotary and tilt wing aircraft. The

[1] 2008—Naval Campaign Analysis (2024) sponsored by OPNAV N816 and Marine Corps Combat Development Center (MCCDC) defines battlespace preparation completed by the initial landing and residual threat. The Naval Campaign is based on the 19 Sep 2007 MCO 1 Swiftly Defeat the Efforts 2014 Multi-Service Force Deployment.

[2] 2009—The Simulation Analysis Center of OSD's Cost Assessment and Program Evaluation Directorate led the MCO–1 Swiftly Defeat the Efforts 2014 Analytic Baseline.

analysis used official threat assessments and modeled battle-space preparation in order to define threats to amphibious landings.

The analysis assessed concurrent and separate landings from 25 nm off a coastline with one force using EFV and another force using AAVs delivered by Landing Craft Air Cushion (LCAC). The analysis did not specifically compare EFV and AAV in that the forces landed used different tactics, in different sites and facing different opposition. While both missions were accomplished, suggesting that the EFV may not be required, higher risk was incurred employing the LCAC/AAV as a result of a slower build-up of combat power ashore. In addition, the LCAC/AAVs required using vertical assaults to secure landing zones, losing the flexibility to maneuver deep inland.

In February 2006, a systems threat assessment was conducted by Marine Corps Intelligence Activity and the Defense Intelligence Agency which supported a minimum distance of 10.8 nm from shore if the right capabilities were in place. Since that time, the Navy has assessed that employing planned U.S. capabilities in pre-assault operations will allow amphibious ships to operate at 12 nm from the coast with acceptable risk against any residual threats. This analysis suggests the 25 nm assault range of the EFV may no longer be required in light of the current capabilities.

In March 2010, the Office of Program Appraisal "Assuring Operational Access" Wargame conducted three separate and distinct excursions using the former EFV program of record, the current capability set (i.e. AAV) and alternative capabilities (i.e. a notional Marine Expeditionary Maneuver Vehicle, and an experimental Ultra Heavy-lift Amphibious Connector).

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## QUESTIONS SUBMITTED BY MR. FRANKS

Mr. FRANKS. 1) Secretary Mabus, it is documented that the Aegis system has experienced setbacks, including failed tests and alleged "false positives". Furthermore, the radar system has also been criticized as being subpar and unable to meet operational expectations. The Aegis missile defense system is a vital part of our missile defense. What concerns do you have regarding Aegis operational readiness in light of its crucial role in our missile defense, and what is being done to address those concerns? Furthermore, can we rely on the Aegis system today if an attack were to occur during this hearing?

Secretary MABUS. The Aegis Ballistic Missile Defense (BMD) system is the most operationally ready, flexible, and effective regional missile defense system in the world and is in great demand by Combatant Commanders. Navy and Missile Defense Agency (MDA) have achieved an unprecedented level of success with the Aegis BMD system and the SM–3 Block IA missile, accomplishing successful intercepts of ballistic targets in 18 of 21 exo-atmospheric tests. The system successfully intercepted and destroyed a de-orbiting satellite in February 2008. The system has also successfully intercepted 3 of 3 endo-atmospheric Short Range Ballistic targets in the terminal phase of flight using the SM–2 Block IV missile. In October 2008, Navy's Operational Test and Evaluation Force declared, "The Block 4 Aegis, employing the Aegis 3.6 Combat System is operationally effective in the negation of Medium Range Ballistic Missiles and Short Range Ballistic Missiles and provides effective tracking of Long Range Ballistic Missiles for cueing of other Aegis, Aegis BMD, and DoD systems."

Navy is committed to maintaining the highest level of readiness for all Aegis BMD ships. Each ship undergoes extensive system evaluations prior to deployment knowing they may be tasked with BMD missions. Due to the high reliability required of the SPY radar while performing the BMD mission, selected critical spare parts have been augmented for these ships to ensure an even higher level of operational readiness. All ships currently employed on BMD missions are fully capable of providing the designed level of protection against ballistic missile threats.

Mr. FRANKS. 2. Secretary Mabus, Aegis ships play large and various roles for Navy missions. One vulnerability that results from this multi-role is that the Aegis ship cannot fully defend itself during missile defense mode. Therefore, another Aegis ship is required to defend the Aegis ship in missile defense mode. Given the limited supply of Aegis ships, is this the best practice, or is there a better strategy to protect the Aegis ship in missile defense mode. How is the Navy addressing this situation of the limited Aegis fleet, and how can Congress help to make sure that our limited supply of Aegis ships are used in the best way possible?

Secretary MABUS. From its inception, Aegis BMD was designed with three main objectives in mind. The ship would be 1) effective in conducting its assigned BMD mission; 2) able to survive air, surface, and subsurface attacks and; 3) be cost effec-

tive. All Aegis BMD capable ships have the ability to defend themselves against both traditional and advanced air and cruise missile threats while also executing the BMD mission. This capability was initiated by Navy in 2003 and developed by Missile Defense Agency (MDA). Simultaneous BMD and Anti-Air Warfare engagements were demonstrated by USS LAKE ERIE on June 22, 2006 and this capability is the current BMD fleet standard. It is proven; it remains ready.

An additional six Aegis BMD upgrades and installations were included in the President's Budget 2012 for a total of 41 Aegis BMD ships by 2016. The Navy continues to work with MDA to ensure that further BMD upgrades will improve the multi-mission capabilities of our BMD ships. Finally, the Navy utilizes the Global Force Management process and coordinates closely with the Combatant Commanders to ensure the best possible use of our Aegis multi-mission ships.

Mr. FRANKS. 3) Last year, the Navy testified that sea-based missile defense requirements for surface combatants (cruisers and destroyers) were still in the review. Has there been any progress in determining sea-based missile defense requirements as it relates to Navy surface combatant requirements, and if so, can you describe what the forward-based requirements are for Navy surface combatants and what that means to the battle-force inventory requirements?

Secretary MABUS. Each Geographic Combatant Commander (GCC) determines its own requirements for surface combatants in each mission area. These requirements are adjudicated through the Department of Defense's Global Force Management process, which allocates the available Aegis ships. The Navy currently has sufficient capacity to meet the most critical demands for multi-mission surface combatants; however, Navy does not have the capacity to meet GCC demands for Ballistic Missile Defense (BMD) surface combatants without breaking established deployment length redlines. Based on threat analysis and steady state presence indications from the GCCs, the Navy, working with Missile Defense Agency, have concluded that the demand for BMD-capable Aegis ships will outpace capacity through approximately 2018, assuming standard six month deployment lengths.

Sea-based BMD requirements in the United States Central Command and European Command are sourced through the rotation of Aegis ships home-ported in the United States. The Pacific Command's sea-based BMD requirements are sourced primarily from the Forward Deployed Naval Force in Japan.

As the demand for these ships increase, either the inventory of Aegis BMD-capable ships or deployment lengths must increase. Accordingly, Navy, in conjunction with MDA, has established a plan to increase the total number of Aegis BMD-capable ships across the FYDP from 21 to 41, of which 27 will be deployable in FY16. This plan includes the increase in capacity and capability of surface combatants either through the installation of the Aegis BMD 3.6.1/4.0.1 suite or Aegis Modernization program, as well as through new construction (commencing with DDG 113). The addition of BMD capabilities to the Aegis Fleet provides improved operational flexibility to GCC and Fleet Commanders to fulfill their various missions.

Mr. FRANKS. 1) Admiral Roughead, it is documented that the Aegis system has experienced setbacks, including failed tests and alleged "false positives". Furthermore, the radar system has also been criticized as being subpar and unable to meet operational expectations. The Aegis missile defense system is a vital part of our missile defense. What concerns do you have regarding Aegis operational readiness in light of its crucial role in our missile defense, and what is being done to address those concerns? Furthermore, can we rely on the Aegis system today if an attack were to occur during this hearing?

Admiral ROUGHEAD. The Aegis Ballistic Missile Defense (BMD) system is the most proven, operationally ready, flexible, and effective regional missile defense system in the world. Navy is committed to maintaining the highest level of readiness for all Aegis BMD ships and we put each ship through extensive system evaluations prior to deployment, knowing they may be tasked with BMD missions. All ships currently employed on BMD missions are fully capable of providing the designed level of protection against ballistic missile threats. I am confident in relying on this system today to defend our Fleet, our Allies and partners, and our national interests against the threat of ballistic missiles.

Mr. FRANKS. 2) Admiral Roughead, Aegis ships play large and various roles for Navy missions. One vulnerability that results from this multi-role is that the Aegis ship cannot fully defend itself during missile defense mode. Therefore, another Aegis ship is required to defend the Aegis ship in missile defense mode. Given the limited supply of Aegis ships, is this the best practice, or is there a better strategy to protect the Aegis ship in missile defense mode. How is the Navy addressing this situation of the limited Aegis fleet, and how can Congress help to make sure that our limited supply of Aegis ships are used in the best way possible?

Admiral ROUGHEAD. All Aegis BMD capable ships have the ability to defend themselves against both traditional and advanced air and cruise missile threats while also executing the BMD mission. Simultaneous BMD and Anti-Air Warfare engagements were demonstrated by USS LAKE ERIE on June 22, 2006, and this capability is the current BMD Fleet standard. It is proven and remains ready today.

The Navy utilizes the Global Force Management process and coordinates closely with Combatant Commanders to ensure the best possible use of our Aegis multi-mission ships. To meet increasing demand for these ships, Navy is growing its Aegis Fleet through modernization of our existing Fleet and the restart of DDG–51 procurement. To meet increasing demand for our Aegis ships, our PB 2012 budget requests funding for one DDG–51 restart ship (DDG 116) in FY 2012 and an additional six Aegis BMD upgrades and installations to increase the Navy's Aegis BMD ships from 21 to 41 ships by 2016. The Navy continues to work with MDA to ensure that future BMD upgrades will further improve the multi-mission capabilities of our BMD ships.

Mr. FRANKS. 3) Last year, the Navy testified that sea-based missile defense requirements for surface combatants (cruisers and destroyers) were still in the review. Has there been any progress in determining sea-based missile defense requirements as it relates to Navy surface combatant requirements, and if so, can you describe what the forward-based requirements are for Navy surface combatants and what that means to the battle-force inventory requirements?

Admiral ROUGHEAD. The Navy currently has sufficient capacity to meet the most critical demands for multi-mission surface combatants; however, Navy does not have the capacity to meet expected future GCC demands for Ballistic Missile Defense (BMD) surface combatants without breaking established deployment length redlines. Based on threat analysis and steady state presence indications from the Geographic Combatant Commander the Navy, working with Missile Defense Agency, has concluded that the demand for BMD-capable Aegis ships will outpace capacity through approximately 2018, assuming standard six month deployment lengths.

Sea-based BMD requirements in the United States Central Command and European Command are sourced through the rotation of Aegis ships home-ported in the United States. The Pacific Command's sea-based BMD requirements are sourced primarily from the Forward Deployed Naval Force in Japan.

With the President's decision to pursue a phased adaptive approach (PAA) for the missile defense of Europe, the Navy has been working within the Department of Defense to identify the most efficient method to provide the required afloat BMD capability. The establishment of a forward deployed force in Europe is one of the options being assessed, however, no final decision has been made.

As the demand for these ships increase, either the inventory of Aegis BMD-capable ships or deployment lengths must increase. Accordingly, Navy, in conjunction with MDA, has established a plan to increase the total number of Aegis BMD-capable ships across the FYDP from 21 to 41, of which 27 will be deployable in FY16. This plan includes the increase in capacity and capability of surface combatants either through the installation of the Aegis BMD 3.6.1/4.0.1 suite or Aegis Modernization program, as well as through new construction (commencing with DDG 113). The addition of BMD capabilities to the Aegis Fleet provides improved operational flexibility to GCC and Fleet Commanders to fulfill their various missions.

Mr. FRANKS. 4) Admiral Roughead, with fewer different fighter/attack aircraft today, and even fewer in the future, do you believe that the Navy is taking significant risks by not including a program to develop and procure a competitive, alternate engine for the F–35?

Admiral ROUGHEAD. No. The Navy does not have a requirement for an alternate engine; indeed, we would only take one model to sea. The additional costs of an alternate engine threaten our ability to fund currently planned aircraft procurement quantities, which would exacerbate our anticipated decrease in strike fighter capacity throughout the remainder of this decade.

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## QUESTIONS SUBMITTED BY MR. CONAWAY

Mr. CONAWAY. From your perspective as the Secretary of the Navy, can you describe to the committee the strategic importance of the F–35 program to the future of Naval and Marine Corps fighter aviation?

Secretary MABUS. The F–35B Short Take-Off and Vertical Landing (STOVL) and F–35C Carrier Variant (CV) of the Joint Strike Fighter are essential to our long-term national security as the future backbone of U.S. Navy and Marine Aviation combat air-superiority. I believe there is no program, or combination of programs, that will more affordably provide the Combatant Commanders these warfighting ca-

pabilities they will need to protect the Global interests of the Nation. The integration of F–35 aircraft will provide the dominant, multi-role, fifth-generation capabilities needed across the full spectrum of combat operations to deter potential adversaries and enable future Naval and Marine Aviation power projection.

Mr. CONAWAY. 1. In the Secretary of Defense's recent restructuring of the F–35 program, the F–35B was put on a two year probation due to development problems.

- If the F–35B variant does not show significant progress by FY13 and is cancelled, what are the USMC's alternatives to fulfill the requirements expected to be filled by the F–35B?

Admiral ROUGHEAD. We are confident that the F–35B program is on track and that the restructuring effort will be successful. However, in the event that the F–35B does not show significant progress and is cancelled, then the question of potential alternatives for USMC aviation requirements would more appropriately be addressed by the Commandant of the Marine Corps.

Mr. CONAWAY. 2. In January, Secretary Gates announced a reduction of 124 F–35s over the FYDP. He further stated that the savings from this reduction would be used to fund $4.6 billion to extend the development period and add additional flight tests; as well as using $4 billion for additional purposes, such as purchasing more F/A–18s for the Navy.

- How does this decision impact you?
- How does this change in the fighter mix effect the Navy?

Admiral ROUGHEAD. The Secretary of Defense's changes to the Programs of Record (POR) for the F–35B/C and F/A–18E/F in December 2010 impacted the Navy in the following ways:

- Compared to PB 2011, the DoN's procurement of F–35B/C aircraft was decreased by 60 in the FYDP, and the F/A–18E/F procurement was increased by 41.
- Procurement of 41 additional F/A–18E/F extended the last year of procurement for the Super Hornets from FY 2013 to FY 2014.
- By adding 41 Super Hornets and extending the life of 150 F/A–18 A–D aircraft to 10,000 flight hours, our strike fighter shortfall was reduced from about 100 aircraft to a peak of 65 aircraft, projected in 2018. As I testified, this aircraft shortfall is manageable.

Navy's PB 2012 budget submission, with the change in strike fighter mix, reflects the optimum balance of procuring new F/A–18E/F aircraft, extending the service life of 150 existing legacy Hornets, and procuring F–35B/Cs. This balanced approach will address the Department's need for tactical aircraft to meet requirements.

Mr. CONAWAY. Are you confident that the development challenges currently faced by the STOVL variant can be solved successfully?

General AMOS. The current Short Take-Off and Vertical Landing (STOVL) technical challenges are typical of major acquisition programs during this stage of development. We do not regard any of these challenges as insurmountable. We already have incorporated corrective actions into production aircraft and identified the modifications needed in the aircraft nearing delivery; and we are proactively finalizing changes for future incorporation.

I am personally engaged with the Joint Strike Fighter Joint Program Office and prime contractors on a monthly basis. We collaborate in resolving these challenges by identifying the most efficient and cost effective processes through which we will implement long term engineering solutions. Our overarching intent is to meet our collective requirements and to deliver higher quality aircraft in a responsible timeframe. Ultimately, this will equip the warfighter with more sustainable and more capable platforms.

On a related note, STOVL flight tests began to turn around this past January, and are experiencing unprecedented success this calendar year. Test point collection and sortie rates achieved from January to March this year have made up for the deficits of 2010 and continue to perform well ahead of plan to date. We are on track for ship trials this fall and commencement of training early next year. I am confident the F–35B will surpass expectations during this period of focused scrutiny.

Mr. CONAWAY. How important is the F–35B to the future of Marine Corps fighter aviation?

General AMOS. The F–35B is the future of Marine Corps fighter aviation. We intend to replace three aging platforms—the AV–8B, the EA–6B and the FA–18—with a single 5th generation platform—the F–35 Lightning II. Our F–35B Short Takeoff and Vertical Landing (STOVL) variant will become our utility tactical aviation (TACAIR) platform well into the middle of this century. The F–35C carrier variant

will serve as our TACAIR Integration aircraft for service with the Navy on their carriers.

The F–35B is the tactical aircraft our Marine Air Ground Task Force requires to remain relevant in today's world with tomorrow's threats. This STOVL variant Joint Strike Fighter meets the expeditionary expectation that our Commander-in-Chief, our Combatant Commanders and the American people demand of the Marine Corps. STOVL aviation capabilities have deep roots in the Marine Corps. Current operations in Afghanistan and Libya and our experience in Iraq reinforce the critical role of amphibious-based and expeditionary STOVL aircraft.

Our requirement is not complex. We require 5th generation stealth, sensors, interoperability and connectivity supporting our forward-deployed Marines. The F–35B will source the MAGTF with an agile, cross-functional tactical aircraft that will provide forward based flexible, scalable and responsive capabilities to our ground forces. F–35Bs transition from ship-to-shore, operating seamlessly from 850ft decks of amphibious ships to short-field, expeditionary operating bases. This proximity provides our ground forces immediate and integrated access to tactical aviation—a core tenet of Marine air operations. F–35B postures Marine TACAIR with the basing flexibility that MAGTF commanders require to execute expeditionary operations. Recent Joint and Coalition operations highlight the flexibility that embarked Marine TACAIR provides the nation and, in the future, the Joint Force will leverage the expeditionary, responsive and game-changing capabilities that the Marine STOVL F–35B brings to the fight.

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## QUESTIONS SUBMITTED BY MR. WITTMAN

Mr. WITTMAN. 1. Are we investing enough in our equipment to sustain our position as the greatest Naval Force throughout the 21st Century? As you all know our Navy and Marine Corps have conducted cyclic combat operations now for 10 years at a pace that we have not seen in the history of our fleet. Ships and aircraft are constantly deploying and critical life cycle maintenance is being affected due to the high operational tempo. Knowing there is deferred maintenance and a backlog of lifecycle management for our fleet, how is the past 10 years going to affect the service life of our ships, submarines, and aircraft?

Admiral ROUGHEAD. Keeping our ships, submarines and aircraft in satisfactory material condition is essential both to supporting current operations and ensuring that we are able to get the projected service life from these valuable national assets. It has been central to the United States Navy's mission to perform sufficient levels of maintenance in each of these areas to ensure our fleet is maintained and ready when called upon. Certainly the last decade of high tempo operations have been a challenge and there have been areas where we were not able to do all of the maintenance we desired. Based on the rapidly improving surface ship engineered maintenance requirement and the established aircraft, submarine, and aircraft carrier engineered maintenance requirements, the FY12 budget accurately reflects the maintenance necessary to ensure ships, submarines, and aircraft will reach their expected service life.

Mr. WITTMAN. 2. What is the affect going to be on the service life of an F/A–18 Super Hornet that is above its planned airframe and engine flight hours, or the DDG that has deployed so many times to support overseas contingency operations, that critical hull, mechanical, electrical, and weapons systems maintenance is neglected and pushed to the right? What do you believe the long term affect is to our overall material readiness? Furthermore, do you feel that we are allocating the appropriate amount of money to focus on maintenance, modernization, and modification?

Admiral ROUGHEAD. Keeping our ships, submarines and aircraft in satisfactory material condition is essential to supporting current operations and ensuring that we are able to get the projected service life from these valuable national assets. It has been central to the United States Navy's mission to perform sufficient levels of maintenance in each of these areas to ensure our fleet is maintained and ready when called upon. Certainly the last decade of high tempo operations have been a challenge and there have been areas where we were not able to do all of the maintenance we desired. Based on the rapidly improving surface ship engineered maintenance requirement and the established aircraft, submarine, and aircraft carrier engineered maintenance requirements, the FY12 budget accurately reflects the resources necessary to maintain, modernize and modify our ships, submarines, and aircraft to reach their expected service life.

Mr. WITTMAN. 3. Do you feel that that $15.9 billion is enough to sustain a 30 year shipbuilding plan with a goal of maintaining 313 battle force ships? We have an

aging Oliver Hazard Perry Class that accounts for 29 frigates and over 40 submarines that are either past their halfway point of commissioned service (6 that are at or over 30 years of service) in the Los Angeles Class Submarine. Is the plan for 313 battle force ships a realistic number and do we have the ability to reach this number when taking in to account the planned budget to reach that goal?

Admiral ROUGHEAD. Yes. The requirement of 313 ships remains the floor and the Navy is committed to building to that floor. The funding in place supports the Navy plan of reaching that level in the next ten years.

Mr. WITTMAN. Can you please talk about the 2 year probationary period that has been placed on the F–35B and how that is going to affect the Marine Corps Strike Fighter shortfall? If the F–35B struggles through test and evaluation, is there a backup plan to mitigate the risk of the F–35B being delayed in delivery to the USMC (will the USMC SLEP the AV–8 Harrier to sustain a STOVL capability or possibly invest in the F/A–18 E/F Super Hornet)?

General AMOS. The Secretary of Defense's decision to increase oversight and decrease early production of the F–35B was prudent. The primary contractor did not achieve fundamental program milestones on time, and the program lacked credible and tangible measurements for progress. I believe that the Secretary's move further serves to emphasize the need to procure a fully capable aircraft that judiciously maximizes value to taxpayer dollars.

I believe the F–35B aircraft will succeed, but I also share the Department's concerns. That is why I am personally involved in tracking progress of this aircraft. The data that I evaluate on a daily basis suggests that our Short Take-Off and Vertical Landing (STOVL) test and evaluation is on track and exceeding expectations. In the first three months of this year, our test point collection overcame last year's shortfall. The test aircraft are flying more frequently, are collecting more test points per flight and are surpassing planning measures in a sustainable way. Two of our aircraft are currently preparing for the first ship trial period later this year. That will be an important milestone in demonstrating that our 5th generation tactical aircraft is capable of integrating into our Marine Air Ground Task Force aboard the amphibious ships of the Navy's Amphibious Ready Group.

We agree that reduced F–35 production rates will slow transition. However, we also believe we can continue to successfully manage our inventory of legacy aircraft to meet operational commitments. We have a variety of service life management initiatives for legacy F/A–18 aircraft. Our AV–8Bs do not require service life extensions, but we plan to reallocate aircraft to manage attrition. Our recent TACAIR Integration agreement with the Navy requires the Marine Corps to procure 80 F–35C variants which will afford us maneuvering room following the F–35B reductions in the near term. Of these 80 aircraft, we will procure 35 across the current Future Years Defense Program and stand up three Marine F–35C squadrons by FY18. These measures allow us to actively manage our TACAIR inventory until we gain the efficiencies of an all F–35 force—340 F–35B and 80 F–35C.

The Marine Corps has no intention to procure the F/A–18 E/F Super Hornet. The Super Hornet lacks a 5th generation capability that our MAGTF requires across the Range of Military Operations now and in future decades. With its expected service life and necessary survivability upgrades, this platform does not meet our vision for TACAIR recapitalization.

Mr. WITTMAN. Has significant testing been done with regard to the F–35B STOVL taking off and landing from the deck of an amphibious ship yet? If not, when do you predict that testing will take place? Do we know if the thrust and heat produced from the engine of the F–35B will have a negative effect on the steel flight deck and I-beam support of the deck . . . will the deck buckle or become unstable over time?

General AMOS. The F–35B test program has made substantial progress this year and is on track for the first Developmental Test Ship Trials scheduled in October through November 2011. During this trial, we will fully assess the environmental effects of the engine. After three years of focused analysis and preliminary tests in preparation for this event, we expect no significant damage or degradation will occur. The USS WASP will serve as the amphibious ship for this test and is being instrumented to assess the flight deck, substructure, and ancillary deck systems. The Marine Corps along with NAVSEA, NAVAIR, and the Joint Strike Fighter Joint Program Office has collaborated extensively to ensure F–35B operations aboard L Class amphibious ships are fully tested and representative of required standards.

## QUESTION SUBMITTED BY MR. HUNTER

Mr. HUNTER. The events in the Middle East and Northern Africa continue to jeopardize our ability to operate freely on land and from those locations in the region where U.S. forces are based. Given this uncertainty in the region, it seems more important that our amphibious assault force is fully operational to address any threat throughout the world. However, the amphibious ship requirement of 33 is less than the 38 requested by the Marine Corps. In fact, we are currently operating below the 33 ship requirement and won't reach that level until 2017.

Given what is currently taking place in the Middle East and Africa, why do we find it acceptable to operate at the bare minimum and below with our amphibious forces? What actions are the Marine Corps taking with the Navy to improve the operational effectiveness of our amphibious forces?

General AMOS. The Marine Corps assesses that the future security environment will require a minimum of three forward deployed Amphibious Ready Groups/Marine Expeditionary Units (ARG/MEU). To meet this operational requirement, we have planned for an ARG/MEU presence in the PACOM, CENTCOM, and EUCOM/AFRICOM Areas of Operations. This necessity requires 38 amphibious ships to meet the Geographic Combatant Commander day-to-day partnering and engagement requirements as well as to be able to support the assault echelon of two Marine Expeditionary Brigades for a theater joint forcible entry operation. However, we have accepted risk at a minimum of 33 amphibious ships in our inventory. Due to decommissioning/commission and maintenance cycles, there are currently 29 ships operationally available in the amphibious fleet. Based on projected fabrication cycles, we anticipate the amphibious ship inventory will rise again to 33 vessels in FY17.

We are utilizing our Marine Corps Service Campaign Plan as a roadmap to strengthen and maintain our core competencies and to ensure we remain America's Expeditionary Force in Readiness. Our amphibious core competency figures prominently in our Service Campaign Plan, and as a result we have undertaken an array of exercise planning in this critical skill area. We will soon be conducting a Marine Air Ground Task Force Large Scale Exercise that will refine our capability to amphibious power projection and sustained operations ashore in a joint and interagency environment. In late 2010, we conducted Exercise Bold Alligator 2011, the first large-scale amphibious training exercise with the Navy on the East Coast in almost 10 years. This synthetic training event practiced planning for forcible entry operations against conventional and asymmetric threats and a large-scale non-combatant evacuation. We will take lessons learned from this exercise and build upon them for the next iteration of this important exercise with the U.S. Navy scheduled in the coming year.

We are presently implementing a Naval Board that will provide a regular forum for senior-leader exploration of strategy, policy, naval concepts and doctrine, concepts of operation, technology, and resource issues to develop unified naval guidance for requirements. The Chief of Naval Operations (CNO) and Commandant of the Marine Corps (CMC) will approve recommendations from the Naval Board. The Naval Board will consider issues selected by the CNO or CMC as well as issues raised by the commanders of the Unified Combatant Commands, Navy and Marine Corps component commanders and their respective Fleet and Marine expeditionary force commanders, and through other venues as appropriate. Although the Board will initially focus on improving coordination of capability development processes, its considerations may include a range of other issues with Navy-Marine Corps implications such as integration of strategic planning and Service campaign planning; prioritizing research and development efforts; development of naval concepts; training and education programs; wargame design; and resource investment recommendations.

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## QUESTIONS SUBMITTED BY MR. COFFMAN

Mr. COFFMAN. 1.) Secretary Mabus, based on the National Security Strategy's demand for theater security cooperation and engagement, I am interested in our nation's ability to meet the requirement for Marine Expeditionary Units/Amphibious Readiness Groups (MEUs/ARGs). What was the Combatant Commander's demand for Marine Expeditionary Units/Amphibious Readiness Groups (MEUs/ARGs) during the last five years? How much of this demand was satisfied?

Secretary MABUS. Demand by Combatant Commanders for naval forces has remained high during the last five years. The inherent flexibility and capabilities of Amphibious/Expeditionary forces makes them particularly desirable by COCOMs.

Navy's current force structure can provide about five MEU/ARG deployments annually. While not able to meet the cumulative annual global COCOM MEU/ARG de-

mand, Navy is meeting all adjudicated demands through the Global Force Management process, based on prioritizes requirements defined by the Guidance for the Employment of the Force.

Mr. COFFMAN. 2.) Secretary Mabus, I applaud the efforts you have taken to identify efficiencies in the Department. I believe the reductions you have made to redundant staffs and large headquarters elements are a good step. Are there additional efficiencies to be had in other headquarters and staff organizations within the Department?

Secretary MABUS. The Department's efficiencies focused on three overarching efforts: Buy Smarter, Streamline Organizations and Operations, and Reduce Fossil Energy Consumption. More specifically, by Streamlining Our Organizations and Operations (-$15.4B), we looked hard at ways to save money by eliminating duplicative staffs, streamlining all staffs, reducing contractor support, and looking at our personnel policies and practices. We focused on building a more efficient operation by reducing infrastructure overhead, and consolidating headquarters activities.

Examples include:

- Reduce ashore manpower, reassign personnel to operational ships and air units; adjust special pays/advancements; and eliminate duplicative functions (-$4.7B).
- Disestablish Second Fleet headquarters; disestablish/reorganize staffs for submarine, patrol aircraft, reserve aircraft, carrier staffs, and destroyer squadrons; and eliminate one carrier strike group staff ($-1.2B).
- Efficient utilization of personnel (force shaping) and examination of personnel policies/practices; develop housing/BAH efficiencies; and rebaseline advertising (-$1.4B).
- Reduce contractor support (-$1.7B).
- Streamline air/ship/equipment maintenance; revalidate flying hour program model; modify fleet training concepts; and restructure maritime prepositioning force squadrons ($-4.2B).
- Implement flexible and tailored responses to infrastructure sustainment ($-2.2B).

While we do not foresee additional efficiencies to be garnered in other headquarters and staff organizations within the Department of the Navy at this time, we will continue the momentum to pursue streamlining efforts.

Mr. COFFMAN. 3.) Secretary Mabus, the number of operational Aircraft Carriers and Submarines that the Navy is required to maintain are mandated by law. Are you in favor of mandating the requirement to maintain the Navy and Marine Corps' published need for a minimum of 33 operational amphibious ships?

Secretary MABUS. I do not believe mandating the number of operational amphibious ships the Navy is required to maintain is necessary or desirable as it would affect the flexibility and force structure decision-making going forward that the Navy and Marine Corps share in providing a capable, adaptable, amphibious force. The Navy and Marine Corps continuously evaluate amphibious lift capabilities to meet current and projected requirements. Specifically:

In the January 2009 Report to Congress on Naval Amphibious Force Structure, the Chief of Naval Operations and the Commandant of the Marine Corps reaffirmed that 38 amphibious ships are required to lift the Assault Echelon (AE) of 2.0 Marine Expeditionary Brigades (MEBs). They agreed to sustain, resources permitting, an amphibious force of about 33 total amphibious ships in the AE, evenly balanced at 11 aviation-capable ships, 11 LPD 17 class ships, and 11 LSD 41 class ships. The 33 ship force accepts risk in the arrival of combat support and combat service support elements of the MEB but has been judged to be adequate in meeting the needs of all parties within the limits of today's fiscal realities. The 33 ships represent the limit of acceptable risk in meeting lift requirements for the Assault Echelon in a two MEB forcible entry operation, the capacity to sustain a day-to-day forward posture of Amphibious Ready Groups with the full deployment capacity of Marine Expeditionary Units. In addition, a force of this size will provide sufficient capacity for single-ship deployments for theater security cooperation activities.

The recently completed Report of the 2010 Marine Corps Force Structure Review of March 14, 2011 concluded that: "The dual demands of sustained forward presence and sufficient lift for the assault echelons of two Marine Expeditionary Brigades (MEB) result in a requirement of 38 amphibious ships. Given fiscal constraints, however, the Navy and Marine Corps have agreed to accept the risk with 33 ships, increasing the imperative to design a lean and effective force structure. We will also explore options for employing Marines from a wider variety of Navy ships, seeking innovative naval solutions to GCC requirements."

In addition to the Department of the Navy's internal reviews, the Quadrennial Defense Review Report of February 2010 determined that the main elements of the Navy force structure should include 29—31 amphibious warfare ships for the duration of the Future Years Defense Program (FYDP) (Fiscal Year (FY) 2011—FY 2015).

Mr. COFFMAN. 4.) The Department of the Navy (DON) has led the DOD in establishing secure, enterprise-wide networking through the Navy Marine Corps Intranet (NMCI) and is to be commended for its leadership. However, the planned NGEN procurement contemplates a segmentation approach that proposes to split a unified network into at least four pieces, creating multiple, overlapping points of accountability across the network, leading to more complexity and likely higher overhead cost, slower problem resolution and most importantly, increased risk of security breaches. How much does the DON plan to spend on the NGEN procurement and why does the DON believe the proposed segmented plan is an improvement to the current IT NMCI/COSC program?

Secretary MABUS. NGEN Increment 1 is the follow-on to the Navy Marine Corps Intranet (NMCI). NGEN will provide secure, net-centric data and information technology (IT) services and support to the United States Navy (USN) and United States Marine Corps (USMC) within the Continental United States (CONUS) and Outside the Continental United States (OCONUS). NGEN will position the DON for transition to the Naval Networking Environment (NNE) vision, and will be interoperable with and leverage other DoD provided Net-Centric Enterprise Services (NCES). NGEN is the foundation for the future Naval Networking Environment (NNE). It is the continuous evolution of the DON enterprise networks acquisition life-cycle, and the transition from the congressionally mandated end of the NMCI contract.

The primary objectives of NGEN Increment 1 are to establish Government operational control of the networks and to provide service-specific network operation. The objectives will be accomplished via the acquisition of necessary NMCI infrastructure and Government Purpose Rights (GPR) of the NMCI Intellectual Property (NMCI IP). Government operational control of the network will be implemented using a phased transition approach and will be complete when the Network Operations (NetOps), Command and Control, Design Authority (DA), and Technical Authority (TA) of the network have transitioned to the DON. In addition, increased competition, to include the ability to periodically recompete this network capability were a critical objective supported by Congress, DoD and DON. The DON's segmented approach, along with ownership of the infrastructure, and license to the IP accomplishes this goal.

The current DON budget profile (PB12) reflects the Navy's position regarding funding the NGEN procurement as follows (FY10 and prior years were budgeted under NMCI. The cost of NMCI is not included): **(See page 194.)**

A new Program Manager for Naval Enterprise Networks (PMW–205) recently reported and is currently in the midst of conducting an initial program review to include the appropriateness and cost of current acquisition processes as applied to the transition of an existing capability to a new delivery model (i.e., segmented, government ownership and operations). The NGEN program is currently in the process of developing its Service Cost Position (SCP). With the assistance of the Naval Center for Cost Analysis (NCCA) a solid "will cost" position will be developed with appropriate sensitivity analysis and identification of program cost drivers. Once the NGEN "will cost" position is developed, the program manager will work toward a program "should cost" total.

Mr. COFFMAN. 1.) Are you comfortable with the level of risk of operating amphibious ships within 12–15 Nautical Miles of enemy coastlines instead of the former 25 Nautical Mile planning guidance?

Admiral ROUGHEAD. Yes. Over the last two decades, threats in the littorals and US capabilities to counter those threats have evolved. Improvements in US area-defense and self-defense capabilities (fielded and in development) mitigate potential threats to an acceptable level of risk that I am comfortable with our naval forces launching amphibious vehicles from a 12 nautical mile standoff distance.

| Total DON PB12 | Navy & Marine Corps NGEN Investment Program Funding | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ($ in Millions / Then Year) | Prior | FY10 | FY11 | FY12 | FY13 | FY14 | FY15 | FY16 | FY12-16 | To Comp | Prog Total |
| **RDT&E** | | | | | | | | | | | |
| Current $ (PB12) | 0.0 | 0.0 | 7.4 | 5.5 | 5.4 | 5.6 | 5.3 | 5.5 | 27.3 | TBD | TBD |
| **PROCUREMENT** | | | | | | | | | | | |
| Current $ (PB12) | 20.0 | 97.8 | 572.7 | 261.6 | 388.1 | 398.7 | 289.5 | 291.9 | 1629.7 | TBD | TBD |
| **O&M** | | | | | | | | | | | |
| Current $ (PB12) | 165.6 | 131.7 | 1280.7 | 1469.6 | 1361.6 | 1269.8 | 1263.7 | 1173.4 | 6538.1 | TBD | TBD |
| **TOTAL** | | | | | | | | | | | |
| Current $ (PB12) | 185.6 | 229.5 | 1860.8 | 1736.7 | 1755.1 | 1674.1 | 1558.5 | 1470.7 | 8195.1 | TBD | TBD |

## QUESTIONS SUBMITTED BY MRS. HARTZLER

Mrs. HARTZLER. 1) With the proposed repeal of the DADT policy, what changes to facilities are you contemplating to address the privacy and concerns of service members?

Admiral ROUGHEAD. There is no requirement to make any facility changes.

Mrs. HARTZLER. 2) What costs do you anticipate it costing to make these changes?

Admiral ROUGHEAD. There are no identified costs because there is no requirement to make any facility changes.

Mrs. HARTZLER. 3) What policies are being put in place to ensure all service members' concerns will be considered without fear of reprisal?

Admiral ROUGHEAD. Current policies ensure all service members have multiple avenues through which they can address their concerns. Service members who believe they have suffered discrimination or reprisal for communicating their concerns may petition for redress through their chain of command or legal office via existing grievance procedures under UCMJ Article 138 or Navy Regulations Article 1150. Similarly, service members with individual concerns or questions about the repeal of DADT may seek guidance through their chain of command. The Navy's approach is founded on professionalism, treating everyone with dignity and respect, and Standards of Conduct that apply without regard to sexual orientation.

Mrs. HARTZLER. 4) Given what is known about the normal human desire for privacy in sexual matters, why would policies requiring the constant cohabitation of mixed sexual orientation groups not undermine morale, disciple, and readiness, recruiting, and retention?

Admiral ROUGHEAD. In the Navy, we live and work in close quarters in many of our operating environments with individuals from diverse backgrounds. We expect all Sailors to treat their fellow shipmates with dignity and respect, and maintain high standards of behavior. This will not change following repeal of DADT. As in all situations, commanders may make reasonable accommodations in the interest of maintaining morale, good order, and discipline, consistent with the performance of the mission and the environments in which we live.

Mrs. HARTZLER. 5) How would these changes improve the All-Volunteer Force?

Admiral ROUGHEAD. Although I cannot quantify the extent to which repeal of DADT would improve the all-volunteer force, I believe repeal, in the long-term, will make our Navy better. Gay and lesbian Sailors already serve in our Navy. Repeal will end the unnecessary loss of these talented and dedicated men and women from the Service and improve our ability to provide an environment in which all Sailors will be able to serve with honesty and integrity. I am confident that the professional men and women of the United States Navy will ensure we remain the world's most ready, capable, and professional Navy in which all shipmates continue to be treated with mutual dignity and respect.

Mrs. HARTZLER. With the proposed repeal of the DADT policy, what changes to facilities are you contemplating to address the privacy and concerns of service members?

General AMOS. The Secretary of Defense has been clear that the Services will not prescribe berthing or billeting assignments based on sexual orientation.

Mrs. HARTZLER. What costs do you anticipate it costing to make these changes?

General AMOS. The Marine Corps does not anticipate any costs as separate facilities will not be established based on sexual orientation.

Mrs. HARTZLER. How essential do you think it is for service member to be able to focus on their mission without distraction?

General AMOS. The Marine Corps is a disciplined, professional force trained to accomplish its mission regardless of environment. I have tendered my best judgment to the Secretary of Defense that the United States Marine Corps is prepared for the implementation of DADT repeal. The Marine Corps has conducted extensive training within the force on DADT repeal and has the applicable policies and regulations necessary for implementation that are consistent with standards of military readiness, military effectiveness, unit cohesion, and recruiting and retention. I assess the impact of implementation to be low to moderate. We intend to resolve any issues that may arise through engaged leadership and discipline.

Mrs. HARTZLER. Do you support the idea of, or do you think it is wise policy, for men and women service members to sleep in the same barracks and shower together?

General AMOS. Sexual orientation is not synonymous with gender. The Marine Corps' and other Services' gender-based barracks have deep roots in longstanding societal and cultural norms. While males and females reside in the same barracks buildings, they have separate room assignments and individual shower facilities

within their rooms. We maintain gender separate room assignments now and currently see no reason to change the current assignment policy.

Mrs. HARTZLER. Given what is known about the normal human desire for privacy in sexual matters, why would policies requiring the constant cohabitation of mixed sexual orientation groups not undermine morale, disciple, and readiness, recruiting, and retention?

General AMOS. The Marine Corps is a disciplined, professional force trained to accomplish its mission regardless of environment. I have tendered my best judgment to the Secretary of Defense that the United States Marine Corps is prepared for the implementation of DADT repeal. The Marine Corps has conducted extensive training within the force on DADT repeal and has the applicable policies and regulations necessary for implementation that are consistent with standards of military readiness, military effectiveness, unit cohesion, and recruiting and retention. I assess the impact of implementation to be low to moderate. We intend to resolve any issues that may arise through engaged leadership and discipline.

Mrs. HARTZLER. How would these changes improve the All-Volunteer Force?

General AMOS. Upon implementation of DADT repeal, the Marine Corps will continue making concerted efforts to attract, mentor and retain the most talented men and women who bring a diversity of background, culture and skill in service to our Nation. As always, we will raise our total capability by leveraging the strengths and talents of each and every Marine.

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## QUESTIONS SUBMITTED BY MR. PALAZZO

Mr. PALAZZO. 1. Admiral Roughead, you were quoted recently in the San Diego Business Journal expressing the needs of the Navy as it relates to the continuing resolution that we are currently operating under. I think it is extremely important that the Department of Defense is funded appropriately, through the regular appropriations process. According to the same article the Navy has had to delay or cancel 29 trips to shipyards, could you give us an overview of the long term effects of this delayed funding and the consequences it holds for our Navy, our military as a whole and the Defense Industry?

Admiral ROUGHEAD. Regrettably, the series of continuing resolutions (CR) for FY 2011 prevented us from applying the increased FY 2011 O&M funding to improve our readiness, and it negatively impacted our ability to procure our future Navy and support our Sailors, Navy civilians, and their families. It forced us to take mitigation measures that included: reducing operations, limiting numerous contracts for base operating support, slowing civilian hiring, reducing Permanent Change of Station notifications for our Sailors from about six months lead time to less than two months, not initiating the Small Business Innovative Research program, and delaying procurement contracts for new capabilities and existing production lines. Starting in March, we cancelled or scaled back several ship maintenance availabilities in Norfolk, Mayport, and San Diego and MILCON projects in many states. The impact of these actions will jeopardize the efforts we made in recent years to restore Fleet readiness.

With the passage of a full year funding bill we will make every effort to reverse these actions, but their initial impact will have negative downstream effects in our maintenance and MILCON portfolios for many y ears.

Mr. PALAZZO. 2. The fiscal year 2012 budget request includes a $15 million military construction project for road improvements at Naval Station Mayport. The 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. 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 especially Naval Station Pascagoula?

Admiral ROUGHEAD. Strategic dispersal remains a key aspect of Navy planning for, and mitigation of, manmade or natural disasters along our coasts. As the Navy grew its Fleet size to almost 600 ships in the 1980s, it constructed four naval bases, including Naval Station Ingleside and Naval Station Pascagoula, to support and disperse those additional ships. As the size of our Fleet has decreased over the last thirty years to 287 ships today, the Navy has methodically closed or consolidated its presence in many ports, including at Ingleside and Pascagoula as part of BRAC 2005.

## QUESTIONS SUBMITTED BY MR. WEST

Mr. WEST. 1) Do you believe that the Navy—as currently funded—has the ability to execute proper force projection in order to protect the sea lanes of commerce throughout the world, specifically off the coast of Somalia?

Secretary MABUS and Admiral ROUGHEAD. The Navy provides maritime forces to Combatant Commanders (CCDR) to accomplish their assigned missions, which include force projection and sea control. Our readiness and operational support programs will meet the anticipated CCDR demand for Navy forces within force structure constraints and provide surge forces in support of operational plans, with an acceptable level of risk. Although total CCDR demand exceeds Navy's capability to source, the world's sea lanes remain protected.

Navy's forward stationed and rotationally deployed forces cooperate with allies and partners to promote collective security, enhance global stability and confront irregular challenges. We join with navies and coast guards around the world to support the stability and security of the global maritime commons; a prime example of our maritime strategy in action. As articulated in that strategy, enhanced global stability and secure freedom of the seas benefits all nations.

Mr. WEST. 2) Considering the recent developments in the Middle East—specifically in Bahrain—what is the current risk to the long-term viability of the 5th Fleet stationed in Bahrain?

Secretary MABUS and Admiral ROUGHEAD. There has been no change in the status of the relationship between COMUSNAVCENT/C5F and the Government of Bahrain. The Government of Bahrain continues to fully support hosting Naval Support Activity-Bahrain (NSA–Bahrain) and its tenant commands. The King and Crown Prince have stated their continuing support to the U.S. Navy presence in the Kingdom of Bahrain. We do not expect a change in the Bahraini government's attitude toward hosting NSA–Bahrain. To date, there are no known credible threats to U.S./Coalition forces or bases. There have been incidents of direct anti-Western/anti-U.S. (but not specifically against U.S. Navy) sentiment. We view the Government of Bahrain's allegations that Iran could support specific measures in an effort to influence the opposition movement in Bahrain with concern.

Mr. WEST. 3) Myself and a number of my colleagues are concerned about so-called invisible wounds, such as Traumatic Brain Injury. What can you tell me about the Department of the Navy's efforts with Hyperbaric Oxygen Therapy (HBOT) and Cognitive Stimulation?

Secretary MABUS and Admiral ROUGHEAD. We are committed to providing all scientifically proven and FDA-approved therapies to our Sailors, Marines and their family members. As soon as there is evidence to ensure safety and efficacy of any new therapy such as HBOT, including documentation from well-designed, adequately controlled medical research studies, we move forward to make it available to our injured service members. In this regard, the Department of Defense has three trials in progress to assess the safety and efficacy of HBOT on the symptoms of mild and moderate traumatic brain injury. The Air Force study at Wilford Hall Medical Center recently completed enrollment and follow-up visits; and the DARPA/VA funded study is ongoing at the Navy operational hyperbaric oxygen chambers in Panama City, Florida. In addition, a large DoD multi-site study will utilize the hyperbaric oxygen chambers at Naval Hospital Camp Lejeune and Naval Hospital Camp Pendleton. Navy Medicine is working with their Army and Air Force counterparts to see these three studies completed safely and efficiently.

With respect to Cognitive Rehabilitation Therapy, Navy Medicine has recently initiated formal pilot programs at four sites that serve large Marine populations including: Naval Hospital Camp Lejeune; Naval Hospital Camp Pendleton; Naval Medical Center San Diego; and Naval Medical Center Portsmouth. All four pilot sites have interdisciplinary treatment teams that meet to discuss patients and their general progress, as well as cognitive rehabilitation. Cognitive rehabilitation interventions offered at the sites address the domains of attention, memory, processing speed, executive functioning, emotional regulation, and social pragmatics through individual and group therapy and training sessions. Outcome measures are collected using standardized psychological, cognitive, and neuropsychological assessments before and after treatment to document progress. Many other Navy medical treatment facilities offer forms of cognitive rehabilitation to their patients, frequently through the neuropsychology, behavioral health, and/or speech language therapy clinics.

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