

**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2014 AND THE FUTURE YEARS DEFENSE
PROGRAM**

TUESDAY, MAY 14, 2013

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

MARINE CORPS MODERNIZATION

The subcommittee met, pursuant to notice, at 9:33 a.m. in room SR-222, Russell Senate Office Building, Senator Jack Reed (chairman of the subcommittee) presiding.

Committee members present: Senators Reed, Kaine, King, McCain, and Ayotte.

Committee staff member present: Leah Brewer, nominations and hearings clerk.

Majority staff members present: Creighton Greene, professional staff member; and William K. Sutey, professional staff member.

Minority staff members present: Ambrose R. Hock, professional staff member; and Daniel A. Lerner, professional staff member.

Staff assistants present: Lauren M. Gillis and John Principato.

Committee members' assistants present: Carolyn Chuhta, assistant to Senator Reed; Karen Courington, assistant to Senator Kaine; Stephen Smith, assistant to Senator King; Paul C. Hutton IV, assistant to Senator McCain; Bradley Bowman, assistant to Senator Ayotte; and Joshua Hodges, assistant to Senator Vitter.

OPENING STATEMENT OF SENATOR JACK REED, CHAIRMAN

Senator REED. Let me call the hearing to order.

I want to, obviously, thank and welcome back Sean Stackley, the Assistant Secretary of the Navy for Research, Development, and Acquisition; and Lieutenant General Richard Mills, the Deputy Commander for Combat Development and Integration, and the Commanding General of the Marine Corps Combat Development Command. We are certainly grateful for your service to the Nation and the Marine Corps, both of you. Thank you very much for that and also to the men and women of the Marine Corps who every day distinguish themselves and honor the country. So thank you, gentlemen.

Today our witnesses will update us on their efforts to build a force of amphibious, combat, and tactical ground vehicles that

meets the Nation's requirements for maneuver from the sea that is technologically achievable and affordable. Since the cancelation of the Expeditionary Fighting Vehicle (EFV) in 2011, the Marine Corps has taken advantage of the opportunity to reassess its amphibious vehicle concepts and requirements.

Last year, we questioned the affordability of the Marine Corps combat and tactical vehicle programs given an out-years' procurement bow wave that far exceeded projected available funding levels. We hope that the Marine Corps ground systems budget request for fiscal year 2014 reflects the applications of the lessons of the recent past and adaptation to the realities of today and tomorrow's operational and fiscal environments.

We look forward to our witnesses describing for us how the Marine Corps has reassessed its priorities relative to its missions and requirements under the current defense strategy and how it proposes to sequence its vehicle development and acquisition efforts to better control overall affordability, specifically the appropriate size and structure of the amphibious assault capability and the mix of armored combat and tactic vehicles and ship-to-shore connectors.

Coming off the cancelation of the EFV, and the affordability tradeoffs made with respect to the cost of the system and the numbers of amphibious vehicles during the program development, several questions were raised about the tactical implications of the scope and pace of the buildup of combat power ashore and risk to mission success.

I understand that the Marine Corps is nearing the completion of its fleet mix study to inform its decisions with respect to how many of what type vehicles it should buy in the future. I look forward to an update on the fleet mix study, its preliminary findings, if any, and continuing our discussion of this issue.

We must note, unfortunately, that all of this is at risk if sequestration is triggered for fiscal year 2014. No doubt, sequestration next year would compound the challenges to all Marine Corps programs. We would like our witnesses to address the impacts and risks of another year of sequestration, including any extraordinary budget pressures associated with continuing operations in Afghanistan.

Finally, and related to our interest in the challenges of modern operations from the sea, I note that next month the Marine Corps will conduct a major amphibious exercise that will, so to speak, stretch some tactical muscles that have not enjoyed robust testing in many years. We would welcome your views on this coming exercise and other completed exercises and what the Marine Corps has learned or hopes to learn about joint and combined amphibious operations and their concepts, equipment, and readiness. We are particularly interested in any insights regarding the performance of the Marine Corps current fleet of amphibious, combat, and tactical vehicles.

Gentlemen, we look forward to your testimony.
Now, let me now recognize Senator McCain.

STATEMENT OF SENATOR JOHN MCCAIN

Senator MCCAIN. Thank you, Mr. Chairman. I join you in welcome our witnesses, Secretary Stackley and Lieutenant General Mills, and thank them for their many years of service.

As we all know, it is the responsibility of Congress to provide the resources to enable a ready expeditionary force capable of acting when called upon and defending our security interests when threatened. Unfortunately, the budget request before us today falls short of that goal as it continues to finance near-term readiness at the expense of modernization and infrastructure. Marine Corps modernization funding represents less than 10 percent of the Marine Corps budget request for 2014. We must ensure the Marine Corps makes good use of these scarce resources.

The current fiscal situation has caused the Department of the Navy to assume significant risk in shipbuilding programs needed by the Marine Corps to accomplish their missions. For example, the Navy has identified a requirement for 38 amphibious ships to support the Marine Corps mission, but the shipbuilding plan calls for only 33 ships. That number of ships will not be achieved until 2025 and assumes a huge increase in the annual shipbuilding budget.

The Navy is also taking on readiness risk with the current amphibious fleet, with only 22 ships available or fully mission capable last year. This is on top of the Navy's decision last year in response to declining budgets to eliminate a squadron of maritime repositioning ships for the Marine Corps which are used to rapidly deploy combat equipment around the world. In all, reduced investments have Marine Corps capabilities and readiness headed in the wrong direction.

Over the last few years, the Marine Corps has identified areas in which new technology is needed to improve capabilities or respond to changing threats. The fiscal year 2014 budget request includes funding for the procurement of the Joint Light Tactical Vehicle (JLTV), and development of the Amphibious Combat Vehicle (ACV), which replaces the failed EFV program. Additionally, the Marine Corps will recapitalize a portion of their legacy vehicles, including the High Mobility Multipurpose Wheeled Vehicle (HMMWV) fleet. This subcommittee would be interested in hearing how the Marine Corps is managing these programs so that they are affordable in the current and future fiscal environment.

After spending nearly \$3 billion on it, the Marine Corps canceled the EFV program in 2011 due to poor reliability and excessive cost growth. One of the factors contributing to cost growth was the requirement that the armored troop carrier be able to achieve high speeds in open water. After recently completing the ACV analysis of alternatives, I understand the Marine Corps is reopening the high water-speed can of worms. We will be interested in hearing how the Marine Corps plans to field this capability without incurring the cost growth that led to the EFV's cancellation.

Let me close by expressing my concern for Marine Corps readiness. Similar to the other Services, the Marine Corps has prioritized deployed and next-to-deploy marines in their operations and maintenance accounts at the expense of nondeployed units. This has resulted in the degradation of Marine Corps readiness. According to the Commandant of the Marine Corps, by the begin-

ning of calendar year 2014, approximately 50 percent of Marine Corps ground and aviation units will be below acceptable readiness levels. This places the Marine Corps at serious risk in their ability to respond to near-term contingency operations.

I look forward to the testimony of the witnesses.

Senator REED. Thank you very much, Senator McCain.

Secretary Stackley.

STATEMENT OF HON. SEAN J. STACKLEY, ASSISTANT SECRETARY OF THE NAVY FOR RESEARCH, DEVELOPMENT AND ACQUISITION

Mr. STACKLEY. Yes, sir. Chairman Reed, Senator McCain, distinguished members of the subcommittee, thank you for the opportunity to appear before you today to address Marine Corps modernization. I will be testifying alongside the Deputy Commandant for Combat Development and Integration, Lieutenant General Mills, and with the permission of the subcommittee, I propose to keep opening remarks brief and submit a formal statement for the record.

Senator REED. All of your statements will be included. You may summarize.

Mr. STACKLEY. Thank you, sir.

Your Marine Corps serves as America's expeditionary force in readiness, a balanced air/ground naval force, forward-deployed and forward-engaged. Today, over 17,000 marines are deployed around the world, on the ground in Afghanistan in support of Operation Enduring Freedom and at sea deployed aboard amphibious ships operating off coasts from Africa to Japan, conducting air operations, ship-to-shore operations, building partnerships, deterring enemies, and responding to crises and contingencies. They place in the hands of our Nation's leaders tools and options to respond to today's world events and shape future events, and it is our responsibility to place in the hands of our marines the best weapons this Nation can produce to shape, deter, defeat, and deny our enemies sanctuary.

The seamless maneuver of marines from sea to conduct operations ashore, whether for training, humanitarian assistance, or combat, remains a key priority as the Marine Corps shapes its future force. To this end, the Marine Corps modernization strategy includes sustainment of amphibious lift capabilities, as outlined in the Department's 30-year shipbuilding plan, replacement of the landing craft air cushion (LCAC), ship-to-shore connectors, recapitalization of critical aviation capabilities from the Short Takeoff Vertical Landing (STOVL) version of the Joint Strike Fighter (JSF) to modernized attack and utility H-1 helicopters to the development of the heavy lift H-53K helicopter, modernization of the Corps' expeditionary command, control, and communications capabilities with the development of the Ground/Air Task-Oriented Radar (G/ATOR), the common aviation command and control system, and the global communications support system Marine Corps and modernization of the Marine Corps' ground combat vehicles.

The Marine Corps combat vehicles are at the front end of much needed recapitalization. We have briefed this subcommittee on the Corps' ground combat tactical vehicle strategy which includes de-

veloping and procuring the JLTV; developing a modern ACV; sustaining a portion of the HMMWV fleet through 2030; initiating an upgrade program for the legacy amphibious assault vehicle (AAV) as a bridge to the ACV; and managing procurement of vehicles to reduce acquisition objectives, a net reduction of about 20 percent based on the more recent force structure reviews.

The JLTV program remains on track with the 2014 budget request continuing development in support of procurement commencing in 2015. We are continuing to review with the Army the impacts of sequestration on the schedule and will advise on the results of this review when complete.

The ACV is, as the Commandant stated in testimony earlier this year, a top Marine Corps priority. The simple fact is that execution of amphibious operations requires a self-deploying amphibious vehicle to seamlessly project ready-to-fight marine units from sea to land in permissive, uncertain, and hostile environments. This capability enables the Corps to maximize available amphibious lift and accelerate the buildup of power ashore, which is key to overcoming access challenges posed by either the lack of improved infrastructure or the threat of an adversary.

In order to ensure we get the ACV program right, we are conducting a combined requirements definition feasibility study assembling the best of government and industry requirements, systems engineering design, and cost experts. Our intent is to bring the best talent and best information together to build on the tremendous body of knowledge we possess across all our vehicle programs and determine how to deliver the capability needed by the Marine Corps with high confidence in the affordability of the defined requirements.

We have engaged your staff at the front end of this process and will remain engaged as we progress towards future milestone decisions. In fact, for our entire portfolio and particularly the ACV and JLTV, the Marine Corps has taken a textbook approach to developing these critical combat vehicles, placing priority on getting the requirements right at the front end, employing mature technology where possible to reduce cost and risk in development, establishing affordability as a requirement, conducting comprehensive systems engineering and cost analysis, streamlining the acquisition process where sensible, leveraging competition and, perhaps most importantly, integrating the requirements and acquisition team to enable effective, cost performance trades throughout the requirements definition and system development process.

Mr. Chairman, thank you for the opportunity to appear before you today. We look forward to answering your questions.

[The joint prepared statement of Mr. Stackley and General Mills follows:]

JOINT PREPARED STATEMENT BY HON. SEAN J. STACKLEY AND LTGEN RICHARD P. MILLS, USMC

INTRODUCTION

Chairman Reed, Senator McCain, and distinguished members of this subcommittee, we appreciate the opportunity to appear here today and discuss Marine Corps modernization. As always, we thank you for your continued support to our sailors, marines, and their families.

As America's Expeditionary Force in Readiness, the Marine Corps' ground modernization investments support our Nation's ability to be prepared for all manner of crises and contingencies. As a "middleweight force," Marines do not seek to supplant any Service or "own" any domain. Rather, Marine forces transit in a "lane" that passes through all domains—land, sea, air, space and cyber—operating capably and freely throughout the spectrum of threats, whether they be conventional, irregular or the uncertain hybrid areas where they overlap. Key is the ability to deploy and employ from the sea in austere environments at a time and place of our choosing—a significant asymmetric, strategic and operational advantage that has been used more than 130 times in the past 2 decades.

Our ground investments allow us to develop and sustain a ready, middleweight force that is easily deployable, energy efficient, and highly expeditionary. As the Department of the Navy and your Marine Corps confront the challenges of budget constraints and the uncertainty inherent in our fiscal outlook, we are evaluating priorities and making hard choices that are necessary to maintain the right balance in capacity, capability and industrial base sustainment. We have accepted our share of the additional risk associated with reduced resources; however, we have also sought innovative and practical means to mitigate that risk. We leverage programs, technologies, technical skills and competencies of other Services to ensure we deliver the most effective and affordable combat capability to your marines. We also seek to capitalize on our industrial base to identify and pursue innovative and ground-breaking solutions to meeting the warfighter's needs and to reduce acquisition and sustainment costs of our systems.

OPERATING ENVIRONMENT

Over the past year alone, Marines have actively engaged in every corner of the global security environment. The Marine Corps continued to meet operational commitments in Afghanistan while simultaneously working with more than 90 allies and partners to train, learn, and build effective security institutions. In addition to forces committed to Operation Enduring Freedom (OEF), our Marine Expeditionary Units (MEUs), in partnership with Navy's Amphibious Ready Groups (ARGs), continued to patrol regions of likely crisis. Other task-organized Marine Air Ground Task Forces (MAGTFs), operating from expeditionary locations, supported U.S. national security objectives through forward presence, deterrence, multinational theater security cooperation exercises, and building partner capacity. Marines have been active in every geographical combatant command, serving as a key component of the joint force. Even under fiscal restraint, we continue to support these strategically important activities to the greatest extent possible.

The need for this highly capable and ready force is more pressing now than ever. Today, we see a world marked by conflict, instability and humanitarian disaster. We see the disruptive changes that accompany a rapidly modernizing world—a world in which tyranny is rewarded, power is diffused, and extremism finds fertile ground in the disenfranchised. In what has been described as a 'new normal,' extremism, economic disruption, identity politics and social change generate new potential security threats at an accelerating pace. While we desire peace as a nation, threats to our citizens, allies and national interests compel our response when crisis occurs.

Regardless of the financial pressures placed on governments and markets today, crises requiring military intervention undoubtedly will continue into the foreseeable future. In this environment, physical presence and readiness matter more than ever. As a maritime nation, dependent on the sea for the free exchange of ideas and trade, America requires security both at home and abroad. Since the 1990s, the United States has been reducing its presence on foreign bases. This trend will likely continue in the face of the strategic and budget realities we currently face. There remains an enduring requirement to balance presence with cost. In the past, the Nation has chosen to depend on the Navy and Marine Corps to provide a lean and economical force of an expeditionary nature, operating forward and in close proximity to potential trouble spots. Investing in naval forces that can respond to a wide range of crisis situations creates options and decision space for our Nation's leaders.

ROLE OF THE MARINE CORPS

The Marine Corps remains first and foremost a naval service, operating in partnership with the U.S. Navy. We share with them a storied heritage that predates the signing of our Constitution. Together, we in the naval service use the seas, not only to protect the vast global commons, but also to project our national power and influence ashore where that is required. The world's coastal regions are the home to an increasing majority of the human population, and are thus the scene of frequent conflict and natural disaster. These littoral regions comprise the connective

tissues that join oceanic trade routes with the activities of populations ashore. In an era of heightened sensitivities over sovereignty, and where large foreign military footprints are unwelcome, the seas provide maritime forces with a means of less obtrusive presence and unfettered access. Maritime expeditionary forces can be located close enough to act when crisis threatens and hours matter, without imposing a burden on host nations. Expeditionary maritime forces can operate in the air, at sea, and on land, without the necessity of infrastructure ashore. They can loiter unseen over the horizon, and can move swiftly from one crisis region to another. Importantly, maritime forces also have the ability to rapidly return to the sea when their mission is complete.

This flexibility and strategic agility make Marine forces a key tool for the Joint force in major contingencies. Operating in partnership with the Navy, the Marine Air-Ground-Logistics Task Force creates the strategic asymmetries that make the joint force so effective on the modern battlefield. Amphibious and expeditionary capabilities contribute to each of the ten mission areas of the joint force, and are directly responsive to the security demands articulated in the President's Defense Strategic Guidance for the 21st Century. By design, marines smoothly integrate with the other elements of the joint force, enable our interagency partners, and provide a naturally complementary team when working with Special Operations Forces.

Virtual presence, the ability to strike with precision weapons or to attack an adversary's networks do not have the same impact of knowing the force is over the horizon can be at your front door tonight. The tragic events in Boston highlight the value of a ready police force that can respond to today's crisis with today's force. Law enforcement personnel (local, State, and Federal) are backed up by sophisticated technology but the officer walking the street—going door to door—was crucial to re-establishing calm and finding the perpetrators. With the right ships, equipment, personnel and training, marines are your international crisis response force—as part of a larger joint and multi-national effort—we will be there first with the ability to respond to today's crisis with today's force, today.

As the Nation prepares for an uncertain future, its expeditionary Marine forces provide a highly-utilitarian capability, effective in a wide range of scenarios. Marines remain a cost-effective hedge against the unexpected, providing a national “insurance policy” against strategic surprise. The Marine Corps will continue to meet the requirements of strategic guidance while resetting and reconstituting the force in-stride.

RESET

Reset is a subset of reconstitution and comprises the actions taken to restore units to a desired level of combat capability commensurate with the units' future missions. After more than a decade of combat, this will require an unprecedented level of effort. The Marine Corps is resetting its forces “in stride” with fighting the war in Afghanistan and transitioning in line with the Defense Strategic Guidance. Unlike previous post-conflict periods, such as after Operation Desert Storm, we do not anticipate taking an “operational pause” to reset as we transition from OEF.

The Marine Corps' Operation Enduring Freedom Ground Equipment Reset Strategy, released in January 2012, identifies the equipment we will reset or divest. The reset strategy prioritizes investment and modernization decisions to develop our middleweight force. Last year our reset liability was approximately \$3.2 billion. We currently estimate it will be something less; however, we are unsure exactly what that number will be until we can get a better picture on both the totality of the costs associated with returning our equipment from Afghanistan and the detailed costs associated with resetting our gear after 10 years of combat. This revised forecast is primarily based on the replacement of combat losses, the restoration of items to serviceable condition, and the extension in service life of selected items. The liability accounts for execution of reset dollars provided in fiscal year 2012 and the first quarter of fiscal year 2013 to include maintaining the Marine Corps' enduring requirement of 1,231 Mine Resistant Ambush Protected (MRAP) vehicles.

The Marine Corps' MRAP reset requirement strikes the right balance between capabilities immediately available to the operating forces, those geographically positioned for crisis response, and MRAPs placed in a cost-effective long-term storage for potential enduring conflict. The 455 MRAPs maintained in our strategic prepositioning stocks afloat, in Norway, and in Kuwait will be kept at a heightened state of readiness—available in crisis response with little notice; 618 MRAPs will move into long term storage at our organic depot facility in Barstow, CA; and the remaining 158 MRAPs will be used in our operating forces for training and immediate response.

The Retrograde and Redeployment in support of Reset and Reconstitution Operational Group (R40G) is a vital element to the Marine Corps' responsible drawdown from Afghanistan and the successful execution of the Ground Equipment Reset Strategy. The R40G which began in May 2012 is the Marine Corps' component to the U.S. Central Command Materiel Recovery Element and is tasked with preserving the operational capacity of combat units shouldering the load of clearing the battle space of equipment, supplies and sustainment stocks. The R40G is focused on accountability and efficiency in the redeployment and retrograde process. This process includes retrograding more than \$324 million of equipment, repairing more than 1,200 shipping containers, and processing more than 230,000 pounds (net explosive weight) of ammunition, and has overseen the retrograde of more than 4.5 million square feet of aviation AM2 matting and more than 5,700 equipment items. The Marine Corps has retrograded 60 percent of its equipment items; 70 percent of the supplies, repair parts, and ammunition; and 85 percent of its AM2 matting in Afghanistan. Additionally, the R40G brings discipline to the retrograde process ensuring Marine Corps combat units can withdraw from Afghanistan and redeploy.

Our reset effort is already underway and it maximizes the Marine Corps' depot capacity, where we expect the bulk of reset to occur for 2 to 3 years after our equipment is returned. The continued availability of our ground equipment depot capacity at both Barstow, CA, and Albany, GA, is essential for timely reset, our ability to generate readiness, and to surge in response to wartime demand. With the funding provided by Congress in Public Law 113-6 we will be able to remain on schedule with our reset plan in fiscal year 2013; however, the long term impacts of sequestration on reset may result in cuts to depot maintenance and procurement accounts, which may hinder the Marine Corps' ability to reconstitute in stride by fiscal year 2017.

We are examining future equipment requirements with an on-going comprehensive review of the Marine Corps' equipment inventories. This effort will validate reset strategies, future acquisition plans, depot maintenance programming, and required modernization initiatives. This review will incorporate the lessons we learned from over a decade of combat to upgrade our tables of equipment to reflect the way we fight today and our warfighting requirements of tomorrow.

MODERNIZATION

With the smallest modernization budget in the Department of Defense, the Marine Corps continually seeks to leverage the investments of other Services, carefully metering-out our modernization resources to those investment areas which are the most fiscally prudent and those which promise the most operationally effective pay-offs.

Innovative warfighting approaches and can-do leadership are hallmarks of the Corps, but these cannot overcome the vulnerabilities created by our rapidly aging fleet of vehicles, systems and aircraft. Long-term shortfalls in modernization would have an immediate impact on readiness and would ultimately cost lives during crises. At some point, sustaining fleets of severely worn vehicles becomes inefficient and no longer cost-effective. This inefficiency reduces available modernization resources from an already small account, degrading our ability to effectively operate in today's complex security environment. Our modernization investment requires a balanced approach across the Air-Ground-Logistics Team.

Ground Vehicle Modernization and Sustainment

Selective modernization and effective sustainment of our combat and tactical vehicles is the basis for planning, programming and budgeting to provide balanced maneuver and mobility capabilities to our Operating Forces. Our force structure and associated vehicles are highly leveraged investments. They optimize strategic lift capability and provide aggregate utility across the range of military operations. Our ground vehicle modernization strategy is to sequentially modernize priority capabilities, reduce equipment inventory requirements wherever possible, and judiciously sustain remaining equipment. Our plans focus on achieving the right mix of assets, while balancing performance, payload, survivability, fuel efficiency, transportability and cost.

Our two signature modernization initiatives are the Amphibious Combat Vehicle (ACV) and the Joint Light Tactical Vehicle (JLTV). These vehicle modernization programs coupled with the upgrade of our Assault Amphibious Vehicles (AAV) and our family of Light Armored Vehicles (LAV), the refurbishment of a portion of our legacy High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) fleet, and improvements in advanced simulations systems, are critical to sustaining our combat readiness and enabling our core warfighting capabilities. The Marine Corps has deferred acquisition of the Marine Personnel Carrier with the future capability requirement to

be assessed after the more pressing ACY and JLTV requirements have been addressed.

The Marine Corps is committed to developing and fielding an ACY that supports and enables our Service-defining capability of enabling operational access and forcible entry from the sea. The ACY is the Marine Corps' top ground modernization priority and the fiscal year 2014 President's budget request includes \$137 million for support of this effort. Based on the Department's 10-year investment plan, the intent is to address modernization shortfalls sequentially-both before and after development of the ACY. The Department's JLTV strategy depends on procuring those vehicles with the most demanding mission profiles. The Marine Corps' fiscal year 2014 request includes \$50 million to continue Engineering Manufacturing and Development efforts and reach Milestone C before the Marine Corps procurement focus is turned towards the ACY.

During the interval in which the ACY is designed, built and fielded, the Department must also ensure the continued safety, reliability, and operational capability of the legacy AAV. The current AAV platform faces significant maintenance challenges and obsolescence issues. Accordingly, the Marine Corps is investing \$70 million in AAV sustainment efforts, to include the AAV upgrade program. Both of these efforts remain a top Marine Corps recapitalization effort priority until fielding of the ACY. The Marine Corps plans to upgrade between 350 to 400 existing AAVs to ensure they are survivable on the modern battlefield.

While the AAV upgrades will provide a bridge of sorts, the ACY is needed to replace this aging fleet. The ACY Analysis of Alternatives was completed in July 2012 and the results of follow-on analysis into the cost of a high water-speed capability are expected in October 2013 at which time a decision will be made whether to pursue a high water-speed vehicle. The current baseline budget allows for equipment modernization on a reasonable timeline. Possible future reductions in the baseline budget and the impact of sequestration would result in delay, modification or elimination of key modernization programs.

Additional Modernization

To complement future ground and amphibious vehicles, the Marine Corps is investing in key support areas such as the Ground/Air Task-Oriented Radarm. Fiscal year 2014 President's budget request includes \$192 million to complete Engineering and Manufacturing Development and enter Low Rate Initial Production in fiscal year 2014. This system will replace five legacy radar systems, and will be significantly more advanced in its capabilities. It will improve threat detection and be more deployable, able to be set up in a fraction of the time compared with current systems.

Over the last 10 years of near continuous combat operations, the need for fuel and batteries on the battlefield has grown exponentially. Since 2001, the Corps has increased the number of radios infantry battalions use by 250 percent and the number of information technology equipment by 300 percent. The number of vehicles has risen by 200 percent, with their associated weight increasing more than 75 percent as a result of force protection requirements. In the end, the force today is more lethal, but we have become critically dependent on fuel and batteries, which has increased the risk to our logistics trains. Moreover, a 2010 study found that one marine is wounded for every 50 fuel and water convoys. To reduce risk and increase combat effectiveness, in March 2011, the Commandant issued the "Marine Corps Expeditionary Energy Strategy and Implementation Plan" to change the way the Corps thinks about and values energy. As part of this strategy, we are also investing in the Ground Renewable Expeditionary Energy System and Solar Portable Alternative communications Energy System. These systems will provide portable power, increasing self-sufficiency, and reduce requirements for fuel resupply for small units operating at the forward edge. This "bases-to-battlefield" strategy includes training all marines to understand the relationship between resource efficiency and combat effectiveness. Throughout the Navy and the Marine Corps, we will consider energy performance in all our requirements and acquisitions decisions.

CONCLUSION

The Navy and Marine Corps team is fully aware of the fiscal challenges facing our Nation and has critically examined and streamlined our force needs for the future. We are proud of our reputation for frugality, and will continue to remain good stewards of every defense dollar we receive. In a period of budget austerity, we offer a strategically mobile force optimized for forward presence and rapid crisis response for a notably small portion of the Department of Defense budget. The Marine Corps will remain ready to fulfill its role as the crisis response force of choice for our Nation's leaders.

Through the support of Congress, our marines and sailors responding to crisis and in the fight have received everything necessary to ensure success over the past decade of sustained combat operations. As we transition to the challenges and opportunities of the post-OEF world and continue to reorient to the Pacific, the Marine Corps is rebalancing and modernizing for the future. We must also keep faith with and provide the right resources for those who have served and sacrificed so selflessly in our All-Volunteer Force. With the continued support of Congress and the American people, we will ensure amphibious forces are well prepared to secure our national interests in an uncertain future.

Senator REED. Thank you, Mr. Secretary.
General Mills, please.

**STATEMENT OF LTGEN RICHARD P. MILLS, USMC, DEPUTY
COMMANDER FOR COMBAT DEVELOPMENT AND INTEGRATION/
COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT
COMMAND**

General MILLS. Thank you, sir. Chairman Reed, Senator McCain, distinguished members of the subcommittee, it is good to be here to discuss Marine Corps modernization programs. As always, we thank you for your continued support to our sailors, our marines, and their families.

As America's expeditionary force readiness, the Marine Corps' ground modernization investments support our Nation's ability to be prepared for all matters of crises and contingencies. Our ground investments allow us to develop and sustain a ready, middle-weight force easily deployable, energy efficient, and highly expeditionary.

As the Department of the Navy and your Marine Corps confront the challenges of budget constraints in sequestration, we are evaluating priorities, we are making hard choices, choices that are necessary to maintain the right balance and capacity, capability, and industrial base sustainment.

The programmatic priority for our ground forces is the seamless maneuver of marines from sea in order to conduct operations ashore whether for training, for humanitarian assistance, or for combat. The Marine Corps modernization and sustainment strategy is the basis for planning, programming, and budgeting in order to provide balanced maneuver and mobility capabilities for our operating forces. This strategy is focused on achieving the right mix of assets while balancing performance, payload, survivability, fuel efficiency, transportability, and of course, affordability.

With the smallest modernization budget in the Department of Defense (DOD), the Marine Corps continually seeks to leverage the investments of our other Services. We carefully allocate our modernization resources in those investment areas which are most fiscally prudent and those which promise the most operational return.

Our two signature modernization initiatives this year are the ACV and the JLTV. These vehicle modernization programs, coupled with an upgrade to our AAVs and also upgrades to our family of light armored vehicles, the refurbishment of a portion of our legacy HMMWV and improvements in advance simulation systems, are critical to sustaining our combat readiness and enabling our core warfighting capabilities.

As discussed, the ACV AOA was completed in July 2012. While it did not directly address high water-speed, it did validate the requirement for an ACV capable of self-deploying from over-the-hori-

zon at long distances. High water-speed, however, is still a valuable attribute, but we understand it must be weighed against all other requirements. Mr. Stackley, as he said, brought industry together with a team of our own experts at Quantico to determine if an affordable, survivable, high water-speed vehicle is in fact obtainable. We expect the results of this incursion in October of this year and expect a decision shortly after that time.

Clearly, there are challenges in meeting operational requirements in today's highly dynamic security environment, as well as the constrained and uncertain budget environment we are operating in. However, in partnership with the Navy, the Marine Corps looks forward to working with you to address these issues so that we are best postured to continue serving as the Nation's expeditionary force in readiness.

Again, thank you for the opportunity to be here. I look forward to your questions.

Senator REED. Thank you very much, General Mills.

Let me ask a question which I think will be asked by all my colleagues in one form or another. That is, how would you characterize the impact or potential impact of the Continuing Resolution (CR), the sequestration, and reprogramming on the Marine Corps modernization budget this year and going forward, all of this under the Budget Control Act and other congressional actions? Mr. Secretary, you might begin.

Mr. STACKLEY. Yes, sir. First, you start with the CR. The CR slowed our execution in 2013, but I think we are overcoming any lasting effects that it has had and getting up on the governor in terms of executing smartly our programs. The sequestration impact clearly is more significant for the two reasons that are described. First, is the dollar amount itself, and second, is the across-the-board method of applying the reductions due to sequestration.

For Marine Corps modernization, for example, the total impact is north of \$300 million across their programs in procurement and then a smaller but significant amount in research and development (R&D). So we are having to go line by line through the Marine Corps programs to mitigate the effects in 2013, recognizing that some of those effects bow wave into the out-years. So there may be some necessary backfilling associated with sequestration.

We can handle that on a 1-year basis, but clearly when you start to compound that with 2014 and out, it will have a significant reshaping of our Marine Corps modernization, at least in terms of the schedule for the programs that we are delaying in the out-years.

Senator REED. General Mills, do you have any comments?

General MILLS. Sir, I would add that our program and our plan for modernizing especially the JLTV and the ACV area require a plan for us to buy them sequentially. Any delay to either of those programs could affect our ability to do that. So it is one that we are very concerned about and one that we are watching very carefully. Again, affordability is a major factor in both of those programs. The sequential buy and the interaction between those two programs is critical to our strategy, and so the impact could be substantial.

Senator REED. Let me ask you a question, General Mills. I understand currently the Marine Corps has about 1,000 AAVs, which is the workhorse that gets marines from ship to shore. When you were doing the EFV, because of costs and other factors, I think you were down to a number of about 360. That was the planned buy. That would equip about four infantry battalions, not presumably 10 or so battalions you could equip now with the AAV.

As you go forward with the new vehicle, the ACV, what is your target in terms of how many vehicles you want to procure? Then how does it relate to some of the other purchases? For example, you also have on the boards a Marine Personnel Carrier (MPC), which is a wheeled vehicle. You are sharing costs with the Army with the JLTV. Is there a priority? I say this in the context of, when you look out at the money situation, even in the best of circumstances, it is not going to be as robust as we might have thought 4 or 5 years ago. Do you have to make a tough decision and say, "well, we only can afford the appropriate number of ACVs and then the others will be slipped." How are you going to deal with this whole vehicle mix?

General MILLS. Sir, the ACV is the Commandant's number one priority for ground modernization, and so that is the crown jewel in our program. Of course, it does impact our other lift requirements, and we have looked at those very carefully and studied them very carefully. The MPC is probably an excellent example of that. Although that is something we would like to have, we feel at this point in time we just simply cannot afford it. So we have pushed that requirement further out into the out-years to be perhaps resurrected at a later date.

We have taken a look at the number of ACVs that we would need, what our lift strategy would be to move forces from ship to shore. We have looked at the mix between aircraft lift and surface lift. We have looked at alternate means of moving forces once they get ashore. We feel we have arrived at a requirement to lift about six battalions of forces by ACV, and that is the number that we are looking at.

We have also, of course, developed a bridging strategy until that vehicle is able to be fielded, and that is to selectively sustain a number of our AAVs, our amphibious tracked vehicles, which are in the fleet right now. Between 350 and 400 of those vehicles will undergo some sustainment work. They will become more survivable by increasing the protection on the floor, by putting in new blast seats that make it more survivable for the marines who ride inside of it, and some work on the power trains to be able to lift that extra weight and move it.

So we see that as a bridging strategy until our new ACVs are able to be fielded some years from now, but we think that we have a plan, again, to maintain that core capability of moving marines in a self-deployer from ship to shore, move seamlessly beyond the high-water mark, continue on to the objective, and provide the marines inside with an acceptable level of protection.

Senator REED. Let me ask you another related question. The present AAV is designed to carry at least a squad of marines to the beach. When you look forward to the new ACV, is that going to

maintain that same unit integrity of a squad or are you building a smaller vessel, or what are your plans?

General MILLS. Sir, what we anticipate is sometime in the October timeframe getting back the additional study from industry which will tell us the trade space that we have. We understand there will be some trades between affordability, number of marines you may have to lift inside of it, high speed in the water or not high speed. So the number of marines that will be lifted ashore is one of those areas in which we look at possible trade space. Unit integrity is critical to us, obviously. Lift capability to bring the right supplies ashore and be able to sustain those forces once they are on the beach. All those are factors that we will have to look at when we decide what it is that vehicle will finally be able to do.

Senator REED. Thank you.

For the members' information, we are doing 7-minute rounds and we will entertain a second round.

I hope, General Mills, I asked hard questions because as General Flynn pointed out at his retirement, I asked too easy questions and he was hoping that the Commandant would be here rather than you so I can ask harder questions. So I hope I have not disappointed General Flynn.

General MILLS. Sir, I failed to thank General Flynn for making that comment.

Senator REED. You should thank General Flynn.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

It is nice to see you again, General. You mentioned the last time we were together was in March—we had a delightful meal of unknown ingredients at the Governor's residence, and how you survived all those meals is a testimony to your iron constitution, I must say. [Laughter.]

Secretary Stackley, we are still budgeting on the proviso that sequestration will be repealed. Is that correct?

Mr. STACKLEY. Yes, sir. The 2014 budget request did not include an impact associated with sequestration.

Senator MCCAIN. Do you think at some point, as the weeks go on, that maybe we should prepare for that contingency?

Mr. STACKLEY. Yes, sir.

Senator MCCAIN. I would imagine that decision is somewhat above your level, but would you not think logically we should start at least preparing a budget which would take into consideration the lack of repeal of sequestration? I say this because I think it might motivate Members of Congress and the American people to understand how devastating the effects would be.

Mr. STACKLEY. Yes, sir. Secretary Hagel, back around the March timeframe, launched what he referred to as a Strategic Choices and Management Review (SCMR) to do exactly that, to take a look at the longer-term impacts associated with sequestration commencing in 2014 and beyond.

Senator MCCAIN. But there has been no formal notification or inclusion of Congress in those deliberations. Again, I hope that we would make the American people aware of the effects of another, I believe, \$52 billion reduction in defense spending. Is that correct?

Mr. STACKLEY. Yes, sir.

Senator MCCAIN. So we have already, in the short-term, curtailed training for nondeploying forces, General Mills, and obviously it takes time to recover from the impacts of training. How concerned are you, and who would bear the brunt of this additional risk in your view?

General MILLS. Sir, the Commandant is very concerned about the readiness, of course—number one—of our deploying forces, but equally with all marine forces. As we are a crisis response force, we have to have forces ready to deploy immediately, not necessarily being able to plan that ahead of time. I think that you can see that somewhat in the deployment of our special purpose Marine Air-Ground Task Force that recently deployed to Europe in order to cover any contingencies that arise on the northern rim of Africa, again an unplanned deployment, but one in which the Marine Corps had to be ready to do and which, I think, we did in a very timely and very efficient, professional manner. Those forces today, I believe, are on alert for possible use somewhere in that area. So we are very concerned.

I think the first impact you probably would see in readiness would be in our aviation communities. Those are skill-sets that deteriorate very rapidly which require constant refresher training. I think the ground forces perhaps might have a little more lag time to maintain their high state of readiness. As you begin to see parts, as you begin to see maintenance pieces fall out of the budgets, I think that that would have a direct impact on our ability to deploy forces. So it is a concern.

Senator MCCAIN. As far as the ACV, for which the budget requests \$137 million and follows the failed EFV, what are we doing different this time, General?

General MILLS. Sir, I believe what we are doing different this time—first of all, we are drawing from the lessons learned from that previous program, which are substantial.

Senator MCCAIN. A \$3 billion lesson.

General MILLS. I think those lessons have been applied directly to the partnership that you see today between industry and the developers down at Quantico who are looking now at a series of capabilities, and those capabilities, I think, include high water-speed will be weighed carefully for affordability and for trade space so that we understand what we are giving up if, in fact, we want to achieve the high water-speed. So I think certainly the number one lesson I can say we drew from there is that we have to balance high water-speed against the other capabilities we want out of that vehicle and ultimately against the affordability of the individual vehicle but also of the entire program itself.

Senator MCCAIN. When you look at the costs of the high speed in the water issue, in retrospect, it is just nonsense. Who was the contractor on that system, do you know?

Mr. STACKLEY. The prime contractor for the EFV program was General Dynamics, one of two defense contractors that have the ability to manufacture track vehicles.

Senator MCCAIN. That is one of the problems.

Secretary Stackley, today I understand that Secretary Hagel plans to announce this afternoon that DOD will furlough about 800,000 civilian employees to pay for the budget cuts under seques-

tration for 11 days. Assuming that is going to happen, which is what reports are, what will be the impact of furloughing the civilian employees on Marine Corps and Navy depot operations, and how does that—maybe General Mills can weigh in on this—impact fiscal year 2014 readiness? How long would it take the Navy and Marine Corps to recover from this decision?

Mr. STACKLEY. Yes, sir. Let me start by discussing what the impact of the furlough would be on the depots. Notionally, the furlough would be a day-per-week furlough for the period of time that the Secretary would be announcing. If it applies to the depots—and I do not know that at this time—then 1 day a week the depots would be shutting down or curtailing their operation, and there would also be an impact in terms of their ability to work overtime. So there is the direct impact of a day-for-day loss of work plus the impact of lost overtime opportunity for dealing with throughput at the depots.

Today at the depots, we are dealing with the workload associated with planned maintenance and also the workload associated with reset as hardware comes back from the theater. So we are rising in terms of the workload at the depots, reaching towards a peak in the 2014 to 2015 timeframe, and this would stall that ramp-up.

Senator MCCAIN. General Mills, do you have a comment?

General MILLS. Sir, I have to concur with what Secretary Stackley said. It would have a ripple effect. Right now, the Marine Corps plan is to reset the force in stride by fiscal year 2017, and that depends on our depots being able to provide that very vital maintenance work and that refit work. So it would have a definite impact on our ability to reset the force and, again, would have a ripple effect, I believe, on readiness in the out-years.

Senator MCCAIN. Just as a comment, Mr. Chairman, is it not true that with all this equipment coming back from Afghanistan, the load on these depots is dramatically increased? Is that not true, Mr. Secretary?

Mr. STACKLEY. Yes, sir.

Senator MCCAIN. Thank you, Mr. Chairman.

Senator REED. Thank you, Senator McCain.

Senator Kaine.

Senator KAINE. Thank you, Mr. Chairman.

To the witnesses, welcome.

You might have mentioned this, but I just want to pin it down. I think we are expecting a report from Secretary Hagel in early July, around the 1st of July, to the committee on sequester effects compared to the fiscal year 2014 request. But if the annual is about \$52 billion in terms of reduced defense expenditure, what are you expecting that to be in terms of an allocation to the Marine Corps?

Mr. STACKLEY. Senator, that is exactly the type of review that is going on right now inside of the SCMR. We are trying to not have a strict Service-by-Service allocation but really take a step back and take a look at the capabilities, the operations, and the priorities across DOD, with input from the combatant commanders in terms of how to best deal with reductions to the budget.

If you just assumed an across-the-board cut the way sequestration was applied in 2013, then in terms of Marine Corps procurement, for example, you would be looking at about a \$200 million

to \$250 million reduction, and when you overlay on top of that the impact to R&D, now you are north of \$300 million. If you look at what we refer to as blue-in-support-of-green, which are Navy dollars that go towards Marine Corps programs such as aviation and amphibious shipbuilding, then you quickly go north into the billions.

Senator KAINÉ. So just on the procurement account—and straight line is not likely what you are going to recommend, but if it was about \$200 million to \$250 million, that is out of a \$1.3 billion request in the fiscal year 2014 budget. Potentially 25 percent of the procurement request could be reduced if we were to apply the sequester on a straight-line basis.

Mr. STACKLEY. For planning purposes, we are taking a nominal 10 percent number and then looking at iterations off of that up and down.

Senator KAINÉ. Just a decisionmaking thing that you have had to recently go through was a decision that you would not retrograde a lot of the Mine Resistant Ambush Protected (MRAP) vehicles back from Afghanistan. Could you just share the decisionmaking on that and how that is a mixture of either modernization and analyzing what capacity you need versus the budgetary realities of the cost of retrograding and how the Marine Corps reached that decision?

General MILLS. Sir, regarding the MRAP, we procured a little over 4,000 of them. We did an extensive study to decide how many we wanted to retain as a capability because it is a rather unique vehicle and it does have some limitations on it. That study was completed this summer. We decided that we were going to retain about 1,200 of them. Those would be refitted and they would be spread-loaded at various places both in our preposition stocks, both ashore and afloat, also out to our operating forces for missions such as route clearance and explosive ordinance disposal work. Some would be retained at our various training locations in order to ensure that our mechanics and drivers were able to train on the actual vehicle itself. So a very rigorous study was applied, in which we decided that a little over 1,200 was probably the number that we could afford and we wanted to retain.

Senator KAINÉ. The plan would be to leave the remainder in Afghanistan and try to allocate them to our partners there as best as we can?

Mr. STACKLEY. Sir, the MRAP retrograde is much larger than the Marine Corps, obviously. So across DOD, with the Army being the heavyweight in terms of numbers, we are still working through the details of how to best retire the vehicles that are not going to be put back into service. There is an in-theater piece to it, but then the large numbers—we are still going to have to be bringing these back to the States.

Senator KAINÉ. We had some testimony recently about the size of the retrograde budget, and I think General Amos or General Paxton said that the Marine Corps will need about \$3.2 billion in Overseas Contingency Operation funding to retrograde the equipment that it wants back. How would the sequester likely affect that effort?

Mr. STACKLEY. One of the issues that we are dealing with right now in 2013, dealing with impacts associated with sequestration, is retrograde and its effect on—again, it is not a Service-unique issue. It is a force-wide issue—our ability to retrograde from Afghanistan. So it is having a very direct, very real impact, and Congress will be seeing some of those effects when we talk about reprogramming later in fiscal year 2013.

Senator KAINE. Senator McCain asked a question that was about the effect of sequester on readiness, and, I think, General Mills, you indicated that you might see it sooner on the aviation side than on the ground side. Or maybe it was Secretary Stackley. How about in terms of the procurement side? What is likely to feel the most direct effects? Or I guess the reverse way to ask it is what priority on the procurement side will you protect against sequester, and then what is most vulnerable to sequester on the procurement side. Is it aviation or other assets?

Mr. STACKLEY. It is not going to be aviation versus ground vehicles versus shipbuilding. We have to look at the balanced force capability. I will tell you that shipbuilding is a priority for the Secretary of the Navy, and so we are going to be protecting that in the budget process. General Mills described that the ACV is a priority for the Commandant. So when we look at the mix of vehicles between the JLTV, the improved AAV, and the development of the ACV, we are going to keep the ACV on track to the extent possible even within a sequestered environment.

Then the other top priority for the Marine Corps is the STOVL version of the JSF. That is going to have to—not simply earn its way—hold its place in the budget as it continues its development. So it is keeping the development on track, and that is a priority inside of the JSF program is keeping the funding for the development, but then performance inside of that development and test regime of the JSF STOVL version will be the other priority for the Marine Corps.

Senator KAINE. One last question moving away from the budget is in the discussion about the pivot to Asia. As you look at modernization programs, how does a more primary focus on Asia affect the strategic decisions about what kinds of platforms to procure on the procurement side?

General MILLS. Sir, again, the pivot to Asia, when you look at the Pacific, you are struck by the vastness of the maritime and the ability of our forces to operate from ship to shore. So we are very carefully looking at, as we modernize, to ensure that everything that we get is able to fit very nicely with our Navy counterparts' plans as they look at shipbuilding, look at what the new ships are going to look like, their capabilities, capacities, and again to ensure that the Marine Corps remains the expeditionary crisis response force able to respond anywhere when the country needs it. So we are looking very hard at those kinds of things. So if you look at vehicles like the MRAP, which are not very expeditionary, and, of course, look at the JLTV and the ACV, which are critical to our expeditionary capabilities, those again are the programs that we want to protect, programs we want to continue, and the ones that are very important to us as a Corps and as an institution.

Senator KAINE. Thank you, Mr. Chairman.

Senator REED. Thank you.

Senator Ayotte.

Senator AYOTTE. Thank you, Mr. Chairman.

I wanted to follow up with last May 10, 2012, before the implementation of sequestration, there were many of us asking questions as to what to anticipate on the impact. General Dunford testified before the Senate Armed Services Committee, I believe on the subcommittee, that if you look at the personnel end—now, I understand that is exempt right now in terms of Active Duty—that if we were to cut 10 percent from the Marine Corps, it would end up being an 18,000 troop cut and that, in his view, it would not allow us to meet a single major contingency operation. That really stuck with me because the notion that we would have—if we just took it from the troop side, that we would have a Marine Corps that could not respond to a single major contingency operation.

Can you help me understand that testimony in light of—we are all sitting here today on sequestration, but this thing continues for 10 years. Is there an assumption that in those 10 years we will continue to exempt the troops from that in terms of force structure and end strength? If that assumption does continue, if you think it will continue, if sequestration is the new norm, then what will that mean? I am assuming if we do not take it from the troop end, General, that if we send the troops in there, it has to be taken from somewhere, and then they do not have the equipment and/or the training.

So I wanted to bring that statement to your attention again and get a reaction to it because to me, it was quite striking at the time.

General MILLS. Thank you, Senator.

Of course, the Marine Corps has been looking for the past several years at what size will we be following the wars in Afghanistan and Iraq, and we have put substantial effort into several studies designed to balance the requirements that the Marine Corps faces, along with what can we actually afford to—how big can we afford to be and what can we afford to have those marines equipped with.

Currently, we are looking at a force of 182,100. That meets the requirements, we feel, with some risk across the board. Everything from, of course, the entire range of military operations. Everything from humanitarian assistance to a major contingency operation somewhere in the world. We continue to look at those numbers. Personnel is our largest expense. It is expensive. But we need to have marines, obviously, and we need to have the units manned to proper strengths. The Commandant has been very adamant that he does not want to build a hollow force, hollow either in the number of marines who are manning the fighting holes or the equipment that those marines have with which to operate.

So it is going to be a balance, no question about it. The challenge will be to make those balances between equipping the force, training the force, and manning the force, and one which we will put an awful lot of effort into.

Senator AYOTTE. General, I appreciate that.

I think what we need to understand here is—and if you cannot answer this today, I would like us to take it for the record. If last year, when General Dunford said that the impact of sequestration would be that the Marine Corps could not respond to one single

major contingency, that is the kind of thing that keeps me up at night. So if that is where we are, meaning if we continue on this path, whether it is because we have to reduce end strength and/or because we have to diminish the training and the equipment that our men and women in the Marine Corps need, I would like to know what your view is of that statement now, if it has changed and/or what the implications are going forward.

I just think that it is really important because there is an operating assumption around here that, sure, maybe it is all okay, and I think it is important to understand what that does to the investment in our Marine Corps going forward. We ask you to go in first, and if we do not have a robust, prepared Marine Corps, then that is a big problem for our country.

So if that is something you want to take for the record, that is fine, or if you can answer it now, I would appreciate it.

Mr. STACKLEY. Senator, the only thing I can add at this point is I come back to the SCMR. That is the task before this group which looks across the Services, across the strategic defense guidance, overlays what does a \$52 billion hit look like in terms of, first, what can we get out of, call it the cost of our doing business, call it efficiency, what have you. Then for the balance of that reduction, what are the impacts to keeping things balanced, the size and shape of our force, and the readiness of that force in terms of their training, their maintenance, the wholeness of their equipment, and then the operations that can be conducted and then prioritize. So, frankly, it is a somewhat daunting task that we are trying to complete in the course of the balance of this spring before we can come forward to Congress with some findings.

Senator AYOTTE. So just as a follow-up for both of you, we will give you General Dunford's statement and you can let me know whether that statement still stands because this is a shocking statement and it is really important that we understand that.

[The information referred to follows:]

Additional information regarding this request was provided to Senator Ayotte.

Senator AYOTTE. I do not have a lot more time, but I want to ask you about this G/ATOR program. I want to ask you about the trailer-mounted radar system. Having read the Government Accountability Office (GAO) report from March 2013, my jaw dropped really when I looked and I saw a 145 percent increase in R&D, an 87 percent increase in procurement costs, a 101 percent increase in total program costs, a 126 percent increase in unit costs, and a 100 percent increase in acquisition time. So can you help us? When we are talking about sequestration, this to me seems like a 126 percent increase in unit costs—how can we justify that to people back home? Can you tell me what is happening with this particular procurement program, the G/ATOR?

Mr. STACKLEY. Let me first describe that the numbers that you are quoting from GAO—I am looking at the baseline for G/ATOR, and I do not arrive at those types of numbers. I am looking at a 13 percent increase in the current costs over the original baseline, and I can provide you the backup data that goes with that.

G/ATOR has been an extremely strongly performing program over the course of about the last 3 years as we have been com-

pleting its development, and today we are taking production representative units out in the field and demonstrating its performance. So it is meeting its performance targets.

It is about 13 percent over the original baseline, but to the current baseline, it has been 5 percent or less above that developmental baseline. The efforts to reduce its procurement costs—we were able to go to a new technology, referred to as gallium nitride, for the system, and by combining that shift in G/ATOR, along with other radar programs that are all moving to gallium nitride, we are able to bring down its unit cost in production in the out-years as well.

Senator AYOTTE. I see my time has passed, but I am holding the GAO report right here. I took these percentages right from it. So I certainly would like to have a follow-up.

Mr. STACKLEY. Yes, ma'am.

Senator AYOTTE. If we can get it today, I will submit a written question to get a follow-up answer on this because it does not make sense to me with what I read in the GAO report.

Thank you.

Mr. STACKLEY. Yes, ma'am.

[The information referred to follows:]

March 2013

**DEFENSE
ACQUISITIONS**

**Assessments of
Selected Weapon
Programs**

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Contents

Foreword	1
Letter	3
Observations on the Cost Performance of DOD's 2012 Major Defense Acquisition Program Portfolio	5
Observations from Our Assessment of Knowledge Attained by Programs at Key Acquisition Junctures	19
Observations about DOD's Implementation of Key Acquisition Reform Initiatives and Program Concurrency	30
Assessments of Individual Programs	36
How to Read the Knowledge Scorecard for Each Program Assessed	38
Two-Page Assessments of Individual Programs	
AH-64E Apache Remanufacture (AH-64E Remanufacture)	41
AIM-9X Block II Air-to-Air Missile (AIM-9X Block II)	43
Air and Missile Defense Radar (AMDR)	45
AN/TPS-80 Ground/Air Task Oriented Radar (G/ATOR)	47
BMDs: Aegis Ballistic Missile Defense Standard Missile-3 Block 1B	49
BMDs: Ground-Based Midcourse Defense (GMD)	51
CH-53K Heavy Lift Replacement (CH-53K)	53
DDG 1000 Zumwalt Class Destroyer	55
E-2D Advanced Hawkeye (E-2D AHE)	57
Evolved Expendable Launch Vehicle (EELV)—Atlas V, Delta IV	59
Excalibur Precision 155mm Projectiles	61
F-22 Increment 3.2B	63
F-35 Joint Strike Fighter (JSF)	65
Family of Advanced Beyond Line-of-Sight Terminals (FAB-T)	67
Gerald R. Ford Class Nuclear Aircraft Carrier (CVN 78 Class)	69
Global Positioning System III (GPS III)	71
GPS III OCX Ground Control Segment (GPS OCX)	73
HC/MC-130 Recapitalization Program	75
Integrated Air and Missile Defense (IAMD)	77
Integrated Defensive Electronic Countermeasures (IDECM) Block 4	79
Joint Air-to-Surface Standoff Missile Extended Range (JASSM-ER)	81
Joint High Speed Vessel (JHSV)	83
Joint Light Tactical Vehicle (JLTV)	85
Joint Precision Approach and Landing System (JPALS) Increment 1A	87
Joint Tactical Radio System (JTRS) Handheld, Manpack, and Small Form Fit (HMS) Radios	89
KC-46 Tanker Modernization Program	91

Common Name: G/ATOR

G/ATOR Program

Technology Maturity

According to the program office, all six critical technologies are approaching full maturity. Program officials state that the maturity of these critical technologies is to be further demonstrated during the ongoing developmental testing, scheduled to end in February 2013, and during four upcoming operational assessments scheduled to begin in March 2013. The program expects these technologies to reach full maturity upon completion of this testing. The active electronic scanned arrays of the initial G/ATOR production units will use gallium arsenide in the transmit/receiving modules. The program plans to incorporate modules using gallium nitride after the cost, development, and reliability risks of those modules are retired. Currently, the program anticipates saving as much as \$500 million from this change in modules, according to the program manager. It is also anticipated that the module change will lower G/ATOR weight and power demand.

Design Maturity

The design is considered mature, with 100 percent of design drawings released, and a system-level prototype is being tested. The contractor is assuming a 5 percent increase in total drawings between now and the completion of production.

Initial plans to integrate the G/ATOR onto a High Mobility Multipurpose Wheeled Vehicle were abandoned when the weight of additional armor for the vehicle combined with G/ATOR exceeded the limits of the chassis and drive train. As a result, G/ATOR will now be towed by a Medium Tactical Vehicle Replacement truck. This truck cannot be moved by helicopter, which limits the expeditionary capability of the system.

Production Maturity

Low-rate production for G/ATOR is scheduled to start in 2013. Prior to the program's designation as a major defense acquisition program, plans called for producing 81 units to achieve a one-for-one replacement of the legacy radars. Based on the increased capabilities of G/ATOR over the legacy radars it's replacing, as well as other factors, quantities were reduced to 64 in 2005, and to 57 units currently. According to the program office, this reduction will save between \$2 billion and \$3 billion

over the life of the program. In addition, multiple areas of production are being evaluated to further lower production cost.

Other Program Issues

In 2005, G/ATOR began development and was designated as an acquisition category (ACAT) II or non-major defense acquisition program. As a result of increased cost the program was re-designated as a major defense acquisition, or ACAT I, program in October 2011.

Performance requirements for the G/ATOR have increased. Initially the program had five key performance parameters, but has now increased to 16. Program officials do not see this as a challenge since they see the increase as more of a clarification of performance required rather than an increase in requirements.

As requested, we reviewed whether individual subcontracting reports from the prime contractor for the program were accepted on eSRS. The government uses subcontracting reports on eSRS as one method of monitoring small business participation. As of December 2012, eSRS indicated that the associated subcontracting report for G/ATOR's one contract has not been accepted.

Program Office Comments

According to the program manager, in 2009, the U.S. Marine Corps and the Assistant Secretary of the Navy for Research, Development, and Acquisition acknowledged G/ATOR's emergent cost and schedule growth, and the program was rebaselined in 2010. Since then G/ATOR has remained on schedule, and total estimated program cost has come down. Also, in commenting on a draft of this assessment, the program office provided technical comments, which were incorporated where deemed appropriate.

Senator REED. Thank you, Senator Ayotte.
Senator King.

Senator KING. General, I want to step away a minute from procurement and talk about strategy. We are talking about the Pacific. We are talking about amphibious. The Benghazi situation taught us that timeliness of response is important. During that week that that event occurred, there were 31 different demonstrations around the Muslim world, 5 different attacks. This is going to be a part of the future, I am afraid. Do you have a strategy or think about

rapid deployment of small numbers of people as opposed to taking a beach in a more concentrated kind of way?

General MILLS. The Marine Corps has always been and continues to be the crisis response force, and one of the pillars of that strategy or ability to do that is our ability to be forward-deployed and therefore being able to be repositioned close to areas of crisis as they develop and, furthermore, being able to linger in those areas for a substantial period of time and to be able to provide the decisionmakers back here in Washington time to decide what it is they want to do about that particular crisis. So that is why we stress the importance of the Marine Corps being expeditionary, being forward deployed, being aboard ship, having the means to move ship to shore, to put only the force necessary on site and be able to sustain them if they need to stay there, and to provide the forces that are afloat with a wide range of capabilities so they are able to operate across the entire realm, or whether that crisis happens to be something like Benghazi or whether that crisis is a hurricane or a tornado that has struck a particular area, or a humanitarian disaster, any sort of crisis we might want to be able to use our forces to respond to.

We believe the value of our amphibious forces is that you can reposition. You can get it to the crisis location. It is not locked down to one particular location and, therefore, too far away or too many hours away to be able to respond credibly. We think that that just shows the value of the Marine Corps to the country.

Senator KING. Do you think we are adequately forward-deployed now? If so, why could we not get people to Benghazi?

General MILLS. The Marine Corps maintains three forward deployed amphibious forces at any one time. One comes off the east coast of the United States, and one comes off the west coast of the United States, and one is based in Japan. Currently, all of them are busy within the U.S. Central Command (CENTCOM) area of operations.

Senator KING. I would point out none of those geographic areas are anywhere near where all of these demonstrations took place.

General MILLS. True. I had the privilege of being able to command the 24th Marine Expeditionary Unit out of Camp Lejeune, NC, back in the late 1990s and early 2000s. Then our routine stops were all in the Mediterranean. We made a round robin, if you will, of the Mediterranean, operated there nearly exclusively. However, a good example again of the value of those kinds of forces is that in 2003, when the fight in Iraq started, we moved through the canal, went down to the Red Sea, and we actually landed and participated in the operation ashore.

So a long answer to a short question. The fact is, that the value of those amphibious forces, had they been moved, they could have been positioned in the Mediterranean perhaps if that is where the decision was made where they were needed most. At this time they are in the CENTCOM area of operations conducting operations.

Senator KING. Changing the subject, on the ACV, I think the chairman testified that there were \$3 billion spent before that program was terminated. That is an awful lot of money. Should we not have a trigger that tells us before we get to \$3 billion that it ain't gonna work?

Mr. STACKLEY. Yes, sir. The program that was terminated was the EFV. A long history to that program. The demonstrator for the EFV dates back to the late 1980s/early 1990s, followed on by a down-select to a sole source development effort that proceeded through the 1990s and into the 2000s to develop the technologies that would go with the complex task of a high water-speed armored vehicle.

The program did incur what is referred to as a Nunn-McCurdy breach where it exceeded its original baseline cost by greater than 25 percent. That was in the 2006 timeframe. At that point in time, the program was restructured. The cost estimates were stabilized, and the program went into what is referred to as a reliability growth effort to get the reliability numbers up where they needed to be.

The decision to terminate the program in 2011 was driven by two parts. One was the unit cost had grown, at that point in time, to a \$16 million to \$17 million vehicle, which was beyond the reach of procurement in the Marine Corps. It would have pushed too many other programs out. The other aspect was the operating and support costs. The complexity of the vehicle brought with it a tail—

Senator KING. Excuse me. I am not questioning that the decision was made. I am sure it was made on good grounds. My question is, why did it take \$3 billion to get to the point where that decision became obvious?

Mr. STACKLEY. Frankly, at the point in time the decision was made, it was competing with other priorities in the budget, and the decision was that the price tag for that vehicle, including the operating and support costs, was going to push out too many other priorities and that we needed to go back and revisit the EFV.

Senator KING. What is the difference between the AAV and the proposed ACV?

General MILLS. The program that was canceled? Is that the comparison?

Senator KING. No. The vehicle you have now, the AAV, versus the ACV. What is the difference? What are we gaining in the new proposed vehicle that we do not have in the current vehicle?

General MILLS. A number of things. First of all, the AAV is aging out. It is coming to the end of its life, so we are going to have to look at either replacing it or putting some extensive modernization into it.

Senator KING. Its physical life?

General MILLS. Its physical life, that is correct, just strictly the frame and those types of things.

The difference is going to be mainly in protection. It will be one that jumps right out at you, is the fact that the AAV—it is very susceptible to the improvised explosive device (IED) threat. It is also susceptible to small arms fire. We are going to put more protection on the ACV, as it comes online. We hope, again, as we have said before, to achieve better water speed, higher speed in the water, therefore less time that the marines have to spend in it afloat.

Senator KING. What are we talking about when we talk about water speed? What does the AAV have versus this high speed? Are we talking about 50 knots or 30 knots?

General MILLS. No, no. The AAV right now in the water is probably about 7 knots. The hopefully high water-speed would be in excess of 15 knots.

What does that give you? It gives you several things, less time in the water, as I said, quicker ability to move from ship to shore, your ability to offset the ships to avoid the threat ashore, so you can go further out in the sea because you can move those forces quickly to the beach. Also, it gives you range and ability to bypass perhaps enemy defenses and enemy beaches where you do not want to land, but you have to go other places. So it gives you a fair amount of improvement over the current capability.

Mr. STACKLEY. If I could just add. General Mills described in excess of 15 knots. In fact, for the EFV, we demonstrated the ability to go greater than 25 knots by pushing the vehicle up onto a plane. That becomes critical in terms of the time/distance equation for buildup ashore and also the range at which you would deploy the marines from the amphibious ships.

Senator KING. But that was one of the things that pushed the price up, I understand.

Mr. STACKLEY. Yes, sir.

Senator KING. Thank you, Mr. Chairman.

Senator REED. Thank you, Senator King.

Related questions, I hope, General Mills, you are going to have to take another amphibious operation, training operation, at which you are going to try to establish, I think, where you are, the baseline and what you need, and it goes to the bigger question. I cannot think of a more complicated military operation than amphibious assault. You need to clear the beach with naval gunfire, aviation. Usually you have to bring your own aviation. You have to get our amphibious ships up close but not too close. You have to have assault ships to take the marines to the beach, and you have to have LCACs to bring supplies ashore. Then, of course, you have to have marines ready, able, and well-trained to do that very complicated operation. Another dimension, which has increased, is the precision weapons that a likely opponent might have to engage even a fairly fast moving assault vessel.

So given all those issues and given this budget problem, how do you keep everything synchronized in the sense of you have all those pieces? Because I think one of the concerns we have that has been reflected in a lot of the questioning is something is going to give. You are either not going to get your new assault vessel or you are not going to get the amphibious ships or the amphibious ships will not be the level of readiness that you need. You have training issues we have all talked about. Then you have this new environment where it is going to be awfully difficult to get close to a beach and it is going to be really hard to get on the beach given the weapons systems that even some of the second-tier powers might have.

In the context of this training exercise you are doing, I would just like your comments on that very broad question. Again, thank General Flynn.

General MILLS. Senator, we do several large exercises. We do a number of large exercises every year. Usually in alternate years they are live. In other years, they are virtual, both one on the east coast and one on the west coast so we involve the entire operational Marine Corps in these exercises. I believe the one that you are interested in particularly is Exercise Dawn Blitz, which goes on on the west coast.

All of these exercises, we try to put in both real operational experience but also experiments in how we plan to do things in the future and try things out. They are not just simply dog and pony shows in which we all land in a perfect line from 1,000 yards off the beach. Instead, we use those exercises because they are expensive and they are difficult to set up. We use them to experiment so we can try out new tactics, techniques, and procedures, and new operational concepts and apply those.

For instance, distributed operations is one in which we are putting a lot of effort into in doing our exercises. Those are long inserts usually by air and supported by aviation and using experimental ways to supply those forces once ashore so we can maintain more of our big footprint out at sea where it is safer. We are also pushing the amphibious forces further out to sea, only sending those ships close to the beach that have to go there in order to carry out a particular mission, with the support further out outside threat envelopes. We are looking at energy experiments, for instance, in the way of solar and things like that so we have less of a logistics footprint to take ashore, which saves us in amphibious lift, which saves us in surface transport.

So we use these exercises to take a look realistically at how we would conduct a whole range of operations from low intensity to high intensity against a threat that is real and that is based on good intelligence of what we might see in various places in which we go.

Senator REED. So your operation force would be, presumably, equipped with some of the sophisticated weapons that are available now, and your operation force command structure would operate independently of the blue force, if you will, so that they could react not by script but by the skill of the operation force commander. Is that a fair summary of the concept?

General MILLS. That is an extraordinarily good summary, sir. We want that operation force commander to react in what we call force-on-force, in which he is free to react as an operation force commander might. We want him to do the unexpected, and we want him to thoroughly test if what we are doing is the way it should be done. Sometimes failure can be as valuable as success. That shows you that an idea you have may or may not work out. Better try that out now in peacetime and obviously in a training operation than to find it out on a beach somewhere in the future.

Senator REED. Could I ask you when you conclude and have your results thoroughly vetted—would you be available either in an open or a closed session to come back and let us know about the lessons you have learned, particularly the lessons learned based on trial and error.

General MILLS. Absolutely. That would be great. We would relish that opportunity, sir.

Senator REED. Thank you very much.

Mr. Secretary, let me ask you a variation of the same question, which is how do you keep all these different components at the relatively same level, readiness of forces, amphibious ships, et cetera, particularly given the sheer cost of the F-35B. How do you keep all those things moving forward in this very difficult budget? At what point—I presume it is after you have talked to the Commandant, General Mills—do you decide that we have to step back on this one. We can afford the risk. Can you comment on that briefly?

Mr. STACKLEY. Yes, sir. First, the going in philosophy when we are dealing with this sequestration issue is the last thing we give up as we bring the budget down is the capability that we need. So let us work the entire budget and identify what we can do to reduce our costs before we give up the capability. Then when you get down to the things that add up to force structure is taking a look at the priorities within the program and looking for are there opportunities where things could either be delayed, deferred, descoped without compromising the force's ability to do its mission and then balancing. In the end, you have to keep things in balance.

So you have to do a portfolio management of the program, as opposed to a line-by-line management of the program, to ensure that as you bring things down, you do not untowardly break a part of the kill chain. It is really looking at the kill chain to keep it intact and then understand what does that leave you in terms of your overall ability to perform the missions. So it is really taking a portfolio approach, starting with the rest of the costs, try to bring the cost of doing business down, and then within the portfolio, prioritizing and then making sure you keep it balanced.

Senator REED. Thank you very much, Mr. Secretary.

Senator Kaine.

Senator KAINE. This is a topic that I think may be a little bit beyond the modernization topic, but it has come up. It is the end strength, and then Senator King's questions about Benghazi have reminded me about something. General, you toured me at Quantico a couple months back, and one of the things I did was visit the marine security guard program on base, which is very exemplary.

So the Accountability Review Board (ARB) in the aftermath of Benghazi suggested that one of the things that we needed to do was to bulk up that marine security guard program, I believe, by about 1,000 marines. That was the recommendation. Am I correct about that?

General MILLS. That is correct.

Senator KAINE. Now, I believe that there is a bit of gray area about how that affects the end force, the 182,100 number. Would it be fair to say that the Marine Corps is considering the additional 1,000 marine security guards as additional to the 182,100?

General MILLS. The assumption was that the extra 1,000 marines would not be counted against that 182,100 end strength. Yes, sir.

Senator KAINE. So the current marine security guard program recruits enlisteds into that elite program and trains them, but the working assumption today is that the additional 1,000 would be on top of the 182,100 end force.

General MILLS. That is correct.

Senator KAINE. The training budget for the current marine security guard program I understand is protected from sequester, but I do not believe the Marine Corps' budget request includes funding for an additional 1,000 to come into the marine security guard program. Correct?

General MILLS. That is correct.

Senator KAINE. So even before we get to the question of whether sequester would affect the marine security guard program, even the Marine Corps budget, as requested, does not include funding for the recommendation that we add 1,000 to the marine security guard program.

General MILLS. I believe that is correct. I know there was a question about where that funding would come from.

Senator KAINE. Mr. Chairman, this might be something that might be more for the Personnel Subcommittee, but I am concerned about this. One of my worries about Benghazi and the discussion about Benghazi is that we will spend a lot of time talking about things other than the recommendations that have been made for how we fix the problems that we spent a lot of time trying to dig through and discover. If the ARB recommendations make this, I think, worthy recommendation, a very worthy one, that part of the response should be bulking up the marine security guard program, and yet that is not part of even the budget request right now, it could easily get lost in the shuffle as we talk about other aspects of Benghazi.

I hope that as we move into the full committee markup, that might be something that we dialogue with the Marine Corps about because if they are believing from a Corps perspective that the 1,000 security guards are extra but we on the staff or the Senate side are believing, no, you can find that 1,000 within the 182,100, then we have a serious challenge. We ought to be trying to reach some kind of an accord and be on the same page about it because following the ARB's recommendations, I think is the least that we ought to be able to do to protect against the likelihood of a similar incident in the future.

Senator REED. I think the Senator has made some excellent comments. First, the issue here of whether that increase would come out of the top line of the Marine Corps so it would be a cost to maneuver units and other units of the Marine Corps, I think that has to be seriously addressed.

Second, the primary mission, prior to Benghazi, of the marine security unit was basically to destroy the sensitive information and protect that information. In fact, we lost a marine in Islamabad doing that in the 1980s. That raises the question of do we want a different mission also for the marine security forces.

So I think your point is well-taken and we will pursue it.

Senator KAINE. Thank you. Thank you, Mr. Chairman.

Senator REED. Thank you.

Senator KING, do you have a question?

Senator KING. A comment about sequestration. I can remember being asked last year this time or perhaps in the summer about sequestration and saying, "oh, do not worry. It will never happen. Congress would never do such a foolish thing." I have a feeling now

that we are having a somewhat similar experience of it will never happen again. It is just more of a comment than a question, and I am glad to hear the Secretary is preparing a contingency plan for what happens if.

I would urge you to get that contingency plan or list of what it would mean to us because it will help those of us who want to try to unwind sequestration to have the information of what it will actually mean. One of the problems with the discussion that took place around here in February and March was it was all abstract and nobody really knew what it was going to entail.

Following on that point, it strikes me that the overall impression from this hearing is that we are really in a situation, particularly with sequestration, where readiness and modernization are in competition with each other, and that we are slighting both is what it amounts to. I believe the chairman's comment was we are 50 percent below readiness levels generally across the Marine Corps, and we are also talking about putting aside and slowing down some of these modernization projects. Modernization is particularly important, it seems to me, as we are coming out of Afghanistan and we have an aged force of equipment. We have learned a lot of lessons, and the question is, are we going to have the wherewithal to modernize and upgrade that equipment?

This was a long statement. Now my short question. Am I correct that we are really talking about a competition or a tension between readiness and modernization?

Mr. STACKLEY. Sir, I would say it is clearly a tension. I would not use the word "competition" because we all lose if you have to compete current and future readiness.

The Marine Corps modernization strategy has been very well thought out over the last several years, going from amphibious ships, aviation, and then ground vehicles. So it is a well-constructed plan to hold onto that capability that was defined in terms of two marine expeditionary brigades capability for joint forcible entry operations. Senator Reed's question gets at that capability that is central to the Marine Corps' operations.

So we are very careful in all these deliberations to hold onto that capability which we think the Nation needs as a priority. The deliberations will carry on and the outcome will start to set a path for perhaps there are trades that get made between current and future readiness to hold onto current force structure at some expense of future capability. But we are not there yet. We are not there yet. We are holding onto what we believe are the core capabilities required by the Marine Corps to perform that mission.

Senator KING. General?

General MILLS. Sir, I would agree. There is always a certain tension, I think, in any budget process. I think the Commandant, however, understands the value of the Marine Corps. We are most ready when the Nation is least ready. He has directed the Corps to be ready and we will be ready. If that requires some tradeoffs in modernization, some delays in some programs or perhaps restructuring a few programs, then that is what we will do. But I can assure you the marines who go forward will be ready to go there and to accomplish their mission, properly equipped, properly trained, and fully manned to do that.

We have already begun to make a few of these adjustments. JLTV, for instance. We maintain that program. However, we are also going to care for our HMMWVs and we are going to put them through a sustainment and a reset process that they will be also able to serve out in the fleet. The MPC, which was the third triad of our ground mobility—we have decided to delay that a number of years, again in order to ensure that we can afford those critical pieces of equipment that we need to do our core missions.

We think that the ACV is our number one priority that we have to have. That is what the Marine Corps does. We move from forward-deployed ships. We move ashore. We move seamlessly beyond the high water mark to the objective to conduct operations. To do that, we need that ACV, and so we are going to protect that program.

The JLTV, we think we need that program. The HMMWV showed itself in Iraq and Afghanistan to be very susceptible to the IED threat and the mine threat. The JLTV will have a level of protection substantially better than the HMMWV and will protect those marines and sailors who have to go forward to do the Nation's business.

So although that tension exists, I think we are studying it very hard and willing to accept some risk in some areas, but again, our readiness, our ability to go forward, our ability to do the Nation's business when called upon, will remain sacrosanct.

Senator KING. Again, I would emphasize that we need to hear about the effects particularly of the sequestration because it will not do to have a crisis that we are unable to respond to adequately and then look back and say, "well, we just could not do that because of the lack of funds." You need to tell us now so we can prevent that eventuality.

Thank you, Mr. Chairman.

Senator REED. Thank you, Senator King.

Mr. Secretary, General Mills, thank you for your testimony, and obviously your continued service to the Nation and the Marine Corps and the Navy.

We will keep the record open until next Tuesday, May 21. You may get questions from my colleagues or additional statements could be included. We would ask you to respond to those questions as promptly as you can.

If there are no further questions, the hearing is adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR KELLY AYOTTE

REDUCED CAPACITY FOR CONTINGENCY OPERATIONS

1. Senator AYOTTE. Secretary Stackley and General Mills, on May 10, 2012, General Dunford testified that "If we were to cut another 18,000 we would not have adequate capabilities and capacities to meet a single major contingency operation." Is that still true?

Mr. STACKLEY and General MILLS. At the time General Dunford was asked the question, leaders were deciding how sequestration would be implemented at the Service level. Studies were attempting to determine if cuts should be applied to capacity, capability, readiness, et cetera. Applying a 10 percent personnel cut from 182,000 would reduce the Marine Corps to approximately 164,000—which is a significant reduction. Based on analysis from the Force Structure Review Group and the Force Optimization Review Group, the Marine Corps could respond to a major contingency operation, but at 164,000, it would be an all-in force. This force would

include all Active Duty components supplemented by the Reserve Force. It is important to note that the Marine Corps would not have the force structure to provide additional crisis response or forward presence (e.g., Marine Expeditionary Units) during this evolution. Additionally, when the question was posed to General Dunford, personnel were exempt from sequestration and were therefore removed from the sequestration equation.

GROUND/AIR TASK-ORIENTED RADAR

2. Senator AYOTTE. Secretary Stackley and General Mills, in your joint prepared statement, you discuss the Ground/Air Task-Oriented Radar (G/ATOR). You state that this multi-role radar will improve threat detection, be more deployable, and is intended to replace five legacy radar systems. However, I am concerned about the program's past cost growth and schedule delays. According to a March 2013 Government Accountability Office (GAO) report, between August 2005 and June 2012, the program saw a 145 percent increase in research and development cost (\$364 million to \$893 million); 87 percent increase in procurement cost (\$1.1 billion to \$2.1 billion); 101 percent increase in total program cost (\$1.5 billion to \$3.0 billion); 126 percent increase in unit cost (\$24 million each to \$53 million each); and a 100 percent increase in acquisition time (66 months to 132 months). Why has the program experienced a 126 percent increase in unit cost?

Mr. STACKLEY and General MILLS. Provided by the Assistant Secretary of the Navy (ASN) for Research, Development, and Acquisition (RDA) in his letter to Senator Ayotte dated May 22, 2013, excerpted below:

During my testimony before the Seapower Subcommittee of the Senate Armed Services Committee on May 14, 2013, you raised a concern regarding a recent GAO report outlining cost growth exceeding 100 percent in the AN/TPS-80 G/ATOR Program.

In my response, I cited much better performance and indicated an inconsistency in our respective data. In fact, I was incorrectly referring to the program baseline at the time it was designated as a Major Defense Acquisition Program as the "original baseline." Your concern for G/ATOR cost growth is wholly warranted as it relates to performance prior to the program being restructured in 2009.

In order to correctly address your question, I believe it is important to review the G/ATOR program performance history. Subsequent to program initiation in 2005, G/ATOR performance requirements were revised to provide better force protection for the host vehicle which resulted in the necessity to redesign the system. Cost growth associated with this decision had become irreversible in the 2009 timeframe at which point the program was restructured. At that time, a revised program baseline was established and one of the Department's finest program managers was hand-selected to take over leadership of G/ATOR's further development. Since then (March 2010), the program has performed exceptionally well and is currently experiencing an overall 15 percent cost reduction to that baseline.

(In millions of dollars)

Fiscal Year 2013	As of 08/2005	As of 03/2010	As of 06/2012	Percent Change from 08/2005 to 06/2012	Today 05/2013	Percent Change from 03/2010 to Present Day
Research and development cost	\$364.3	\$1,016.0	\$893.0	145.1	\$907.0	-3
Procurement cost	1,141.1	2,423.0	2135.0	86.6	1620.0	-34
Total Program cost	1,508.1	3,439.0	3034.0	101.2	2,911.0	-15
Program unit cost	23.6	49.8	53.2	125.9	47.5	-4
Total quantities	64	69	57	-10.9	57	-16
Acquisition cycle time (months)	66	132	132	100	132	0

It is worth noting that during this timeframe, the Department of the Navy recognized that we had encountered an unacceptable rate of program cost breaches which were attributable to requirements or design change, and we implemented improved governance through a "Gate Review Process" designed to preclude inadvertent cost growth of this nature.

Thank you for the opportunity to clarify the performance of this important program. The program's early performance history was unacceptable. Currently, G/ATOR is on sound programmatic footing, has solid requirements and continues to show improvement in technical maturity. Upon a successful Operational Assessment this fall, I will be reviewing the program for entrance into Low Rate Initial Production. Cost will be a major aspect of my assessment and decision to move forward.

3. Senator AYOTTE. Secretary Stackley and General Mills, I note that the Marine Corps began development of the G/ATOR in August 2005, and as I understand it, we don't expect initial capability until August 2016. Why is it going to take 11 years for the Marine Corps to reach initial capability for a trailer-mounted radar system?

Mr. STACKLEY and General MILLS. The contract was originally awarded in 2005. However, the program was delayed 2 years due to a protest from industry and didn't commence development until 2007. Subsequently, G/ATOR was redesigned to support the improved force protection for the host vehicle (High Mobility Multipurpose Wheeled Vehicle (HMMWV)) thus increasing program cost and schedule. As such, the program was restructured in 2009 and has since maintained all schedule thresholds and is scheduled for a Milestone C this fall with an Initial Operational Capability of 2016. This timeframe is entirely consistent with complex radar development timelines.

4. Senator AYOTTE. Secretary Stackley and General Mills, why has the acquisition time doubled?

Mr. STACKLEY and General MILLS. The contract was originally awarded in 2005. However, the program was delayed 2 years due to a protest from industry and didn't commence development until 2007. Subsequently, G/ATOR was redesigned to support the improved force protection for the host vehicle (HMMWV) thus increasing program cost and schedule increase. As such, the program was restructured in 2009 and has since maintained all schedule thresholds and is scheduled for a Milestone C this fall with an Initial Operational Capability of 2016. This timeframe is entirely consistent with complex radar development timelines.

5. Senator AYOTTE. Secretary Stackley and General Mills, I understand that initial plans to integrate the G/ATOR onto a High Mobility Multipurpose Wheeled Vehicle (HMMWV) were abandoned when the weight exceeded the chassis and drive train limits. Reportedly, the G/ATOR will be towed by a Medium Tactical Vehicle Replacement (MTVR) truck—which cannot be moved by helicopter. This will limit the expeditionary capability of the system—which is, of course, a key comparative advantage of the Marine Corps. Can you discuss these design changes and how they will impact the expeditionary capabilities of this system?

Mr. STACKLEY and General MILLS. To ensure clarity, the problem was not with G/ATOR's weight, rather the increase in curb weight the HMMWV experienced due to the vehicle being up-armored in response to the improvised explosive device threat our warfighters were experiencing in theater. This additional weight diminished the towing ability of the HMMWV required to support G/ATOR. The MTVR is an interim solution until the Joint Light Tactical Vehicle (JLTV) comes onboard. The radar continues to meet the Marine Corps expeditionary needs, as all prime mission equipment can be transported to/around the battlefield by two vehicles, rotary-wing aircraft, MV-22, and fixed-wing support aircraft. Once the JLTV is introduced into the inventory, it will replace the MTVR as the prime mover.

EXPEDITIONARY FIGHTING VEHICLE

6. Senator AYOTTE. Secretary Stackley and General Mills, in 2011, after spending approximately \$3 billion in developmental funding, the Marine Corps cancelled the Expeditionary Fighting Vehicle (EFV) program due to poor performance and excessive cost growth. With the budget challenges our Nation and the Department of Defense (DOD) are confronting, we cannot afford more acquisition failures like we saw on the EFV. What are the key lessons you have learned from the EFV cancellation and how are those lessons informing your work on the Amphibious Combat Vehicle (ACV)?

Mr. STACKLEY and General MILLS. The key lessons are, first, getting the requirements right. The ACV requirements must be established with an understanding of the associated cost and maturity of the technology required to meet them with sufficient available trade space to manage the uncertainty in both.

The second lesson is a realistic assessment of affordability. ACV affordability targets must be established with an understanding of both the opportunity costs and service impacts associated with the trades necessary to hold that target in a dynamic fiscal environment. The Department's "Better Buying Power 2.0" places emphasis on affordability as a requirement and we will approach this acquisition with full consideration of affordability.

The third lesson is early industry involvement to inform the above. This entails a need for greater industry involvement in the early phases of requirements development and material assessment.

While determining affordability will continue to be a challenge in an uncertain fiscal environment, we believe we have developed a more rigorous means of establishing and understanding requirements, particularly the correlation between capability, cost, and technical risks. These relationships serve to drive trade-offs in capabilities necessary to establish achievable affordability targets and manageable program risks while still providing relevant operational value to marine warfighters.

Beginning with the cancellation of the EFV program, we stood up a Systems Engineering War Room that first decomposed, to the component level, the cost of the EFV in order to help us fully understand the cost drivers of that program. We then defined several ACV concepts, with cost information down to the component level, some of which were evaluated in an analysis of alternatives (AOA). The results of the AOA provided insight into potential future capabilities and the cost of those capabilities. It confirmed that mission requirements dictate that the ACV must be a self-deploying amphibious tractor capable of over-the-horizon deployment but it did not specifically address the tactical value of a vehicle capable of moving at high water-speed.

7. Senator AYOTTE. Secretary Stackley and General Mills, does the Marine Corps have preliminary program cost estimates for the ACV?

Mr. STACKLEY and General MILLS. The Marine Corps and the ASN(RDA) established an ACV team which reports directly to General Paxton and Mr. Stackley and is chartered to determine the capability trades, cost, and technical risks associated with the development of an affordable, survivable, high water-speed vehicle. This team, composed of leading technical experts from across the Marine Corps/Navy enterprise, is working in close collaboration with industry to understand the design and cost implications of prospective requirements. This team is also engaging with the operating forces and Marine Corps leadership to establish Service priorities across the spectrum of requirements. The results of these efforts will be used to inform decisions and investments with respect to future ACV capabilities and acquisition plans, the goal of which is to provide the operational capability at the best price possible.

Specific to your question, the Marine Corps is still conducting a material solution analysis to determine the most suitable alternative for this program and the associated cost. We expect to complete this phase of the program in fiscal year 2014 at which time we will be able to provide specific program costs.

8. Senator AYOTTE. Secretary Stackley and General Mills, has the Marine Corps provided those cost estimates to this committee, and if not, when can this committee expect to receive those cost estimates?

Mr. STACKLEY and General MILLS. We have not yet provided cost estimates to the committee but will do so as soon as we have completed our material solution analysis and developed our cost estimate for this program. In the interim, we offer your staff full insights to the process and progress of this important program by way of a full program brief at the ACV war room.

JOINT LIGHT TACTICAL VEHICLE

9. Senator AYOTTE. Secretary Stackley and General Mills, according to recent news reports, Army officials have said the across-the-board sequestration cuts and potential furloughs threaten to delay the JLTV program by an estimated 3 to 4 months. From a Marine Corps perspective, do you also see sequestration and furloughs causing delays in the JLTV program?

Mr. STACKLEY and General MILLS. Yes. JLTV is a joint program, and budget decrements and delays imposed upon the program from any source affect both participating Services. The Joint Program Office is already experiencing schedule delays to ongoing ballistic hull and rolling chassis blast testing, due to sequestration and furlough-related restrictions on workhours directed by the Army Test and Evaluation Command approximately 2 months ago. While current schedule delays will not impact the timely delivery of the Engineering and Manufacturing Development (EMD) phase of the JLTV prototypes in late August, sequestration decrements and furloughs will cause a delay in the start and execution of the program's (Office of the Secretary of Defense/Department of Operational Test and Evaluation) approved Test and Evaluation Master Plan (TEMP), resulting in an estimated schedule slip of 3 to 4 months, and placing the program at a higher risk of a schedule breach. Subsequent sequestration decrements in future fiscal years will have potentially compounding schedule and associated cost implications.

10. Senator AYOTTE. Secretary Stackley and General Mills, how will the delay impact program costs?

Mr. STACKLEY and General MILLS. The Joint Program Office (JPO) is working contingency plans to mitigate schedule delays caused by fiscal year 2013 sequestration cuts and furloughs. If these measures prove unsuccessful, or if additional cuts are levied on the program, the JPO estimates each month of delay increases EMD phase contract costs by roughly \$3 million. In addition, lengthening the EMD phase 14-month test period for the 66 full-up prototypes will also increase the costs of supporting all aspects of the required performance, reliability/availability/maintainability (RAM), and live-fire testing, to include onsite JPO test representatives, test site personnel and equipment, and administrative costs.

ARMY AND MARINE CORPS ACQUISITION COLLABORATION

11. Senator AYOTTE. Secretary Stackley and General Mills, how has the Marine Corps' collaboration with the Army on the JLTV benefited the Marine Corps?

Mr. STACKLEY and General MILLS. From a business perspective, collaboration has enabled the Marine Corps to leverage significant Army fiscal, manpower, and test resources in the refinement of operational capabilities requirements and the research, development, and acquisition of technical solutions to meet those requirements. Long-term benefits for both the Marine Corps and the Army will be realized during the production phase, in that both Services will incur lower average unit costs due to the economies of scale afforded by the combined quantities in the JLTV production rates of Service-common baseline vehicles. These same benefits extend likewise well into the program's sustainment phase as the Marine Corps will be able to leverage the benefits of commonality with the Army.

12. Senator AYOTTE. Secretary Stackley and General Mills, are there any other current or planned acquisition programs where we could achieve economies of scale and save money by developing and fielding the acquisition program jointly?

Mr. STACKLEY and General MILLS. When it comes to requirements, the Marine Corps and the Army collaborate whenever mission profiles converge. We have many joint programs—JLTV being the most notable. A few other joint programs include the Joint Battle Command-Platform, RQ-11B Raven UAS, Tactical Robotic Controller, and Enhanced Combat Helmet (ECH). The Joint Battle Command-Platform is the follow-on to the Force XXI Battle Command Brigade and Below (FBCB2). The Marine Corps is an active participant in this Army program. Both Services have converged to a single, common hardware and software solution that provides command and control/situational awareness to the platform and dismounted user. With the ECH, the two Services will develop a helmet with greater protection against ballistic and blunt trauma at equal or lesser weight to the currently issued helmets (Light Weight Helmet (LWH) for the Marine Corps, Advanced Combat Helmet (ACH) for the Army).

In addition to the many joint programs with the Army, the Marine Corps collaborates with the Army on a myriad of capabilities—from C2, cyber, and force protection, to the HMMWV sustainment program. For example, the Marine Corps has collaborated with the Army on the M16A4 and the M4 Carbine. We have participated with the Army since 2008 in developing the improved carbine requirements and will remain engaged with the source selection process to identify potential candidates to replace the M16A4 and the M4 Carbine Modular Weapon System (MWS). Although the Marine Corps will monitor individual carbine progress, the Service has neither validated a requirement to replace the MWS nor funded a potential replacement. Current Marine Corps efforts and funding are focused on MWS precision, accuracy, and human factors upgrades. The Marine Corps is actively pursuing emerging technologies, such as lightweight materials and ammunition, improved fire control systems, and an integrated approach to the next generation of small arms weapons, optics, enablers, and ammunition.

MARINE CORPS PREPOSITIONING PROGRAM-NORWAY

13. Senator AYOTTE. General Mills, in last year's hearing, you and I discussed the Marine Corps Prepositioning Program-Norway (MCPN). We talked about the need to ensure that the equipment there is fully reconstituted and modernized, as well as properly maintained. Would you please provide an update on the MCPN?

General MILLS. MCPN equipment and supplies are stored in stable temperature and humidity-controlled facilities and undergo scheduled inspections and main-

tenance services. All equipment and supplies are stored at the proper level of preservation to ensure operational readiness and serviceability. Normal modifications, technical instructions, and retrofits are applied during scheduled maintenance services. Corrective maintenance is performed by the Norwegian Defense Logistics Organization on an as-required basis, generally after equipment has been returned from an exercise. In this regard, MCPP-N benefits from an experienced, highly trained workforce and near optimal storage conditions directly attributable to our 50/50 burdensharing agreement with our Norwegian partners. Marine Corps Logistics Command is responsible for overall equipment management for the program which includes, but is not limited to: rotation planning of weapons systems and equipment; conducting quality assurance inspections; readiness reporting; meeting accountability requirements; and support of exercises or crisis response, when required.

The Marine Corps is currently executing a transformation effort designed to enhance relevance of the MCPP-N to geographic combatant commanders, in particular, U.S. European Command (EUCOM) and U.S. Africa Command (AFRICOM). This effort includes development of a new force list and corresponding equipment sets to support that force. This initiative includes addition of communications and ordnance items not previously prepositioned in Norway. Quantities of equipment and supplies currently stored in Norway will also be adjusted to provide a balanced equipment set appropriate to support a Marine Air Ground Task Force manned specifically to support a crisis response. The Marine Corps plans to complete MCPP-N transformation in fiscal year 2016.

14. Senator AYOTTE. General Mills, have the stocks there been fully reconstituted?

General MILLS. MCPP-N is fielded with equipment based on approved acquisition objectives and Marine Corps fielding priorities. Current attainment is 73 percent. Over the course of the next several years, and to maximum extent possible, the MCPP-N will be restocked with equipment that becomes available as a result of elimination of the Maritime Prepositioning Squadron-One (MPSRON-1) and draw-down from combat operations in support of Operation Enduring Freedom. This is essential to increasing attainment levels in Norway and mitigating risk to EUCOM and AFRICOM associated with the loss of MPSRON-1. Though MCPP-N will mitigate this risk to some extent, it is not a substitute for the entire afloat prepositioned capability previously provided by MPSRON-1. The Marine Corps plans to fully reconstitute MCPP-N in fiscal year 2016.

[Whereupon, at 10:47 a.m., the subcommittee adjourned.]

