

**DEPARTMENT OF DEFENSE AUTHORIZATION
OF APPROPRIATIONS FOR FISCAL YEAR
2015 AND THE FUTURE YEARS DEFENSE
PROGRAM**

WEDNESDAY, APRIL 2, 2014

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

MARINE CORPS MODERNIZATION

The subcommittee met, pursuant to notice, at 9:18 a.m. in room SR-222, Russell Senate Office Building, Senator Jack Reed (chairman of the subcommittee) presiding.

Committee members present: Senators Reed, Blumenthal, Kaine, King, McCain, Sessions, and Wicker.

Committee staff member present: Mary J. Kyle, legislative clerk.

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

Minority staff members present: John D. Cewe, professional staff member; and Ambrose R. Hock, professional staff member.

Staff assistants present: Alexandra M. Hathaway and Robert T. Waisanen.

Committee members' assistants present: Carolyn A. Chuhta, assistant to Senator Reed; Karen E. Courington, assistant to Senator Kaine; and Joseph G. Lai, assistant to Senator Wicker.

OPENING STATEMENT OF SENATOR JACK REED, CHAIRMAN

Senator REED. The hearing will come to order. First let me thank Senator McCain and my colleagues for moving up the start time by about 15 minutes. There's a vote at 10 a.m. that I'm very much involved in. The current plan is that Senator King will vote immediately and come over here and the hearing will continue forward. But again, let me thank you all for your presentations and for your presence today.

I want to particularly welcome General John M. Paxton, the Assistant Commandant of the U.S. Marine Corps, and Lieutenant General Kenneth Glueck, the Deputy Commandant, Combat Development and Integration, and Commanding General, Marine Corps Combat Development Command. Thank you, gentlemen, for your presence, for your service, and for your commitment to your marines and to the Nation. Thank you very much.

The Marine Corps has for about 2 years or more been in a transition from an appropriate focus on generating forces to support counterinsurgency operations and stability operations in Iraq and Afghanistan and back to its more historical role of force in readiness, forward stationed, deployed and ready for crisis response. This transition has been and will continue to be complicated by fiscal uncertainty, including sequestration, end strength and force structure reductions, and nagging struggles with combat vehicle modernization based on the interacting challenges of technology and affordability.

Today our witnesses will update us on their efforts to build a globally capable crisis response 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. We understand that, based on its most recent technology studies, the Marine Corps has once again reordered its amphibious combat vehicle priorities. Instead of developing and fielding a new high water speed Armored Amphibious Combat Vehicle (AACV), the marines will accelerate the development and fielding of a Marine Personnel Carrier (MPC).

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 now proposes to sequence its vehicle development and acquisition efforts to meet deployed forces' requirements for armored amphibious and tactical mobility ashore, and at the same time better control the portfolio's affordability.

We must note, unfortunately, that the Marine Corps's painstaking rationalization of its combat and tactical vehicle portfolio is at risk if sequestration as required by the Budget Control Act is triggered for fiscal year 2016 and beyond. No doubt sequestration at any point on the development schedule compounds the challenges to all Marine Corps programs. We'd like our witnesses to address the impacts and risks of fiscal instability in additional years of sequestration, including any extraordinary budget pressures associated with continuing operations in Afghanistan.

Last year I emphasized what I considered the central planning issue facing the Marine Corps regarding the appropriate size and structure of the Nation's armored amphibious assault capability and the mix of armored combat and tactical vehicles and ship-to-shore connectors to support the Nation's defense strategy. Coming off the cancellation of the Expeditionary Fighting Vehicle in 2011 and the affordability tradeoffs made with respect to the cost of the system and numbers of Amphibious Assault Vehicles during the program's development, several questions were raised about the tactical implications of the scope and pace of the buildup of combat power ashore and the risks to mission success.

I remain concerned that substituting wheeled MPCs or Armored Personnel Carriers for amphibious tractors could erode the Marine Corps' amphibious assault capability, the capability that separates the Marine Corps from the other Services of the Nation. I look forward to an update on the fleet mix study, its findings, if any, and continuing our discussion of this issue.

Finally, and related to our interest in the challenges of modern operations from the sea, we observed last year that the Marine Corps has rejuvenated major amphibious exercises that will, so to speak, stretch some tactical muscles that have not been exercised in many, many years. We'd welcome your views on the results of these exercises and what the Marine Corps has learned about joint and combined amphibious 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.

The Nation could not be more proud of what the Marines and their families have accomplished over the last decade and in fact the history of the country. We're deeply grateful and ask you to pass our thanks on to your Marines. Thank you.

Senator McCain.

STATEMENT OF SENATOR JOHN MCCAIN

Senator MCCAIN. Thank you, Mr. Chairman. I will ask to submit my opening statement for the record, given the fact that we have a vote beginning at 10 a.m.

I just would add one caution to our witnesses. The Expeditionary Fighting Vehicle (EFV) was a disaster. I want to make sure that we never repeat a \$3 billion mistake again.

I thank you, Mr. Chairman. I submit my opening statement for the record.

[The prepared statement of Senator McCain follows:]

[SUBCOMMITTEE INSERT]

Senator REED. Thank you very much, Senator McCain.

General Paxton, please.

**STATEMENT OF GEN. JOHN M. PAXTON, JR., USMC, ASSISTANT
COMMANDANT, U.S. MARINE CORPS**

General PAXTON. Thank you, Mr. Chairman. Chairman Reed, Ranking Member McCain, distinguished members of the subcommittee: Thank you for the opportunity to report on modernization investments in your U.S. Marine Corps.

Today, as always, the Marine Corps is committed to remaining as our Nation's force in readiness and a force that's truly capable of responding to any crisis anywhere around the globe at a moment's notice. As we gather here today and, Senator, as we spoke earlier, we have some 37,000 marines who are forward deployed, promoting peace, protecting the National interest, and securing our defense.

To your specific point about examples, sir, we do have 2 MEUs and 6,200 marines over off the eastern coast of Korea right now exercising with our allies and counterparts over there. In addition, there are more than 6,000 marines in Afghanistan who continue to make a huge difference to our Nation, our allies, and the world.

All your marines forward remain well-trained, well-equipped, well-led, and at a high state of readiness. Our readiness was proven last year, and if I may offer you just two examples here, when the Marine Corps displayed agility and responsiveness and saving lives, first in the aftermath of the Super Typhoon in the Philippines in November, and then shortly thereafter when we did a

rescue mission of some American citizens in South Sudan over the Christmas time. Both of these events demonstrate the reality and the obligation of maintaining a combat-ready force that's capable of handling today's crisis today. Such an investment is essential to maintaining our Nation's security and our prosperity for the future.

We fully appreciate that our readiness today and the ability to maintain it in the future are directly related to the innovations and investments we continue to make in the refinement of expeditionary amphibious concepts and the necessity to modernize decades-old equipment. All of this must be accomplished in concert with the fiscal realities that we face and particularly in the Department of Defense budget.

As our Nation continues to face those uncertainties, we're making hard but necessary choices to protect our near-term readiness and also to put the Marine Corps on the best trajectory to meet future defense requirements. I look forward to the opportunity to elaborate on some examples of those choices that we have made.

As we navigate the fiscal environment, if I may, I'd just like to remind of the five pillars by which we grade ourselves for Marine Corps readiness: first and foremost, the recruiting and retention of high quality people; second, maintaining a high state of unit readiness; third, our ability to meet combatant commander demand requirements; number four, ensuring that we maintain appropriate infrastructure for investments; and then number five, keeping an eye towards investment for the future and the capabilities we'll need for tomorrow's challenges.

Sir, just in closing if I may, just three short examples here to highlight how all these pillars are unique to the modernization that we came here to testify about today. First, the Marine Corps has and will source our best trained and most ready units to keep them forward to meet combatant command requirements. In doing so, the Marine Corps will protect readiness today with the realization that our modernization investments may be negatively impacted over the long term. In fact, the Marine Corps has accepted the greatest amount of risk in this particular area. Such tradeoffs portend future risks for us in the costs involved in maintaining long-term readiness.

Second, the Marine Corps, as always, does not man the equipment; we equip the Marine. Therefore, in anticipation of the emerging national security environment, what we call the new normal, and our continued drawdown in Afghanistan, the Marine Corps is continuing to look at how we identify equipment that we will need to best retain, to reset, or to divest.

Additionally, while balancing capabilities and costs, the Marine Corps will continue its look at critical investments and in particular for this committee, sir, the Amphibious Combat Vehicle, the Joint Strike Fighter, and Advanced Radar, to name a few. We will endeavor to posture ourselves so your U.S. Marine Corps is most ready when the Nation is least ready.

Then third and finally, sir, just a reminder that we will continue to be, as always, naval in heritage, naval in partnership, and naval in outlook. We will continue to look at the future, realize that we have to be sea-based, forward deployed naval forces that provide day to day engagement, crisis response, and assured access to the

global commons. So a critical component there is to build, train, and maintain an expeditionary forward presence that is both available and ready on amphibious shipping.

So, sir, if I may, I'll just delay the rest of the oral statement, if I may submit that for the record, sir. I thank you for the opportunity and look forward to the questions.

[The prepared joint statement of General Paxton and General Glueck follows:]

Senator REED. Thank you very much. All the statements will be made part of the record.

General Glueck, please.

**STATEMENT OF LT. GEN. KENNETH J. GLUECK, JR., USMC,
DEPUTY COMMANDANT, COMBAT DEVELOPMENT AND INTE-
GRATION/COMMANDING GENERAL, MARINE CORPS COMBAT
DEVELOPMENT COMMAND, U.S. MARINE CORPS**

General GLUECK. Chairman Reed, Ranking Member McCain: Thank you for the opportunity to testify before you today. The Marine Corps' ability to serve as our Nation's premier crisis response force is due to a large part to this subcommittee's strong support. On behalf of all Marines, I say thank you.

A forward-deployed Marine Corps provides our combatant commanders a universal tool they can immediately employ. This force can serve as a leading edge of a larger joint force or deploy and sustain itself even in the most austere of environments. This ability to rapidly respond to developing crisis not only ensures the combatant commander has the right force in the right place at the right time, but also provides our National leaders valuable decision space.

Flexible and scaleable by organizational design and instinctively adaptive by culture, the Marine Corps is guided by our expeditionary ethos and bias for action. These characteristics are the hallmark of our Corps' capstone concept, Expeditionary Force 21. We have given you a small pamphlet there that kind of highlights some of the information that's in that concept.

Expeditionary Force 21 blends our time-tested concepts of operational maneuver from the sea, ship-to-objective maneuver, sea-basing, with the strategic agility, operational reach, and tactical flexibility that our forward-stationed and deployed expeditionary units provide. Crucial to these capabilities and persistent presence are our amphibious warships. They are versatile, interoperable warfighting platforms capable of going into harm's way and serve as the cornerstone of America's ability to project power and respond to the full range of crises. With embarked Marines, the amphibious ships are the Swiss army knife of the fleet, providing diverse capabilities unlike any other naval platform. They are critical to both our combatant commander's theater engagement strategy and crisis response options, significantly contributing to both regional security and stability. From humanitarian assistance to disaster relief to forcible entry operations, it is the amphibious fleet that answers the call.

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. Long-

term shortfalls in modernization will have a detrimental impact on readiness and degrade our crisis response capability. Sustaining fleets of severely worn and legacy vehicles becomes inefficient and no longer cost effective.

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 capabilities and costs. With the smallest modernization budget in DOD, the Marine Corps continually seeks to leverage the investments of other services to those areas which are most fiscally prudent and those that promise the most operationally effective payoffs.

The future security environment requires a robust capability to operate from the sea and to maneuver ashore to positions of advantage. The Amphibious Combat Vehicle provides us this capability and is our Corps' number one ground modernization priority. It will be procured on a phased approach, thus complementing existing capabilities to maximize both the surface power projection and littoral maneuver. The benefits of this phased effort are aimed at producing an amphibious capability that deploys from greater distances and speeds, thus ensuring greater standoff distances for our forces.

Given continuing advancements in applicable technology, the Marine Corps believes that further investment in these technologies will lead to the envisioned high water speed capability.

Additionally, as part of the systems approach, the Navy-Marine Corps team will continue its investment in the next generation of future connectors. These connectors, with enhanced speed and range, both aviation and surface, will provide future expeditionary force commanders greater flexibility to operate in contested environments. The type of transformational technology that the MV-22 Osprey has already demonstrated needs to be brought to our surface connector fleet.

While the ACV remains the Marine Corps' number one priority, it will be part of a broader acquisition strategy aimed at providing us a mixed fleet of balanced capabilities. This strategy involves retaining and recapitalizing portions of our AAV, MRAP, and HMMWV fleets. We will also address obsolescence issues in our Light Armored Vehicle fleet that are sorely needed to maintain the relevance of this unique platform.

In addition to preserving these legacy systems, we will remain firmly partnered with the United States Army in fielding the affordable Joint Light Tactical Vehicle. The JLTV will greatly enhance reliability and survivability of our overburdened HMMWV platforms.

In addition to our critical investments in mobility, the fiscal year 2015 budget includes a request for the next generation radar, which will replace five of our legacy systems. The ground-air task-oriented radar is a multimode, ground-based, expeditionary radar that provides unprecedented reach, volume, and precision to identify and track both friendly and hostile forces and interfaces with existing naval systems to project land and sea power beyond the littorals.

Clearly, there are challenges in operating in today's new normal security environment, as well as challenges of constrained and uncertain budgets. But rest assured that our forward-stationed and deployed marines are poised to remain our Nation's premier expeditionary response force in readiness. Modernization priorities reflected in the fiscal year 2015 budget are paramount to maintaining future combat readiness and these investments will ensure that our Corps remains most ready when the Nation is least ready.

In partnership with the Navy, the Marine Corps looks forward to working with you to address the issues. Thank you for the opportunity to be here and I look forward to answering your questions.

Senator REED. Thank you very much, General Paxton and General Glueck.

We've been joined by Senator Kane. Thank you.

We'll do 6 minutes and as many rounds as we have time before the vote or after.

Let me begin with a question that we've raised. You're in many respects talking about long-term system development, but you're going to run into by at least 2016 the legal, still legal requirements of sequestration. So how are you managing that in terms of risk, in terms of program development, General Paxton and General Glueck.

General PAXTON. Thank you, Senator Reed. Chairman, within each dollar that the Marine Corps has, unfortunately we're only spending about 8 cents of the dollar on modernization. We're spending about 63 cents on people, about 27 percent on our operations and maintenance, and about 8 cents on the modernization, and 2 percent on sustainment and restoration.

So these are hard choices that we've had to make as we look at not only the current size and capability of the Marine Corps, but what we anticipate that future Marine Corps will be. We had done a rather exhaustive study to try and keep a balanced air, ground, logistics Marine Corps that we can future deploy, and the optimal strength of the Marine Corps remains 186,800, sir. But the Marine Corps that we are bracing for under sequestration is 175,000. That's a Marine Corps that has at least moderate risk, sir, for our OP PLAN and warfighting capability.

So what we are trying to do, sir, as we look at the size of the Marine Corps is to make sure that neither the National command authority nor Congress, we never have to make that hard choice between do you want a well-manned force, a well-trained force, or a well-equipped force. So we're trying to keep that balance, air, ground, logistics, but between manning, training, equipping, as we come down to 175,000.

So that in a nutshell is the way we're looking at sequestration and the negative impacts. We talked earlier with Senator McCain, sir, and we had originally forecasted that we would see significant changes in readiness as of about this time this year before sequestration kicked in. The PRESBUD gave us some extra money. We had some returned unobligated money that we were able to put into readiness, and each of our extra dollars over the last year went into buying back near-term readiness. So we have not seen the immediate effects of that downward spiral, but we still predict

that within about the next 12 to 14 months, with each budget cycle, we will continue to erode.

Probably the most significant and initially the most visible impact on us will be on our aircraft, because we will have aircraft that will be out of reporting. So squadrons that would normally have 12 aircraft, that may have 8 now, could easily go down to 6 and be 45 to 55 percent manned, because there will be a backlog of depot maintenance because of parts and maintenance and people and money. Then consequently the pilots that are in the squadron will have more pilots, fewer aircraft, and we'll see that downward spiral.

So if that answers your question, sir, that's how we're looking at the size of the Corps and the immediate impacts of sequestration.

Senator REED. Thank you.

General Glueck, do you have any comments?

General GLUECK. Sir, I agree with everything that General Paxton said. I'm in charge of ground modernization for the Marine Corps. In the last two years we've had to reduce that by about 25 percent. But we know that we did with a purpose. We're mortgaging some of our capability and development to maintain our current readiness. We're going to go ahead and move ahead on that. Some projects we had to cancel, other ones we've had to curtail.

But it's all in the name of maintaining our current readiness. I would say that, as I was talking with Senator McCain, our Marines that are forward-stationed and forward-deployed like we have today in Ssangyong up in Korea do not feel the impact of this. As far as they know, it's business as usual. It's the forces that are left behind that are feeling the major impact.

Thank you.

Senator REED. Thank you, General.

We mentioned the fact that you're beginning to exercise more, which is a very I think positive development. You're just, as you mentioned, General, about to complete the exercise in Korea. Part of these exercises, you get the results sometimes based upon the assumptions you make. In the very few minutes that I have remaining, in these exercises are you assuming air superiority, close access to the beach, and uninterrupted communications so that electronic systems like GPS work constantly? Because there seems to be capabilities developing worldwide where some of these things that we took for granted 10 years ago might not be the operational environment that you are faced with.

General PAXTON. Thank you, Senator. We never want to assume that. I think invariably when we do exercises you always posit the worst case scenario. In honesty, because we have been doing so much counterinsurgency work in Iraq and Afghanistan and because we have a deficit in the training level both nationally as well as bilaterally and internationally, some of these exercises we have put that in as an example of we'll do periodically. You'll go into MCON, you'll go into NOCOM plans, you will go into a restricted environment of some sort.

But in order to regenerate the capacity and the capability, amphibious and expeditionary, that we haven't exercised for a while, the focus upfront in all candor, sir, is to get back in to do those

nuts and bolts things that we've been away from for 12 years. But we fully realize that both operationally, exercise, and modernization, we have to look at an environment where we'll be denied access, denied communications, things like that.

Senator REED. So at this point we're sort of getting back into the amphibious game, if you will, the basics, getting off the ship, getting on the beach, assuming that you don't have further complicating factors. But your long-term exercise planning recognizes that these emerging threats are there?

General PAXTON. Absolutely, sir, absolutely.

Senator REED. Senator McCain.

Senator MCCAIN. I thank the witnesses.

General Paxton, you have some relief for 2014 and 2015, but without further change sequestration kicks in again, right? One, what is that—how does that affect your planning? And two, what effect would it have if sequestration kicked in again in 2016?

General PAXTON. Thank you, Senator. We fully anticipate the worst case scenario, that in 2016 sequestration will kick in again. As I said earlier, sir, that's why we're planning on a 175,000-man Marine Corps as opposed to 186.8. We expect that we will see aircraft that go out of cycle reporting. We expect we'll have a maintenance backlog.

The net impact, Senator, will be that we will have our units ready to deploy and the next ones on the bench, but then the ones behind that will not be ready, sir. And that'll be a decreasing spiral, in that the equipment won't be ready because it won't come out of maintenance and depots, the training won't be done, whether it's the ground side or the air side, and it will—we'll pay for it in the tyranny of time and the tyranny of distance, sir. We won't be able to get—in the case of a major theater war plan, the two that we look at, the forces will not arrive as fast and they won't be as trained when they get there, and it could result in more casualties and things like that, Senator.

Senator MCCAIN. You know, Mr. Chairman, maybe we ought—it's an issue for the full committee, but maybe we ought to get an assessment from the Chiefs exactly of what the impact of the renewal of the sequestration would have on our military. I think that it would be devastating, obviously.

General Glueck, the GAO identified, recently identified deficiencies with software development in the F-35 that they say could stress its cost, schedule, and performance. Have you taken a look at that GAO report?

General GLUECK. Senator, no, I have not read that GAO report. I know General Schmidle, who's our Deputy Commandant for Aviation, is very familiar with that report.

Senator MCCAIN. Well, I'd like you to take a look at it and maybe give us an answer in writing, because the GAO has been consistently correct on the problems with the F-35. They have not been wrong a single time. And unfortunately, the military, the Department of Defense, has been wrong every time, as we've watched the cost skyrocket. And we still don't have the initial operational capability achieved.

Right now, when are we supposed to—what are your plans as to when we reach the initial operational capability for the F-35?

General GLUECK. Senator, that's when the conditions are going to be met. If the software is not developed to meet the requirement, then we will not declare IOC.

Senator MCCAIN. What are your plans now for it to be operationally capable?

General GLUECK. Well, sir, I'd have to take that for the record and discuss that with—get back with General Schmidle, our DCS-Aviation.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator MCCAIN. All right. Look, the next time you come before this committee I'd like you to have some answers, particularly on the major and most cost-consuming program that we have, and that's the F-35. So I guess I've got to ask: Do you think the software challenges could impact the F-35's ability to be fully combat ready?

General GLUECK. Well, I think that any software development is development, and it moves in stages, sir. If you don't have the correct development at the very beginning, then it would have impact in the long term.

Senator MCCAIN. Is the F-35 being delivered now on time and on schedule?

General PAXTON. Senator, if I might, the models that we have are being delivered on time and on schedule. The software is tentatively behind schedule. The IOC is forecasted for July 2015. We have every expectation that that could be delayed by several months, sir. It will continue to be conditions-based. We won't declare IOC until we work through these with the systems provider, sir.

Senator MCCAIN. Isn't one of the many lessons here fly before you buy?

General PAXTON. Absolutely, sir.

Senator MCCAIN. The Amphibious Combat Vehicle program, you've got a request, which is pretty modest, of \$105 million. It follows the failed EFV program, the Expeditionary Fighting Vehicle, which was terminated in 2011. What is the time schedule that we could anticipate for the Amphibious Combat Vehicle? As we know, the present capabilities are extremely old, 40-year-old amphibious assault vehicle.

General PAXTON. Senator, as the committee and you are well aware, we have had challenges fielding the Expeditionary—what used to be the Expeditionary Fighting Vehicle in the program we killed. It's a three-part—we move from the AAV, which we have now, sir, 40 years old, 50-year-old technology. We tried to move to the AAAV and the issue then was to see how much high water speed we could get, if we could get the vehicle up on plane; moved it to the EFV, and then that did not bear fruit, sir.

So we knew two things here. Number one is we had to actually triage the way we're going ahead—

Senator MCCAIN. I guess my question is are we looking at 10 years, are we looking at 5 years, are we looking at—what kind of schedule would we have an adequate replacement for this 40-year-old Amphibious Assault Vehicle?

General PAXTON. Sir, fiscal year 2022 was the target window, sir, that we were trying to get, where we knew we had to do a mix of upgrading the AAV, getting an interim tentative replacement vehicle, and then trying to see where we could be, knowing we would probably only have one more chance to get this right, if we could get a high water speed vehicle. So it would start in fiscal year 2019 and we look to field something in '22. And we believe now that we can do all three of those pieces, sir, and I'll give it to General Glueck—

Senator MCCAIN. So it's about 7 years?

General PAXTON. Seven years, yes, sir.

Senator MCCAIN. I thank you, Mr. Chairman.

Senator REED. Thank you, Senator McCain.

Senator KAINE.

Senator KAINE. Thank you, Mr. Chairman, and thanks to our witnesses today. I echo Senator McCain's statements about sequester in 2016 and beyond. It was a good thing that we did to provide some sequester relief in 2014 and 2015, and I'm just struck every time I think about this that the DOD through the President's budget has come in and asked, not for the elimination of sequestration, but you've basically asked for sequester relief that over the course of the sequester would suggest that you would absorb about half the sequester cuts, actually a little more than half the sequester cuts, and seek relief from the remainder. I think that's a very reasonable request and look forward to working with my committee members on that.

General Paxton, I want to ask you a couple of personnel questions. One, talk a little bit about the integration of women into the MOSs across the Marine Corps, as the decision was announced by Secretary Hagel about a year ago that all branches would look at sort of gender-neutral criteria for the MOSs. If you could just talk about the progress of that, I'd appreciate it.

General PAXTON. Thank you, Senator Kaine. It was a mix of both statutory and legal requirements, as well as policy requirements. And it was actually Secretary Panetta in January started it, sir.

We have vowed within the building and to Congress that we will be deliberate, measured, and responsible as we look at this. Right now, sir, the Marine Corps has about 335 military occupational specialties. There are approximately 290-some of them to which, other than passing the physical fitness test, the combat fitness test, there are no additional physical performance standards required with those MOSs. There are about 30 that there are unique physical requirements to.

So what we have obligated to ourselves, to Congress, to the American public, is to study those MOSs and to see what are those physical requirements. In the past we have had the latitude, the luxury, in an all-conscripted force, as opposed to an all-volunteer force, and things like that, not to focus in.

We have indeed hard and fixed training requirements for all those MOSs. But we're going to open up the books and look at all those requirements individually and collectively. We have made, to your point, sir, some initial occupational fields where we believe there were no indications of additional significant requirements, and we made what is called an exception to policy and we took a

closed unit which theretofore had not had women assigned and we opened it up. First we assigned junior company-grade officers and senior staff noncommissioned officers, to make sure that the performance was there, the culture was there, before we looked to move other Marines who happened to be women in at the PFC level.

So we're working through that first phase of exception to policy. The next step, as the Commandant has articulated, is we're going to stand up a ground combat element task force, and we're actually going to get in and study not only individual standards, but collective and unit standards, and we're going to try and study them in terrain and in an environment where that unit will be tested. So that will continue the 22-month period we had to do this deliberate, measured, responsible look at what the actual requirements are in the occupational fields before we make either an exception to policy or an exception to assignment, sir.

Senator KAINE. Thank you, General Paxton. I've been asking that question at all the posture hearings and exploring it and it's been heartening to see the degree to which each of the branches is tackling this a year in. I'm glad to hear the way you describe it.

Another, different personnel issue is, in the aftermath of the tragic attack on the embassy compound in Benghazi one of the recommendations that the administration and Congress has agreed to is an augmentation of the Marine security guard program. I visited that training facility at Quantico and have been impressed. As I've traveled, largely on Foreign Relations travel, I've met a lot of the Marine security guards who are out there, all over the Middle East especially.

I think there is a commitment to increase the size of that program by about an additional 900 to 1,000 MSGs over time. Could you talk a little bit about how that progress is going and whether sequester or other funding issues are potentially getting in your way as we try to accomplish that important objective?

General PAXTON. Thank you, Senator Kaine. Thanks to the hard work and support of this committee and Senator McCain in specific, we were able to get an increase of approximately 1,000. 881 is the requirement and then we have what's called T2P2, which is the training pipeline and the movement and folks who are not immediately assignable. But about a thousand folks, and funded, sir.

So within that reduced force of 175,000, which will be the new normal, that includes an increase to our Marine Corps embassy security guard units. With the Department of State, we have identified 35 high-threat posts, which are additional embassies and consulates around the world that would need augmentation. So we are now, number one, trying to cover down on those high-threat posts.

Number two, we have what's called a Security Guard Augmentation Unit, which is trained and equipped and ready in Quantico. If you have a deliberate or an anticipated need, you can actually fly them out to augment the posts that are already there.

Then, as you saw, sir, in Libya and other places, we still have our FAST, our Fleet Anti-Terrorism Support Teams, who work with the Navy and the Marine Corps, that can go in and augment on top of the embassy security guards, sir.

Senator KAINE. One last question, and this may be one for the record, because I was going to ask this for Secretary Stackley, even though he's not here. The Navy forces laydown program had a decrease at Little Creek Fort Story in Virginia Beach from 18 to 6 shifts between fiscal year 2013 and fiscal year 2020. I was going to ask the question about what are the Marine Corps' plans for Little Creek to maintain its hub, both for Navy and Marine operations. That might have been more appropriately directed at him. If either of you could answer that, that would be great. If not, I'll just submit that for the record.

General PAXTON. Thank you, sir. I know we have our embassy—I mean, our security cooperation group down there, and of course we're close to Little Creek, so we had some training there. We have moved some amphibians from Little Creek down to Mayport, Florida, and changed the homeporting thing. So in order to give the details and the integration with the Navy and the Marine Corps, if I could take that for the record, sir, and get back with you on that.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator KAINE. Absolutely. Thank you.

Thank you, Mr. Chair.

Senator REED. Thank you, Senator Kaine.

Senator WICKER.

Senator WICKER. Thank you.

General Paxton, at a full committee hearing last week I entered into the record a March 25 letter from some 20 retired Marine Corps generals dealing with, among other things, amphibious ships.

Mr. Chairman, I ask that be entered into the record of this subcommittee hearing.

Senator REED. Without objection.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator WICKER. General Paxton, have you read this letter? I bet you have.

General PAXTON. I have, Senator.

Senator WICKER. Last week, in answer to questions, Commandant Amos and Admiral Greenert testified they would need 50-plus amphibious ships to meet the needs of the combatant commanders, stating specifically the demand for steady-state operations all around the globe would indicate somewhere around the right number of 50-plus. Do you agree with that?

General PAXTON. I do, Senator. The steady-state demand signal is the most pressing demand signal for our amphibious fleet.

Senator WICKER. Well, how are we doing on that need?

General PAXTON. Sir, when we do our amphibious shipbuilding, as I'm sure members of the committee are aware, we looked at the war plans as the stressing environment, as opposed to the steady state, and according to the war plans to get the appropriate MEB amphibious lift there was a requirement for 38 amphibious ships. So the long-term commitment has been to try and keep the amphibious fleet at 38.

Prior to September 11, in a fiscally constrained environment and given the industrial base, there was a tacit agreement between the

Navy and the Marine Corps that we could—we would have acceptable risk as long as the fleet stayed at 33. So right now, sir, if you look at the next 5 or 8 years, in the near term the fleet is not going to be at 33.

Our concern on the Navy side, as it is on the Marine side, is the moneys that are available for maintenance. We have worked very closely—and I certainly understand the significant maintenance challenge the Navy has with their depots and yards. But what we call the A-sub-O, the operational availability of the ships, is not there. So even if we were to have 33 ships, the requirement for those aging platforms to get in the yard, to get upgraded, maintained, to keep them survivable at sea, to keep the COMs up, we will not have the 33 at a minimum that we need.

So we're in a period the early part of a bathtub, sir. To get what we call the 11-11-11 mix of the three hull forms—we're not there, sir.

Senator WICKER. We're nowhere near the 50-plus that we would need for the steady state; is that correct?

General PAXTON. That's correct, sir.

Senator WICKER. What is your assessment of the risk to the Marine Corps ability to execute its objectives, for example in the Asia Pacific, if we do not provide you with the right number of ready, capable amphibious ships?

General PAXTON. Sir, I believe Admiral Locklear and General Scaparrotti have been here and testified that for their war plans there is at least moderate risk there, sir, that in terms of closing within the time and the distance to meet the war plans we would be challenged, sir.

Senator WICKER. With regard to the LPD-17 program, this was originally planned for 12 warships, but was reduced to 11 vessels due to the budget. Do we need that 12th LPD to support your mission?

General PAXTON. Sir, operationally we could certainly use the LPD. We would never say no to another ship, particularly given, number one, the fact that we have—

Senator WICKER. Is it a frill? Is it an extra, a luxury?

General PAXTON. No, sir. I mean, it would get us closer to that, either the 38 count or the 54 count. The challenge, sir, as you well know, is the cost of the current ships. It's unsustainable at the \$2 billion plus that it's currently priced at, sir. And given the sequestration that we're all facing, how we would absorb that within the top line—and this would have to be above top line and a different type of prioritization to get that 12th ship.

It is a proven performer as a single ship deployer. It gives us the five fingerprints of lift that we need for aircraft, for surface, for people, and for cube and square. But how we would cost that and put it within the current program would be the challenge, Senator.

Senator WICKER. Let's assume that this committee and this Congress takes care of the sequestration issue. What would—given that assumption, what would your request be to this subcommittee with regard to amphibious ships?

General PAXTON. Sir, the Marine Corps would always be in favor of looking to increase the amphibious fleet. We would again have to get—if it's going to be—even if sequestration we had relief from,

sir, we'd have to get with the Navy, because I know they have their own challenges with the OHIO-class submarine and the carriers, and how we balance the overall fleet capability is something that I know Secretary Mabus and the Navy has to look at, sir.

Senator WICKER. Okay. Let's assume it's unlikely that we can meet the defense budget—that it will be increased, as I hope. What will—what tradeoffs will we have to make to strike a balance?

General PAXTON. Sir, I believe that the first tradeoff—having been down at Second Marine Expeditionary Force and Marine Forces Command in Norfolk and worked very closely with the Navy, the pressing thing for me as a Marine commander would always be to work with our Navy counterpart to get the maintenance in the yards done, so that that A-sub-O, the availability of the ships in the inventory, is higher.

The Navy goal is to keep it at 90 percent. It is by advertisement around 70 percent. We would say it could even be a little bit lower than that. So the current ships that we have in the inventory, if we were to have the 33 in the inventory, sir, the issue would be to get them into the yards to maintain so we could get them out on a short fuse to do operations.

I used the example for Senator Reed and Senator McCain earlier about the Super Typhoon that went through the Philippines. We were able to respond to that very quickly last November and December. Regrettably, the initial response was all by helicopter because all three of the ships that we needed were in the yards. The Navy, to their credit, got two out of the yards very quickly to go down there. The third one took another two, two and a half weeks, and that's because of the requirement to get them back into the yards after sustained deployments to keep them maintained, Senator.

Senator WICKER. Thank you very much.

Thank you, Mr. Chairman.

Senator REED. Thank you, Senator Wicker.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

Thank you to the witnesses for being here today, and thank you for your service and dedication to our country. I think a number of us here who have sons who have served or are serving currently would join us in thanking you for your leadership, but also I think reflect to us that the main asset of the Marine Corps continues to be its men and women who serve.

We're here to talk about a lot of hardware and ships and planes, but I want to begin by asking whether you're satisfied that, with all the uncertainty about sequester, with all of the talk about drawdowns and other potentially discouraging news, that the men and women who are recruited, men and women who are enlisting to serve in the Marine Corps, are of the same quality as they have been in the past, in the recent past?

General PAXTON. Your caveat with "recent past," sir—if you go past past, I think they continue to be of higher quality, of higher physical quality, higher moral quality, higher performance. We've had great Marines for 239 years, sir, regardless of air, ground, logistics, male, female, officer, enlisted, regular, or Reserve.

Senator BLUMENTHAL. So to put it more directly, you don't see any—

General PAXTON. No, sir.

Senator BLUMENTHAL.—any reduction either in quality or number of men and women who want to serve?

General PAXTON. Sir, our recruiting command is finding the best and the brightest out there. Truly, it's an All-Volunteer Force. They want to serve. All the indications from our recruit depots is that the caliber of the young man and young woman coming in is still high, and the operational commanders when they see them in the fleet early on, it's gone very well, sir.

Senator BLUMENTHAL. Let me shift to the F-35. You testified that the date of IOC may have to be postponed by a number of months as a result of the software issues. Certainly I think many of us on the committee share the views that have been expressed by Senator McCain about the difficulties in reaching combat readiness for this aircraft and our desire to make sure that we do everything possible to reduce the cost and increase the likelihood of on-time delivery.

My understanding from the Lockheed representatives who come to see me very recently, in fact within the past few days, is that the software will be ready by July of 2015. Are you saying something different today at this hearing?

General PAXTON. Sir, I'll start and then if General Glueck wants to chime in. July 15 is the planned IOC date. We had indications that that would be hard to meet. We have been assured by Lockheed Martin that they were taking this on board and tackling it hard. I was trying to reiterate what General Glueck said to Senator McCain, that this is still going to be conditions-based, that we do want to fly it and maintain it and make sure it's operationally ready before we declare IOC or FOC; that we're going to work with the contractors collaboratively to make sure that the performance requirements and the thresholds are actually met before we do any declaration.

Senator BLUMENTHAL. So you're not telling us there will be a further delay. You're expressing some caution about the July 2015?

General PAXTON. Exactly, sir. I mean, that's still 16, 17 months out, so it's just cautionary at this time, sir.

Senator BLUMENTHAL. And those planes are, the fifth generation fighters, are necessary to the Marine Corps' readiness and preparedness, are they not?

General PAXTON. Absolutely, sir. On this I will defer to General Glueck as both concept development and as an aviator. But it is a leap-ahead technology. It's not an aircraft or an air delivery platform. It is an integrated weapons system that is essential to the way we'll do business in a denied environment, where communications are a challenge, access is a challenge, and the time and distance separation to do our missions is a challenge. That's exactly what we need to make that leap ahead into the next generation, sir.

Senator BLUMENTHAL. General?

General GLUECK. Sir, I'd just reinforce what General Paxton said. It is a transformational capability. When I worked in the combat development field earlier around 2000 or so, that's when we

were trying to figure out what transformational really meant. Transformational, what I came to find, was we have absolute leap-aheads such as the V-22 and the Joint Strike Fighter.

Every opportunity that I've had to visit the Joint Strike Fighter and get in the cockpit of the simulator and what-not, it is an airborne integrator and it will replace three of our legacy aircraft, and it is a transformational capability.

Senator BLUMENTHAL. Thank you.

Let me ask about the Marine Corps heavy lift helicopter replacement. Looking to the shift of priorities to the Pacific, could you describe what role that helicopter will have in that role for the Marine Corps?

General GLUECK. Sir, as you know, our current CH-53 As and Es are becoming legacy. The newest one, the 53E, which is a three-engine aircraft, is coming up on 30 years old. So this is going to be a great modernization effort, and we need that heavy lift. It's going to have three times the lift capacity of the current E model.

I think when you look at combining that with the effects that we're going to have with the MV-22, when you look at our future concept of operational maneuver from the sea, they will be critical to moving the Marines on the airborne connector side, to go from greater distances, to be able to move to positions in the shoreline.

Senator BLUMENTHAL. Thank you. Thank you very much for your very helpful testimony.

Thank you, Mr. Chairman.

Senator REED. Thank you, Senator.

Senator SESSIONS.

Senator SESSIONS. General Paxton, I'm worried where we are on the budget. We seem to be talking past ourselves on where our finances are. People talk about the sequester as causing more cuts, but that's not so, the way I look at the numbers. It's below the President's request, but it's not below current levels.

This year, 2015, the 050 account, the total is 521 billion, and it goes to 523 in 2016, 536 in 2017, 549 in 2018, 562 in 2019, 576 in 2020, and 590 in 2021. That's the current law. That's the Budget Control Act. That's the caps we have on that number.

Are you aware of that?

General PAXTON. Sir, I'm aware of the distinction between the BCA and the BBA, yes, sir.

Senator SESSIONS. Ryan-Murray filled the gap, because this year was a terrible year for the Department of Defense. It really would have been damaging to the Defense Department. I wasn't comfortable the way they did it, but they fixed—at least they helped this year.

So you're getting by on this year. 2015 is going to be the same, and 2016 has a little increase, and then you begin the \$13 billion a year increase in the out years.

So how is that further cuts?

General PAXTON. As I said earlier, sir, immediately prior to your arrival, we are planning on a worst case scenario. We are planning on the BCA levels. So what we do is to buy back the readiness that is missing, sir. We continue to fund the people, continue to work on the drawdown in people and in equipment as we reset, and the

additional moneys that may come through something like the BBA, we will buy back both near-term and midterm readiness, sir.

Senator SESSIONS. Well, it's really important because the Marine Corps is such a critical part of our defense structure and in a crisis that's who we call. We're going to have to have you.

But let me just run these numbers because I'm confused about where we are. One of the problems we have is that the President and the Democratic Senate has said: We will not give another dime to the Defense Department unless we increase spending likewise for the non-defense departments. So that's one reason we're having a hard time finding you any extra money. The Commander in Chief, that's his position.

So looking at the budget request, looking for 184,000 this year—or is that 2015—down from 190 in 2014? You're at 190,000 in 2014, you drop to 184 in 2015. That's a noticeable drop. It's not a little bitty matter. That's the numbers I have here.

General PAXTON. Yes, sir.

Senator SESSIONS. Then it goes to 182 in 2017, and then the numbers I have says that the future years defense program submitted with the President's budget has the Marine Corps reducing to 175,000 by the end of fiscal year 2019. So that's based on the law, the Budget Control Act numbers—

General PAXTON. That's correct.

Senator SESSIONS.—which includes the sequester.

General PAXTON. That's correct, Senator. We believe by the end of the FYDP we'll be at 175,000 marines.

Senator SESSIONS. Have you analyzed—maybe you were asked this before I got here. But have you analyzed the impact of this? We know we upped the Marines, we surged some for this sustained combat you've been involved in really for a decade, more than a decade. Can you go to 175 and still be within the budget, still have some procurement, and be able to meet the responsibilities of the force?

General PAXTON. Senator, we did discuss this briefly a little tangentially prior to you getting here, sir. We have done fairly exhaustive studies about the size and shape of the Marine Corps, trying to keep it ready and responsive as our Nation needs, most ready when the Nation is least ready, and to try and keep that balance between aviation, ground, and logistics.

The optimal Marine Corps would be 186,800, sir. Under BCA we believe that the only way we can keep it balanced and ready and the next plateau would be about 175,000, sir. There is risk—

Senator SESSIONS. Where were you, what number, do you recall, before September 11?

General PAXTON. Sir, on September 10 we were about 185,000, sir. And we knew when we, thanks to Congress, congressional support, when we went to 202,000, that enabled us to do what we needed to do in a counterinsurgency environment in Afghanistan and Iraq. We knew that that would be fiscally unsustainable and we'd have to come back down. So prior to sequestration we started to look at how we reshape as we come down, sir.

Senator SESSIONS. Now, the Secretary smiled a little bit when I said you laid out these numbers. I know you have a responsibility and you kind of lay out the worst case scenario. It may not have

to be quite so bad. I think he understood what I was saying, because he doesn't want to be pollyannish about trying to meet these numbers. But I'm hopeful that that may not be so if you manage well. You may be able to get above 175,000 even at this level.

We were promised massive civilian furloughs that didn't occur. A few did, but not many. So I'm hopeful. We're going to have to get to the bottom of it. That's all I'm telling you. We're going to have to have honest reporting on this number, and Congress can't just keep breaking the budget we agreed to. We just can't keep doing this every year, because there are other—the doctors, they want to break the budget to have the doctors. Unemployment insurance, they want to do it for that. The Defense Department wants to do it for this. Preschool education, they want to do it for that.

So all of this—at some point we've got to adhere to the numbers we've got. Are you aware that interest on the debt was \$211 billion last year, \$233 billion, and it's going, according to CBO, to 880 10 years from today? \$600 billion increase in annual interest payment, which is more than the defense budget. So you just can't keep borrowing and spending. So we've got a serious financial problem. I'm just saying that to my colleagues, who aren't here to hear it.

Senator KING. I am, and I'm listening.

Senator SESSIONS. Good. Good for you. Well, I know you managed your State well and dealt with the realities of it.

One more thing. Is my time up? Yes. I'll submit for the record a question about the Joint High Speed Vessel. I believe if you can give me a yes or no: Do you think that has potential to play a larger role, General Glueck?

General GLUECK. Sir, the Joint High Speed Vessel is going to be a force multiplier for us. I could say that currently—I used to command the Third Marine Expeditionary Force out in Okinawa and we had a similar capability in the WESTPAC Express. That brought us the capability of carrying over 900 Marines and you can carry 20 C-17 loads worth of equipment.

I see that the current fleet that we're developing today down at Austal—and I've had a chance to go down and walk the decks and see the capability that exists today—it's going to be a gamechanger for us.

Senator SESSIONS. Well, that's good to hear, because it's relatively inexpensive. I mean, it's under \$300 million, whereas—193, less than 200 million, and compared to \$2 billion ships—if it can be a force multiplier at that cost, I think it has maybe a role, an expanded role to play in the future.

General GLUECK. We look at it to be a critical connector for us. In today's environment, you have amphibious ships and you have maritime prepositioned ships, and they're going to come together at the sea base. A connector like the Joint High Speed Vessel would be able to offload equipment and personnel and be able to change the load, and that could be our high-speed connector to get us to the shore.

Senator SESSIONS. Well, I'm hearing good reports about its value. Thank you for that and I will submit a question for the record.

Senator King, Mr. Chairman, I turn it over to you.

Senator KING [presiding]. Thank you, sir.

Gentlemen, I want to apologize. If the Marine Corps was run on the same logistics and scheduling system as we do around here, you'd still be fighting the War of 1812. There's a vote on, as you know, a rather important one, so that's created this back and forth in the committee.

General Paxton, I'm always interested in lessons learned and I know in your business you do after-action assessments. What have we learned from the EFV issue, cancellation, that we are using in the developing of the ACV? In other words, are we ahead of where we were? Can we avoid some of the mistakes that were made in the development of that earlier system? And how does it look now for the timely and cost-effective development of the ACV?

General PAXTON. Thank you, Senator King. And I'd like to assure you and fellow members of the committee that we have indeed captured the lessons learned, both with the AAV and the EFV, to make sure that the mistakes that were made are not repeated.

We believe that—I started to articulate this for the committee earlier and I'll turn it over to General Glueck as the concept developer who is actually in charge of the program now. But we did a rather exhaustive 10-month study of, first off, the requirement, the ship-to-shore requirement that drove the actual procurement and the process; number two, the actual non-development, on-the-shelf capabilities that exist around the country; and then number three is where the delta was for things that we thought we needed or wanted to have.

We took a look at what we called the four big areas, which is lethality, troop capacity, direct fire protection, and indirect fire protection. Then we tried to balance those requirements against affordability and against the novel game-changing concept of can we get high water speed, which is what we were trying to do originally.

The existing AAV is, as you know, sir, 40 years old for the vehicle and 50 years old for the technology. So we had about 64 different permutations and combinations of the costs and the risks and the capability. We did things like Monte Carlo analysis and we brought in folks from industry, best of industry, best of government, to take a look at this for the better part of 10 months, sir.

So we have concluded that high water speed is capable, technologically capable. In order to get the things that we need for troop capacity and vehicle protection and remote weapons systems, it will probably be unaffordable in the current—certainly in the current environment.

Senator KING. When we say “high water speed,” what are we talking about?

General PAXTON. Well, sir, right now the vehicles go 4 to 6 miles an hour. We'd like to get them up certainly into the teens, and if you could get 18 to 21 where you could get them up on plane—the requirement issue, sir, is that in order to get ship to shore you have both a 12-hour tidal change period and then the roughly 12-hour period of darkness. So whether it's a humanitarian assistance disaster relief or whether it's a forcible entry op, what we're trying to do is build up that combat power ashore as quickly as we can within one of those tidal periods or within one period of darkness.

Senator KING. So you determined that the high speed capability was inconsistent with the other values you were trying to achieve?

General PAXTON. Not inconsistent, sir, and certainly desirable. But unfortunately, when you put the triangle there it became unaffordable, again particularly in the sequestered environment.

So what we have done, sir, is keep the overall requirement there, but then we tried to do what we call a triage, where we would take the AAV and see what kind of modernization and upgrades we could do with it, then we would take a look at non-development, off-the-shelf technology that indeed may not be what we call self-deployable, but can actually swim and have better speeds than what we have now, at the same time keeping a hard look at what the future technologies would be.

I see General Glueck there, so he can work with you and tell you how we balanced the numbers on the time lines to try and keep this as an affordable program and fill in the gaps that we need operationally.

Senator KING. Where are we in the development stage now? When do we expect to see a product?

General GLUECK. Which product would we be talking about?

Senator KING. The ACV.

General GLUECK. The ACV. We would look to see that—right now there are four contractors that have current models that we've actually driven in. I took the Commandant out to the Nevada Test Facility out there. We rode in every combat vehicle we have within the inventory.

Senator KING. How do you test an amphibious vehicle in Nevada?

General GLUECK. Well, for their shore capabilities.

Senator KING. I'm just teasing.

General GLUECK. The shore capability.

So we drove in all four of these ACVs that'll be probably in competition, that are production models. The ride and performance was far superior, because we actually had one of the old EFVs out there. When you rode in that, the tracked vehicle, it was like night and day, the difference.

Senator KING. So if they've got prototypes, that means once the decision is made the time to delivery shouldn't be that long.

General GLUECK. Yes, sir. We're looking for a streamlined delivery of the process that's out there, because we've already done a little bit of work on the requirements side earlier with the MPC program. Essentially what our phase one of the program would be to buy that technology as it exists today.

So we looked at, if we can stay on track and with the current process, that we should be able to have an IOC of about by 2020.

Senator KING. As you have developed this, I assume that part of the spec was IED-resistant; is that the case?

General GLUECK. That's correct, sir.

Senator KING. Because that's going to be something we're going to deal with practically everywhere, I'm guessing.

General GLUECK. Yes, sir. The previous EFV was very limited in the force protection on that side, because you had to give up weight, weight for speed on the surface of the water. So it was not as well protected. It was less than 1X. The current vehicle, fleet of

vehicles that we're talking about, of the four that we rode, the least was 1X and then the other three were over 2X, up to 2.8X, as far a protection. So they're far more protective. But they're also far more survivable to a blast.

Senator KING. Now, I understand that this is the ACV, the vehicle that would be used on both land and on the water. But there is also a separate vehicle for connector. Where are we on that project?

General GLUECK. It's really—as you look at it, we've got the AAV fleet today, which is about 1,062, and that was to be able to move 12 battalions worth of lift. The plan right now is that we will go ahead and do a survivability upgrade on about 392 of those vehicles. That will be able to give us four battalions worth of lift, be able to meet our Marine brigade forcible entry requirement, and also meet the requirements for all our deploying MEUs that are going to be the crisis response forces.

That will be a bridge. At the same time, we will go ahead and develop the ACV vehicle phase one that we talked about there, that would be a production line variant, whichever—whoever wins the contract, that they would set up, and we would buy a limited number of about 200. That would be the vehicles, essentially probably 90 percent of the vehicle that we've already seen today.

Then 1.2 of that program then would be to buy the rest of the vehicles to be able to give us the full additional six battalions worth of lift. So you would have the ability to lift 10 infantry battalions. Four of them would be in the AAVs that are going to be upgraded and then the rest would be in the ACVs.

Now, for the future what we wanted to do as phase two was to continue to do some research and development on the CV vehicle, the high water speed vehicle, to see if there's any breakthroughs, if we can come up with a new engine or if there's something else that they can do to give us that high water speed.

In lieu of that, we're also going to look at an R and D effort to focus on connectors, because we can get high water speed through the series of connectors. Currently we've got the LCAC and we have the LCU, but they're legacy systems. They're being upgraded, but they're going to give us marginal increases in performance. What we're looking for something is more along the lines of the Joint High Speed Vessel, for example, or another connector similar to that, that's going to be able to give us probably 25 to 35 knots over the water, to be able to move; take our ACVs; we can do an at-sea integration between the grey hulls and the Joint High Speed Vessel, put those on there, and then they'd be able to actually launch those into the surf closer in to shore.

Senator KING. We've been talking for this whole, my whole series of questions, about the traditional Marine mission of amphibious assault. Yet Afghanistan was a full-blown ground situation. What's your strategic thinking about what you need to be prepared for? Do you need to be prepared for both? Where do you see the Marine Corps demands of the future? Is it back to amphibious or are you going to have to also think about a 10-year ground war?

General GLUECK. General Wilhelm—I don't know if you know General Wilhelm, retired. He told me that it's like going back to the future almost, getting back to our amphibious roots, being our

Nation's premier crisis response force. Can we—as we focus in our Expeditionary Force 21 concept, as we look at being that expeditionary force in readiness, we're kind of focused on being that middleweight fighter. That means you can box up and you can box down. But to be that middleweight capability, to provide that immediate crisis response, so you've got the right force to the right place at the right time. That doesn't mean that you can't box up in class and go ahead and conduct operations ashore alongside with our Army brethren.

Senator KING. General Paxton, any thoughts on that?

General PAXTON. No, sir. I agree with General Glueck. We have been since 1952 by congressional mandate the Nation's crisis response force. We are tasked to be most ready when the Nation is least ready. Given the amount of space around the world that's in the littorals, that you have to have access from the sea and you need assured access and you need access to the global commons, we do believe that we need to go back and be more amphibious and more expeditionary.

We've been proud and successful at what we've done for the last 12 years in Iraq and Afghanistan, but we're trying to refocus on the capability that the Nation needs so that we can do assured access, power projection, and safeguard our way of life around the world, sir.

Senator KING. Well, I'm going to turn it over to Senator Kaine in a minute. But I'm delighted that you're working on the ACV and that it's moving rapidly. Senator Inhofe at most of our general hearings has a chart of time from concept to delivery, and it's getting longer all the time. 23 years is I think the average now in some of the forces. To the extent that can be shortened, I think that's to everybody's benefit.

It sounds like you think you'll be ready in 2020?

General PAXTON. Yes, sir. As General Glueck said earlier, what we have done is the concepts and the state of technology in wheeled vehicles have surpassed that of tracked vehicles over the last 12 years, so we've gone back to try and capitalize on that. So that this interim solution for the ACV will actually be non-developmental. It will be off-the-shelf technology that surpasses what we have in the AAV. And that's a good use for the taxpayer dollars, sir.

Senator KING. That's great. This isn't an admonition to you, but I'll share this to you because you can use it on your folks. When I was Governor of Maine people would come and say: Well, that'll take two years, or that'll take three years. I always reminded them that Eisenhower retook Europe in nine months. I think that's a good standard for us.

Gentlemen, thank you very much.

Senator Kaine.

Senator KAINE. No.

Senator KING. Oh, you're all set? Okay.

The record is going to be held open until 5 p.m. on Thursday. There will be additional questions submitted for the record. If there are no other questions, the hearing is adjourned. Thank you very much, gentlemen.

[Whereupon, at 10:27 a.m., the subcommittee adjourned.]