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**UNITED STATES MARINE CORPS  
ACQUISITION AND MODERNIZATION**

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HEARING

BEFORE THE

SUBCOMMITTEE ON TACTICAL  
AIR AND LAND FORCES

OF THE

COMMITTEE ON ARMED SERVICES  
HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

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HEARING HELD  
NOVEMBER 16, 2011



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**UNITED STATES MARINE CORPS ACQUISITION AND  
MODERNIZATION**

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HOUSE OF REPRESENTATIVES,  
COMMITTEE ON ARMED SERVICES,  
SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES,  
*Washington, DC, Wednesday, November 16, 2011.*

The subcommittee met, pursuant to call, at 2:00 p.m. in room 2118, Rayburn House Office Building, Hon. Roscoe G. Bartlett (chairman of the subcommittee) presiding.

**OPENING STATEMENT OF HON. ROSCOE G. BARTLETT, A REPRESENTATIVE FROM MARYLAND, CHAIRMAN, SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES**

Mr. BARTLETT. Good afternoon. My colleagues are delayed, but we want to be respectful of your time. Your testimony will be part of the permanent record of course, but we want to begin.

The Tactical Air and Land Forces Subcommittee meets today to receive testimony on Marine Corps Ground Force Acquisition and Modernization Programs. We welcome our distinguished panel of witnesses, Brigadier General Frank Kelley, Commander of Marine Corps Systems Command; Brigadier General Daniel O'Donohue, Director, Capabilities Development Directorate, Combat Development and Integration; Mr. William Taylor, Program Executive Officer Land Systems, U.S. Marine Corps.

Of the estimated 210,000 military service personnel deployed in Iraq and Afghanistan, approximately 130,000 are in Afghanistan, and out of this number 21,000 are marines. More than 6,200 Americans have given their lives, and more than 46,000 have been wounded, in Iraq and Afghanistan since September 11, 2001.

This is the fourth in a series of hearings the subcommittee is holding for the purpose of updating our members on the budget request for fiscal year 2012 and to help better understand the potential impact of the Budget Control Act of 2011 on our military capability and deployed forces. The ultimate impact of the Budget Control Act on DOD funding next year and over the next 10 years remains a major concern of this subcommittee.

As I have stated before, major reductions in the Federal budget need to be a major element of correcting the Federal deficit. The Department of Defense must share in a fair and balanced way in those reductions, and that process is already taking place under the Budget Control Act of 2011, with nearly \$500 billion in cuts planned for DOD [Department of Defense] over the next 10 years. If the Administration had first reconsidered the national military strategy based on the likely resources to be available, the changes that are having to be made by DOD in acquisition programs could

be better justified, but it appears we will only have a new national military strategy after the fact.

Under the sequestration provision of the Budget Control Act, up to a total of \$1 trillion over 10 years could be possible under what Secretary Panetta has called the “doomsday mechanism.” As recently as this week, Secretary Panetta indicated that such a reduction would be, and I quote, “devastating for the Department.” Secretary Panetta has further indicated a \$1 trillion reduction possible under the Budget Control Act sequestration provision would amount to 23 percent if the President exercised the authority to exempt military personnel. Under current law, the reduction would have to be applied equally to each major investment and construction program. And I am not sure how you build three-fourths of an aircraft carrier.

Finally, the Secretary noted that between 2013, “Cuts under a maximum sequestration would equal about \$100 billion a year compared with the fiscal year 2012 plan. We would have the smallest ground force since 1940, the smallest number of ships since 1915, and the smallest Air Force in history. The threat to our national security would not be reduced. We would have to formulate a new security strategy that accepted substantial risk of not meeting defense needs.” This ends his quote.

Today, we will significantly address Marine Corps ground force acquisition and modernization programs. In order to perform their missions, whether home or abroad, these marines must be adequately equipped with the right gear to maximize their combat effectiveness and provide for their best protection possible. We cannot lose focus of this objective. The subcommittee expects to receive an update from the witnesses as to what changes may have to be made in their proposed acquisition programs in fiscal year 2012. We would like to know the views of our witnesses on what the potential impacts to Marine Corps capabilities are, particularly in light of the possible reductions in the Marine Corps procurement and R&D [Research and Development] budgets over the next 10 years. We also hope to gain a better understanding from our witnesses on how potential funding reductions would be apportioned for their programs and how these funding reductions could potentially impact Marine Corps modernization programs and the approximately 21,000 marines currently serving in Afghanistan.

One major concern is understanding the potential impact of budget changes on the affordability of the Marine Corps’ ground combat and tactical vehicle modernization strategy. The subcommittee expects to gain a better understanding of the processes used by the Marine Corps in determining what is good enough in terms of their combat and tactical vehicle portfolios given the austere fiscal environment projected for the next 10 years. What metrics are the Marines using to determine how much modernization is needed for the combat and tactical force fleets, and will the Marine Corps ultimately be able to afford its currently projected ground vehicle modernization strategy?

I would like to now turn to my good friend on the Democrat side to see if he has an opening statement or comments.

[The prepared statement of Mr. Bartlett can be found in the Appendix on page 25.]

Mr. CRITZ. Well, I appreciate that, Mr. Chairman. No real opening comments. I don't want to take up too much time. I want to get to the witnesses' testimony. But you know, as we all sit here, obviously sequestration and what next year's budgets and what we are going to be facing are certainly a top priority to us. And we are anxious to hear your testimony on the strategy going forward. We had a hearing with the Service chiefs a couple of weeks ago, and still talking about working through the cuts to the budget from the CR [Continuing Resolution] from earlier this year, without a plan for what is going to happen if we hit sequestration or certain budgets looking forward.

So we have some major issues we have to face. But I appreciate the opportunity, and I yield back.

Mr. BARTLETT. Thank you very much. I ask unanimous consent that non-subcommittee members, if any, be allowed to participate in today's hearing after all subcommittee members have had an opportunity to ask questions. Is there objection? Hearing none, non-subcommittee members will be recognized at the appropriate time for 5 minutes.

We will proceed with the panel's testimony and then go to questions. Without objection, all witnesses' prepared statements will be included in the hearing record. General O'Donohue, please proceed with your opening remarks.

**STATEMENT OF BGEN DANIEL J. O'DONOHUE, USMC, DIRECTOR, CAPABILITIES DEVELOPMENT DIRECTORATE, COMBAT DEVELOPMENT & INTEGRATION, U.S. MARINE CORPS; BGEN FRANK L. KELLEY, USMC, COMMANDER, MARINE CORPS SYSTEMS COMMAND, U.S. MARINE CORPS; AND WILLIAM E. TAYLOR, PROGRAM EXECUTIVE OFFICER LAND SYSTEMS, U.S. MARINE CORPS**

General O'DONOHUE. Thank you, sir. Chairman Bartlett, Congressman Critz, and distinguished members of the panel, it is an honor to be here. On behalf of all marines, their families, and this team before you, thank you for your extraordinary support. This will be the one opening statement for the team here, and then we will proceed to questions, sir.

The Marine Corps is the Nation's expeditionary force in readiness. As such, we are prepared for all manner of crises, ensure access for the joint force and the interagency, and by being ready, mitigate national risks during a period of fiscal retrenchment.

Ten years ago today, under circumstances no one predicted, 4,400 marines and six amphibious ships were assembling to strike Al Qaeda after the horrific acts of 9/11. On short notice they rapidly concentrated from globally dispersed forward engagement missions to attack hundreds of miles from the Arabian Sea to Kandahar, and on to Kabul. No other force had the required readiness, strategic mobility, and self-sustainment to respond so quickly and decisively. Their tactical mobility extended the operating area beyond the enemy's capacity to cope.

This dynamic ability, at a moment's notice, to shape, deter, defeat, and deny our enemy sanctuary is emblematic of the crisis response capabilities that we continue to develop in the current and future force. Our unequivocal top priority is supporting our 21,000

marines and sailors fighting in Afghanistan, and 10,000 more that are forward deployed worldwide. With the continuing support of Congress and a rapid fielding process, our marines in combat are well equipped for the current fight even as the enemy adapts.

At the same time, in stride we are transitioning to our role as the post-OEF [Operation Enduring Freedom] expeditionary force in readiness. In doing so, we will accept risks and extended ground operations, and reshape the Marine Corps for scalable crisis response missions such as counterterrorism, counterproliferation, disaster relief, rescuing Americans, prioritized security cooperation, and major contingency operations, and reinforcing our allies. While still globally responsive, we will rebalance our force posture back to the Pacific as we withdraw from OEF.

Our judicious modernization strategy supports this force while recognizing fiscal constraints. Our spare budget focuses only on what is good enough and what is absolutely required. The Marine Corps' entire budget, to include supporting Navy accounts, is only 7.8 percent of DOD's. Our modernization priorities are the Joint Strike Fighter and MV-22, and an affordable amphibious combat vehicle, a balanced ground combat and tactical vehicle portfolio, to include the JLTV [Joint Light Tactical Vehicle], and Navy amphibious ships.

This testimony addresses ground force modernization, which is 14 percent of our budget and just .6 percent of DOD's. Our ground procurement account is approximately \$2.0 billion a year. Fiscal constraints on the relatively small ground modernization can have a disproportionate impact. Our top ground priority is the amphibious combat vehicle. A JLTV addresses shortfalls for select light combat vehicles which perform our most demanding missions.

For our entire portfolio, and especially the amphibious combat vehicle and JLTV, the Marine Corps, working with the Department of Navy, has taken an aggressive and innovative approach, distinguished by integrating mature technology, stressing affordability as a key performance parameter, conducting comprehensive system engineering and cost analysis, creating a transparent and open dialogue with industry, OSD [Office of the Secretary of Defense], and Congress, employing a streamlined acquisition process, with an emphasis on competition, and most importantly, at inception creating an integrated requirements and acquisition team that makes cost-informed trades in requirements. The acquisition requirements team testifying before you today works together daily and at every step. We are completely integrated, and we ensure best value for the Nation for essential capability.

Thank you for the opportunity to testify.

[The combined prepared statement of General O'Donohue, General Kelley, and Mr. Taylor can be found in the Appendix on page 30.]

Mr. BARTLETT. Thank you, General. I understand that you have the only oral testimony, that all three of you are available for questions. Is that correct?

General O'DONOHUE. Yes, sir.

Mr. BARTLETT. Thank you. As is my usual practice, I will reserve questions until the other panel members, including our guest panelists, have had an opportunity to ask their questions, hoping that



my questions will have been asked by the other panel members. So I turn now to Mr. Critz.

Mr. CRITZ. Thank you, Mr. Chairman. General O'Donohue, General Kelley, and Mr. Taylor, thank you so much for being here today. Thank you for your service to our country. I actually have just a couple of quick questions, and then I will allow other members to talk.

I am heartened by the strategy that the Marine Corps is working with the Army on the JLTV program to try to move that quicker and come to a resolution. And it brings up an issue, is that the remote weapons station that sits on top of a lot of Army vehicles is something that the Marine Corps hasn't really looked at in the same way. And I am just curious as to as you move forward, the CROWS [Common Remotely Operated Weapon Station] it is called on the Stryker vehicles, it is on the Humvees [High Mobility Multi-purpose Wheeled Vehicle], and I am wondering because of all the technology advancements that have been made because of the Army's use of it if the Marine Corps is looking at the CROWS as being part of any system as they go forward on their vehicles.

Mr. BARTLETT. Excuse me, they have not provided us with the world's best microphones. If you could hold those very close to your mouth, we will hear you better. Thank you.

General O'DONOHUE. Sir, from the requirements perspective, particularly for the amphibious combat vehicle, we have a requirement for lethality. We have studies to look at the best way do it, to include remote weapons systems. So it is in the consideration of Marine Corps planning. We work closely with the Army on everything they do, to look at things that we can spiral into our programs in every aspect. We have the Army and Marine Corps Board that works at every level to make sure we are sharing what works between the two Services. So we certainly have a strong look at lethality, particularly for the amphibious combat vehicle and remote weapons stations. We do not have a decision yet on it though, sir.

Mr. CRITZ. Okay. It won't be on the amphibious vehicle. It is on the JLTV, it will be on Stryker and those types. So it is the land-based systems more so than underwater.

General O'DONOHUE. Yes, sir.

Mr. CRITZ. And this is an issue that I am still trying to grasp, and the reason I bring up the CROWS is because of the IED [Improvised Explosive Device] issues that we have, and snipers. It certainly helps in the safety of our men and women. But one of the issues that I am still trying to grasp, and I can't really get a hold on, is, you know, we are in a budgetary scenario now where everyone is looking to pinch pennies. And the move from the Humvee to the JLTV program, I am trying to understand what the Marine Corps' plan is. As I look at your chart and you are going from approximately 25,000 now down to 12,500 in 2014, it looks like the JLTV starts to come online 2017, 2018. And, you know, I saw in some of the reporting as well that the recapping of the Humvee is about half the price of building new. So there is a financial benefit to this. So I just want to know what is the Marine Corps' plan, and how is it that it is going to impact your budget, 14 percent of your budget being ground vehicles? What is the impact to your budget,

and where are we going to see—are we going to see some pinch points here?

General O'DONOHUE. Sir, I will start and then we will pick it up on the acquisition side. From the requirements perspective, we have scrubbed our light combat vehicles. We started with a base of about 26,000. We have reduced that by 8,000. We have gone through and leveraged based on the force structure review, looking at the expeditionary force and readiness. We have cast a post-OEF Marine Corps which is not for extended campaigns ashore, but to be a crisis response force. And as we looked at the missions and as we come from a 202,000 Marine Corps to about 186,800 we took a corresponding look at vehicles. And the first step towards efficiencies was to remove that amount of the requirement. That amounted to about 8,000 vehicles. That left about 18,600 in the light category. These are vehicles that we can't take off the FOB [Forward Operating Base] now. The MRAP [Mine Resistant Ambush Protected vehicle] was a substitute in a high IED threat, but isn't applicable in places we might go otherwise. So we addressed that base of 18,600. We took a small subset of that, about 5,500 vehicles, and these are the ones that shoot, move, and communicate forward. They have the most demanding mission profile. And these are the ones that we are looking for the JLTV.

So we have looked at selective aspects of the portfolio. We are going to manage just those high priority ones for the JLTV, and then we are going to sustain the Humvee fleet. And we will look at a process of, for the remaining bulk of the majority of the fleet, those not modernized by the JLTV, and have a reduced mission profile, we will do a sequential modernization. We will buy up front those in the most need and most demanding profile, then we will hit our amphibious combat vehicle. And then at the back end of that, we are looking at the late 2020s, those vehicles we sustained over that period, the bulk of them, about 13,000 that you talked about, we would be looking at modernization in the late 2020s.

Mr. TAYLOR. I will add that we have looked at the business case between the two programs. And I would respectfully disagree that Humvee recap would equate to about half the cost. Our best estimates of what it would take to overcome the engineering deficiencies in order to provide a durable Humvee range somewhere between 240 to 260 K. So at that cost you are bumping up against the cost of a new vehicle that would provide much more capability.

We have also done some durability testing on the Humvee. And what we found is extreme engineering issues over their designed gross weight. These have led to cracks in everything from the suspension, to radiator mounts, to even the frame itself. And one of the inherent design features of the original Humvee, as designed, was to provide a torsional twisting in the frame. We lose that as we try to beef up the Humvee through rigid measures like capsules or anything like that.

So my point here is that the procurement costs alone are bumping up against a new vehicle cost, yet we haven't even begun to scratch the surface on what a Humvee recap might cost us ultimately in O&S [Operating and Support] costs.

General O'DONOHUE. Sir, just to follow up on the requirements aspect of it, a Humvee recap does not meet the requirement that

the JLTV will. We have a requirement for a strategic transportability, mobility, protection, and payload. And while we can get any one of those elements in a lighter vehicle, we can't get the full range of it. So a Humvee recap, which the Marine Corps is not pursuing, would not meet the requirement.

Mr. CRITZ. Thank you. I yield back.

Mr. BARTLETT. Thank you. Ms. Hartzler.

Mrs. HARTZLER. Thank you, Mr. Chairman. Thank you, gentlemen, for your service.

I just wanted to start off asking just general questions about the impacts of the budget. So how are the DOD and the Department of Navy's implementation of the Budget Control Act of 2011 potentially impacting the Marine Corps acquisition and modernization programs?

General O'DONOHUE. We have addressed the fiscal austerity with a current program that reflects the cuts proposed by the President. And what we have done is take sequential modernization. We have carefully timed an initial buy of JLTVs, a subsequent buy of ACV, the amphibious combat vehicle, which is our number one priority, and then we will follow with JLTV and modernization over a period of we are talking about 20 years. That becomes unhinged by delay for any reason. The continuing resolution, if we are not able to execute these accounts and we don't get special authorization, or we get something as severe as sequestration, what we are going to do is create a bow wave of requirements at the back end that are difficult to handle. Again, we have a small account for modernization. There is a disproportionate impact if we have to absorb something bigger than already planned. And then I think larger and more strategically, we unhinge strategy and ways and means. And there probably will have to be a relook at the OSD level. And again, the Marine mission is to provide the insurance, be the kind of the ready force, which requires an O&M [Operations and Maintenance] expenditure, kind of keeping faith with people and having the force structure to allow us to do the job, and the judicious modernization to field that force to be a force in readiness. That strategy becomes unhinged if we take a blind proportional reduction.

Mrs. HARTZLER. Absolutely. I see in the chart that you provided that we are down to 850 MRAPs now compared to 2,225 in 2009. Is that correct?

General O'DONOHUE. Ma'am, we have about 4,000 currently on the battlefield. We have a plan to reduce to something about 2,500. And of those, those are divided in two parts. We have an enduring mission for the MRAPs and the MATVs [Mine Resistant Ambush Protected All Terrain Vehicle] for about 1,100 or so vehicles. These are for engineers, it is for EOD [Explosive Ordnance Disposal], for those really at risk and can afford to be roadbound. We have for the remaining balance, these will be things that we preserve that could be used in case we were in the unusual circumstance that we need the MATV, either a counterinsurgency or where the mobility limitations of the MATV are suitable. So we don't see it as a general purpose fleet vehicle. We see, one, that we have a selective group that we are able to equip a force if we had the special circumstances where the MATV is appropriate, ma'am.

Mrs. HARTZLER. Okay. Thank you. As far as the warfighter, I am always concerned about their safety, the weight of their total gear that they carry, their body armor. And I just want to ask a couple questions about that first regarding them. The vehicle, the Stryker, I know the Army has been testing an improved version of the Stryker with a double-V hull for deployment to Afghanistan. I have seen something very similar at Fort Leonard Wood, which is in my district, and I know that has been helpful. So what is the Marine Corps doing to improve the survivability of its light armored vehicle fleet?

Mr. TAYLOR. We are looking across the entire spectrum of technology that is available, to include what the Army is doing. This will be part of the development process of some of our new amphibious vehicles. So we are looking at the entire spectrum of what is available and mature.

Mrs. HARTZLER. That is great. What about, what do you think is a reasonable weight for body armor? Can we achieve adequate protection with less weight?

General KELLEY. Ma'am, I believe that we can. We continue to challenge industry to provide anywhere from a 10 to 20 percent reduction in body armor. One of the things that I do think that we have done as a Marine Corps proactively, and that is provided some options, alternatives for commanders out in the field for what type of body armor that they would like their marines to be wearing. So we have the improved modular tactical vest (IMTV) that is about a 33-pound vest, obviously provides more comprehensive protection. And that is about a 3-pound reduction in the modular tactical vest that we produced before that. We have also allowed commanders in the field to dictate what level of protection their marines will wear. And that is at the Lieutenant Colonel level and above for their battalions. So the real choice is not between the old vest and the new vest, but it is really between this scalable approach to body armor. I have already discussed about the IMTV, or the improved modular tactical vest. That is going to be, another option there is going to be the scalable plate carrier, which is about a 21-pound solution in terms of providing protection. Obviously, it has got less material, provides the ventilation that is one of the areas where we have discovered that that causes some fatigue. So we are talking about something that is about 33 pounds, or choosing to go down to, you know, about 21 pounds.

Mrs. HARTZLER. Thank you very much. And thank you, Mr. Chairman.

Mr. BARTLETT. Thank you. I would now like to turn to my good friend and ranking member, Mr. Reyes, who this afternoon was a victim of Washington traffic, which I understand may now have eclipsed Los Angeles traffic as the worst in the Nation. Mr. Reyes.

**STATEMENT OF HON. SILVESTRE REYES, A REPRESENTATIVE FROM TEXAS, RANKING MEMBER, SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES**

Mr. REYES. I can give you personal testimony that having been in L.A. [Los Angeles] this was as bad as it gets. I think part of it is the rain and the complications that it brings. So I wanted to apologize for being late and not being here for your opening state-

ment. Oh, and Mr. Chairman, can I ask unanimous consent to enter my statement for the record?

[The prepared statement of Mr. Reyes can be found in the Appendix on page 28.]

Mr. REYES. Thank you. I did read your statement last night. And I wanted you to know that when you made reference to the 10 years ago, the 2 Marine expeditionary units of 4,400 Marines going into Afghanistan and working with the Special Operations Forces that were there, I happened to have had the opportunity to go with one of our chairmen at the time, Chairman Hobson, we were actually in Tashkent because of discussions about the opening of the K2 [Karshi Khanabad] facility, but we did get an opportunity to actually go and see some of those marines and the Special Operations folks there. And it made us all very proud the way that we were working with the Northern Alliance. So I wanted you to know that.

And coincidentally, last week, having been in the district and going to several Veterans Day commemorations, one of the questions that I was asked, and this was by a marine who was—we were doing a Homes for Troops, where one of the marines, there was a home that was built specifically for him because he was a double amputee, so we were there, but one of the marines that was there for that ceremony was asking me if we had any plans—and this all goes back to everyone talking about the budget, and saving money, and concerned about their retirement and all these kinds of issues—so he was asking me, he says do we have any plans to integrate the uniforms? At one point the Army and the Marine Corps had the same uniforms. And he said today we have different uniforms than the Army does. This is him talking. He says it makes sense to us to save money by the Army going to the Marine uniform. I said, okay, that makes sense to have one uniform. I am not sure the Army would agree that it be the Marine uniform. But be that as it may, do we have any plans to do that any time in the future? Because I didn't know the answer to that. And I haven't had a chance to ask any of my colleagues here on the committee if we were even contemplating that. But I guess for 10 years now, according to him, we have had different uniforms. And they are similar, but not exactly alike. And are there uniqueness or unique things to the Marine uniform versus the Army or vice versa?

General O'DONOHUE. Sir, when it comes to requirements, the Marine Corps and the Army, wherever their mission profiles converge, collaborate. In the case of the uniform, the Marine Corps has picked, as we do with the mobility for our vehicles, the places that we think we are going to be most likely deployed, and we created a uniform for that independently. And the Army has done its own mission analysis. And there are areas we converge, like the JLTV. There are other areas where the mission requirements are different. I don't know of any move to have a similar—there have been discussions I think outside. But the Army and the Marines both look at their requirements. And in this one, they obviously came up with different solutions. There is nothing that prohibits a single uniform except, again, the mission profiles that we both have. In some areas they overlap, and others they are distinct.

Mr. REYES. Mr. Chairman, that may be something we want to either look into or consider, which brought this question up. Have

the Marines participated in the network integration exercises with the Army?

General O'DONOHUE. We are on the second one, which is right now. In fact, tonight I fly out there to observe both the Army and the Marines. So the first one that went off we were in observer status. This second one we are participating. And as we get units back from Afghanistan and have more depth, we will participate fully. There have been discussions at the Vice Chief, Assistant Commandant Marine Corps both saying this is an area of collaboration. So senior leadership is fully behind it. My responsibilities are in capabilities development. And I will be there tomorrow.

Mr. REYES. Great. Well, thank you. Mr. Chairman, that is all I have for the moment. I yield back. Thank you all very much.

Mr. BARTLETT. Thank you. Mr. Runyan.

Mr. RUNYAN. Thank you, Chairman. And gentlemen, thank you for your service.

Just a quick question about the JLTV, learning our lessons from what we needed from the Humvee, what we need from the MRAP. And knowing that you guys aren't talking about it, but, you know, up-arming the old Humvees to make them more sustainable and be able to push that off. In the procurement process, are we putting in room to grow in the JLTV so we don't run into this situation as soon in the future?

General O'DONOHUE. Again, as I mentioned before, Humvee recap, and we have had a lot of experience with it, we have done a lot of experimentation and looked at that problem hard. A vehicle in the category of 16,500 pounds or so will not give us all the characteristics to include payload. And that is one of the key distinguishing characteristics between the JLTV and any Humvee recap. So the growth path in every respect is higher with the JLTV. So as we look at making an investment for a vehicle that we are going to have for decades, a growth path is one of the key considerations. And that is shown even in specific of reliability. There is an O&S cost associated with that. If you are at a vehicle at the very edge of its performance characteristics, it starts losing mobility, starts losing transportability, it starts having maintenance problems. And then you don't have the payload to get the mission done. So a key distinguishing factor between the JLTV, and the reason we are going for it, is in fact payload and that growth for a vehicle that we are going to have to have for quite some time, sir.

Mr. RUNYAN. Yes. And going back to MRAPs and MATVs, have you had any experience with parts and getting those actually out in the theater?

General KELLEY. Sir, no, we haven't. Actually, the MRAPs are being well supported. We certainly want to thank Congress for all the help and support that they have provided us there. As you know, on the MATV side of the house, while we continue to respond to the threat, we come up with fixes that will help provide safety on the MATV side of the house. And we are currently in the middle of installing what is called the UIK [Underbody Improvement Kit], which is an improvement package that will help, not only help with the overall vehicle safety but also the passengers inside the vehicle. And we are on path to continue with those up-

grades. One issue is tires for all of our tactical vehicles, and industry is performing well in this regard with the larger R-2000 tires.

Mr. RUNYAN. Going on to obviously what is going to be our largest medical issue of this combat, TBI [Traumatic Brain Injury], I know the Army has taken a program to actually in some cases have sensors in the helmet to predetermine that. Are you guys a part of that program and/or looking into it?

General O'DONOHUE. In every respect. In every vehicle. We have ways of measuring blast, which is a key. The idea to protect mobility, both dismounted and mounted, is going to be a factor, obviously in this war and future ones. And how you measure that. And one of the most pernicious aspects of it is the mild TBI. The severe symptoms are ones that we are first on in collaboration with the Army. It is the ones that are very difficult to detect that sometime have the appearance of a concussion but have long-standing consequences. And that area is a particular focus. So in every way, from the Commandant on down this is the issue of this war. And it is one that we are working closely with the Army, sir.

Mr. RUNYAN. I thank you for that, because it is—I also sit on the VA [Veterans' Affairs] Committee. So it is going to be one that is going to be a challenge, as we are still dealing with Agent Orange from the Vietnam era also. So thank you for that.

Also dealing with, you know, there has been complaints regarding the helmet pad suspension being too hard and it has had occasion to fall apart. Have we looked at ways to enhance that? I know myself, spending 14 years in the National Football League, that having uncomfortable head gear doesn't make your job any easier.

General KELLEY. Sir, I have not personally heard of anybody coming to me and complaining about the helmet mounting system. As you know, we have the Team Wendy suspension system in the helmets that we are currently fielding. And also that is the plan for the ECH, the enhanced combat helmet. We are working closely with the Army, Natick Soldier Systems Center, and also with PEO [Program Executive Office] Soldier to make sure that we are not making our marines, and soldiers for that matter, uncomfortable. And certainly I agree with you that being uncomfortable can be as big a detriment as, you know, not having a safe helmet at all to begin with.

Mr. RUNYAN. Thank you. Mr. Chairman, I yield back.

Mr. BARTLETT. Thank you very much. Now to our visiting member, Mr. Coffman, who is one of the hardest working members of our full committee. Thank you for joining us, sir.

Mr. COFFMAN. Thank you, Mr. Chairman. And thank you for your service to our country and your testimony today. I know the United States Marine Corps is trying to transition to become a lighter force. And so I wonder if you can, in respect to that statement, in what we are talking today, tell me about—drill down a little bit more in the transition of where you see us moving to. Because, you know, we have got a lot of heavy vehicles. You know, the United States Marine Corps is an amphibious force. It is an expeditionary force. It is supposed to be a lighter force. And yet it has become a very heavy force. And so I wonder if you can shed some light on that.

General O'DONOHUE. Yes, sir. I will start, and then pass it. Tied to our mission, obviously an expeditionary force and readiness, as we come out of a protracted counterinsurgency we have shed vehicles, as I talked about before, even just in numbers, as we look to be lighter. The Commandant has cast us, and it was confirmed by SECDEF [the Secretary of Defense], that we are the middle weight force. What that means in part is that we are strategically transportable. We can get there. We are optimized for one of the scarcest and dearest assets we have in terms of strategic mobility, whether it be amphibious shipping, prepositioning, or airlift. So light is in some ways a matter of degree. Much lighter, obviously, than the Army, heavier than SOF [Special Operations Forces] in terms of being scalable. And then we have a range of missions we have to accomplish, from theater security cooperation, crisis response, all the way to major at least initial entry force for an MCO [Major Combat Operation]. So our gear has to be able to span that range. And obviously with the fiscal constraints in terms of how we transition is also a factor. It is one the Commandant has charged us with. It could be as small as a countersniper device on a helmet that weighs four ounces. The Commandant is asking how much does it weigh. So we have made weight and strategic mobility a key performance parameter in the systems we have. And we are looking at from the individual to the squads and the entire MAGTF [Marine Amphibious Group Task Force] reducing it. And there are a number of initiatives, from R&D, to acquisitions, to just getting to a smaller profile in terms of number of vehicles that are part of that. So it is a wide-ranging campaign.

And I know my partners here have some more on that, sir.

Mr. COFFMAN. Maybe you can drill down on this. And that is let's assume at some point we are out of Afghanistan. Let's draw the scenario that we are no longer in Afghanistan, no longer in Iraq.

General O'DONOHUE. Yes, sir.

Mr. COFFMAN. So the Marine Corps is not then engaging in an active counterinsurgency war. So what do you do with all these MRAPs in terms of where do they organizationally fit in terms of as far as the table of equipment goes?

General O'DONOHUE. Yes, sir. We are under extensive review. And the MRAP is a perfect example. We do core missions that every Marine unit is equipped with as a force in readiness. And they are there as kind of core plus, they are above their standard mission set. The MRAP fits the category above the standard mission set. So we can reduce from a combination of MATVs and MRAPs of about 4,000 to a range of somewhere between 1,500 to about 2,500. Those are kept and preserved. There will be a limited amount for training. And then if we get into circumstances where they are required, that smaller equipment set, and we shed the burden of carrying a much larger force for tactical and counter-insurgency is available.

Mr. COFFMAN. So they are not going to be, obviously, let's say we are not—we go back to the Marine Corps prior to 9/11 more or less. I mean we have obviously learned some things we changed from that. So they are not going to be organic to an infantry battalion. Is there anybody that they would be organic to?



General O'DONOHUE. A few. EOD, engineers, a small category of those numbers. The other important point is our mission set is we focus on mobility, not just strategic, but also operational and tactical. So our vehicles have a weight limit, and we put a high premium on giving options to the commander. He can cover a lot of uncertain ground, he is not channelized to roads like the MRAP is. So part of being that light middle weight force is making sure we build in our vehicles and in our marines the ability to be mobile. And that is reflected in the entire equipment set. JLTV, rather than MRAP, our amphibious combat vehicle, the premium is on keeping it low weight and keeping it survivable, but also mobility gives you a survivability because you have many more choices for a commander, and the enemy can't predict where you are going to be.

Mr. COFFMAN. Okay. Thank you, Mr. Chairman. I yield back.

Mr. BARTLETT. Mr. Wilson, do you have questions?

Mr. WILSON. Thank you, Mr. Chairman. And I would like to thank our witnesses for being here today. I am very grateful and honored to represent Parris Island. And my experiences there, Marine Corps Air Station Beaufort, the Naval Hospital in Beaufort, it is just inspiring. Just last month, Chairman Jeff Miller of the Veterans' Affairs Committee was one of the reviewing officials for graduation. And it just is such an awesome and wonderful reminder of the opportunity that young people have to serve who are serving in the Marine Corps. So thank you for your service.

And General Kelley, you have stated your support for the joint light tactical vehicle, JLTV, program. I understand that there are some manufacturers who could provide vehicles in the same rapid timeline as the mine-resistant ambush-protected vehicle, MRAP. The current engineering and manufacturing development phase for the JLTV is scheduled to take 34 months. Would the Department consider revising the JLTV acquisition strategy to move into production more quickly along the lines of the MRAP?

Mr. TAYLOR. Sir, I will take that. The JLTV actually falls under my portfolio. I will address it in this manner. Our best estimate right now is that the EMD [Engineering and Manufacturing Development] phase will take approximately 33 months. I am going to steal one of those months away from you. In addition to that, we are never satisfied with either cost or schedule. We are always looking for ways to drive those down. We had a meeting just this morning with the Commandant. And I can tell you with respect to requirements, we have done all we can. And General O'Donohue can elaborate on that. But we have done all we can early in the development effort in terms of cost-informed trades. So the requirements, there is no gold plating. The General expounded on that. But we are where we are with requirements. So about all that remains to focus on in terms of trying to reduce cost and schedule is schedule itself. So we would consider the potential for trading schedule for cost or vice versa. But we plan on continuing to look at ways within the Department to do that.

There is risk in terms of industry's side. We want to keep the competition field as broad as possible, because that benefits not only the government in terms of keeping the unit price down, but it also has benefits for the industrial base. So we want to keep the

competitive field as broad as possible. So there are potential risks to schedule if we compress that time frame too much in terms of keeping the large competitive field.

So where we are really focusing our attention is inside the building, and what we can do in terms of documentation requirements, oversight requirements, testing, et cetera. So that is where our primary focus is right now, to see if we can free up additional schedule.

General O'DONOHUE. Sir, just to pick up on that, there is a narrow window where the Marine Corps can afford to buy the JLTV as we sequentially modernize and phase the ACV. We have a very aggressive schedule that starts in December with a proposal for an RFP [Requests for Proposal]. So any delay, whether it is continuing resolution and we don't get special authorization, or any other kind of actions, would kind of unhinge the strategy. So time for the Marine Corps and schedule is an imperative in every respect, sir.

Mr. WILSON. And General O'Donohue, you have very interesting challenges as you are looking at different issues. One that is ahead is in regard to possibly the Marine Corps participating in the Army's new infantry carbine program. Will you participate or not?

General O'DONOHUE. Sir, we have looked hard at our infantry weapons. And there are several aspects of it. How do you train the marine? What ammunition do you use? And the weapon itself. We even considered our new IAR [Infantry Automatic Rifle], the automatic weapon that replaced the SAW [Squad Automatic Weapon] with more precision and less weight. We believe the most cost-effective means of meeting our profile right now is product improvement to the M16A4. We have a different mission profile. We are dismounted. We have got infantry. There is caseless ammunition, which is in the future, which we are doing a lot of research and development. Not ready yet. A threshold difference like that would cause us to reconsider our service rifle. Right now the most cost-effective strategy is product improvement to the M16A4, sir.

Mr. WILSON. And in line with that, do the Marines plan to procure a new carbine to replace the M4 or M16? What is the Marine Corps' current and future strategy or plan for a new primary small arms weapon?

General O'DONOHUE. Sir, there is no replacement for the carbine. In the small arms, sir, are you talking about the pistol or—

General KELLEY. Sir, I know that we have a close quarter battle pistol program that we are considering right now. And I can take that one for the record if you like, sir, to get you a little bit more detail on that.

Mr. WILSON. That would be fine.

[The information referred to can be found in the Appendix on page 41.]

General KELLEY. About our infantry assault rifle, I don't know if that was the point you were trying to make there, sir.

Mr. WILSON. If you could go into that also.

General KELLEY. Certainly, sir. The infantry assault rifle, you know, we should start—we have already fielded some in limited quantities out in Afghanistan to get our marines' user assessment. It is performing exceptionally well. We should start fielding that weapon in February of 2012, so next year. And we should complete

that fielding of about 4,000-plus infantry assault rifles, that should finish up in about April of 2013, sir.

Mr. WILSON. Thank you very much. And I also want to commend you on my visits to Parris Island to see the marksmanship training, to see the sighting. It is just so impressive and how capable these young people are. It just warms your heart. Thank you very much.

Mr. BARTLETT. Thank you. In my opening comments I regretted the fact that we have not developed a new national strategy for how we will use our military in the future. About every 6 hours we have another billion dollar deficit, which means another billion dollars in debt. We spend almost as much on our military as all the rest of the world put together. And we spend more on our military than the next 11 countries in the world combined. And nine of those are allies of ours.

The Ryan budget, which is a very tough budget, doesn't balance for 25 years. With the reality of where we are budgetwise in our country, there are obviously going to be those who will say that we will never balance the budget, that our country will go bankrupt unless there are additional cuts to defense. There is no way of knowing where this dialogue will end.

What I would like you to do for the record is to assume the sequester sets in and that the Congress has the wisdom to permit you to use that money as wisely as you can, rather than across-the-board cuts the way it is now structured, so that you can develop the best possible Marine Corps with the moneys that you have. This will be very useful in advising the development of a new national strategic strategy, new national strategy, whatever the amount of money available might be.

[The information referred to can be found in the Appendix on page 41.]

Mr. BARTLETT. I have a few questions I need to ask that were not asked by my colleagues. Most of them were. What is the status of the Marine Personnel Carrier program? Given the current budget environment, do you believe this program is affordable and justified?

General O'DONOHUE. Sir, right now the MPC [Marine Personnel Carrier] is in research and development. It has a utility in multiple ways. It is a highly leveraged RDT&E [Research, Development, Test, and Evaluation] funding that is in the fiscal year 2012 budget, and it is in several respects, and I will describe those. The first is as we start looking at an amphibious combat vehicle, and we are in the process of doing analysis alternatives, having a connector with the wheeled vehicle, which would be the Marine Personnel Carrier, MPC, would be one of the options for it. This summer or in the early fall we will have a decision on that.

Secondly, in our portfolio we are looking at mixed wheeled and tracked vehicles. We talked about earlier in the testimony the advantages of the Stryker. The survivability of wheeled vehicles is high, the mobility as well. And we are working in fact with a state of the art technology demonstrator that proves to us that we can get a commercial-off-the-shelf capability that is very effective.

The other aspect, we are managing our three replacement programs for the EFV [Expeditionary Fighting Vehicle], the AAV-

SLEP [Amphibious Assault Vehicle–Service Life Extension Program], the ACV, and the MPC under one program manager. And we are using the money that is in the current budget to experiment with aspects that affect all of them. So the money is really in the category of experimentation.

And then lastly, as we look at an LAV [Light Armored Vehicle] replacement, we are learning things from the RDT&E. Very highly leveraged. We are looking at fiscal year 2014, a decision point. If we have survivability in the ACV that makes it a common fleet vehicle, then we will shift from eight and four mix, eight battalions of the ACV and four battalions of MPC, we would be able to shift over maybe to a pure fleet.

So the money we have right now doesn't reflect a program decided. It reflects a judicious investment so we can learn and leverage and inform the different areas that I described, sir.

Mr. BARTLETT. Thank you. What is the schedule for the enhanced combat helmet? When do you expect to begin fielding this helmet in Afghanistan?

General KELLEY. Sir, I know I am probably not supposed do this, but thank you for asking that question. Based on a comment I made last March, the enhanced combat helmet program, we had noticed some anomalies last March, if you remember when I had a chance to talk to you the last time. Today, November 16, the enhanced combat helmet is going to enter into its First Article Test series number two. And we are really looking forward to that test. This has been probably one of the best collaborative ventures that I have seen between industry, director of operational test, our own Marine Corps operational test and evaluation activity, and our program manager at Marine Corps Systems Command.

We think after having flushed out the test protocols rigorously this past summer that ECH is going to pass its First Article Test well. It will pass its full up system level testing immediately to follow that. There is a series of reports, as you well know, one that will have to come to the Congress, and also a Beyond LRIP [Low Rate Initial Production] report, and then we should start fielding in late spring, early summer of 2012, sir.

Mr. BARTLETT. Thank you. In your opinion, are there opportunities to improve commonality and jointness between the Army and Marine Corps across the modernization account? For an instance, how do the Army and Marine Corps coordinate on the development and fielding of tactical wheeled vehicle solutions that address similar needs and requirements of both Services?

General O'DONOHUE. Sir, the story of this war has been almost complete integration between Army and Marines, both tactically, where Marine battalions have worked for Army brigades, and Army brigades have worked for Marine divisions. Likewise, actually in the requirements and acquisition, we work very, very closely. We meet almost every other month, it is actually monthly at some level, every other month at the general officer level with the Army leadership to discuss opportunities like that. General Bo Dyess is my counterpart. We meet quarterly with our full staffs to do a staff review. So in every respect—in fact, the JLTV is a shining example of where we went through some knowledge points,

worked together as a Service, and were able to come up with a program that meets both Service needs, sir.

Mr. TAYLOR. Sir, I would also add that on the programmatic and development side we go to where the infrastructure exists. In fact, we have actually signed a memorandum of agreement with the Army's TARDEC [Tank Automotive Research, Development, and Engineering Center], and we actually take advantage of their engineering infrastructure to work some of our joint engineering issues.

Mr. BARTLETT. Thank you. Mr. McIntyre.

Mr. MCINTYRE. I have no questions right now. Thank you, Mr. Bartlett.

Mr. BARTLETT. Let me ask the other members of our subcommittee, do you have additional comments or questions?

Mr. REYES. I just wanted to follow up on a question that my colleague from Missouri asked, and maybe get a little more detail. When she was talking about the mandated cuts of the Budget Control Act, I think she asked how big a portion of those cuts would be made from the Marine Corps procurement accounts. But I am not sure I heard the answer. Can you tell us? Do you have that information?

General O'DONOHUE. Sir, I don't. I know the Commandant has talked about how we have three areas that we go at it. And that would assume how DOD would apply them based on strategy. Again, we have made the payroll, as the force and readiness, O&M is obviously key to that, that we would have to maintain to be ready. There is a personnel piece, keeping faith with the marines. Again, the Marine Corps has gone through a capabilities-based review. We start with a 202,000 Marine Corps. Based on strategy, based on the roles of force and readiness we have come with a 186,800 force. It would require, to keep faith with the marines, a judicious drawdown. We are not doing RIFs [Reduction in Forces] to combat veterans and those things. So the timing of it is important in terms of degree, in terms of going after that. And then we have talked about how small the Marine Corps modernization account is on the ground side, about .6 percent of DOD. So a minor impact—or a minor cut has a large impact. Those things I think have to be sorted out at the OSD level in terms of prioritization rather than just a strict proportionality. If it were strictly a proportional cut it would be damaging to the Marine Corps, and we would have to reevaluate the strategy in terms of how we go about doing that.

Mr. REYES. So based on that answer, at what point do you think you will be able to tell the committee, you know, the types of cuts that you would be forced to make as a result of this act? Because a number of us are concerned about not just these cuts, but any additional cuts that might be taken out of the Marine, the Army, and other budgets.

Mr. TAYLOR. I can't speak to specific impacts to specific programs, but I can talk in general themes. In terms of government programmatics, it will obviously become extremely difficult at best or near impossible at worst to launch new programs, and it will certainly be extremely difficult to keep existing programs stable in terms of funding and schedule. In fact, some of the detailed impli-

cations are stretching out both development and procurement rates to field the ultimate capability.

And then there is also implications for industry and there is a most recent example, very similar to what we are experiencing on the shipbuilding front, now on the ground vehicle side we are starting to see some contraction. Just recently it was announced that General Dynamics may procure FPI [Force Protection Incorporated]. We have also seen vendors who are not normally in the ground vehicle business. They are now trying to partner. They may not survive in certain scenarios.

Some of the specific implications of that, perhaps a part of foreign pricing rate agreements that vendors must negotiate with DCAA [Defense Contract Audit Agency]. Part of that equation is assessing the current state of their business base and, in addition to that, another aspect of the equation is making predictions about their future business base. What this equates to to the government is probably a higher forward pricing rate agreement whether this comes to fruition or not. So we are probably already incurring risk as a result—very much like the markets, just reaction to the perception of risk will probably drive up labor rates.

Mr. REYES. And that is very helpful because oftentimes we have to articulate those consequences, you know, internally as we debate how we move forward and—because the reality is that it is such a huge defense budget that there are knives at every level that are looking for chunks to cut out. So that is why we ask these questions. So I appreciate that answer, and I want to associate myself with the chairman, that we—it is important to have a national strategy, a cohesive understanding of how our military is going to move forward as we deal with these budget shortfalls.

Thank you, Mr. Chairman.

Mr. BARTLETT. Thank you. Now we return to Mr. McIntyre.

Mr. MCINTYRE. Thank you, Mr. Chairman. Gentlemen, given the constrained budget environment, what concerns do you have about the ability to maintain night vision goggle production capacity and technological capability? And specifically what planning, review or assessment are you undertaking to better understand these challenges so that we can sustain this critical program?

General KELLEY. Currently, sir, we don't have any further requirements for purchasing of night vision goggles. In our plan right now we are really just planning for replacement in the outyears.

Mr. MCINTYRE. Do you believe that strategy is going to be adequate given the demands of the theater?

General KELLEY. Given the current demand right now, we feel that the budget is adequate, sir.

Mr. MCINTYRE. With regard to vehicle protection, my understanding is there is research being done by the DOD, by the Army and the Marine Corps advancing both material and nonmaterial solutions to the constantly changing threat of IEDs. Are these various research efforts sufficiently coordinated to bring forth solutions in the most timely manner? Is there any coordination going on between these three aspects of research?

Mr. TAYLOR. There is coordination at multiple levels, both in the S&T [Science and Technology] world, across numerous fronts and then also in the actual later development efforts, again as pre-

viously mentioned, an MOA [Memorandum of Agreement] that we entered with the Army's TARDEC. There is a joint center for ground vehicles and that is one of the themes that has been raised in numerous forms. So there is joint collaboration and communication on this front. But to the best of my knowledge there has been no new alloys discovered. So for the most part it comes down to things like composites or specialty metals, and certainly that becomes part of the discussion in cost in foreign trades in terms of the cost to provide these new technologies.

Mr. MCINTYRE. So you mention composite and materials and alloys. So there is not other technology that we can anticipate that is about to emerge other than looking at the lightweightness of the armor, so to speak?

Mr. TAYLOR. I didn't mean to allude that those were the only areas. I wouldn't consider myself a subject matter expert, but I am certain there are.

Mr. MCINTYRE. Does anybody else know on the panel? Okay. If you could check into that and get back to us. Mr. Chairman, I would ask if you would in 5 business days let us know what those other areas may be.

Mr. TAYLOR. Yes.

[The information referred to can be found in the Appendix on page 41.]

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

Mr. BARTLETT. Thank you very much. Another element in the discussion as to how much money we will spend in the future on defense is the recognition that our robust defense spending in the past and our willingness to protect has encouraged many of our allies to be quite parsimonious in their defense spending. So much so that in this little operation in Libya, our NATO allies ran out of missiles, bombs and ammunition. Hopefully a new assessment of what is there in defense spending will create a foreign sales market that may help ease the challenge we have where about every 12 hours there is another billion dollar trade deficit.

When we have had a chance to review your testimony and the questions and answers, we may need to ask you additional questions for the record. We trust that you will be available to answer those. If there are no additional comments on part of my colleagues, I will thank you very much for your service and for being with us today, and our subcommittee now stands in adjournment.

[Whereupon, at 3:05 p.m., the subcommittee was adjourned.]





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**A P P E N D I X**

NOVEMBER 16, 2011

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**PREPARED STATEMENTS SUBMITTED FOR THE RECORD**

NOVEMBER 16, 2011

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**Opening Statement**  
**Honorable Roscoe Bartlett**  
**Marine Corps Ground Force Acquisition and Modernization**

November 16, 2011

Good afternoon. The Tactical Air and Land Forces Subcommittee meets today to receive testimony on Marine Corps ground force acquisition and modernization programs.

We welcome our distinguished panel of witnesses:

**Brigadier General Frank L. Kelley**  
Commander  
Marine Corps Systems Command

**Brigadier General Daniel J. O'Donohue**  
Director, Capabilities Development Directorate  
Combat Development & Integration

**Mr. William E. Taylor**  
Program Executive Officer, Land Systems  
U.S. Marine Corps

There are roughly 210,000 military service personnel deployed in Iraq and Afghanistan; approximately 130,000 are in Afghanistan and out of this number 21,000 are Marines.

More than 6,200 Americans have given their lives, and more than 46,000 have been wounded, in Iraq and Afghanistan since September 11, 2001. In order to perform their missions, whether home or abroad, these servicemen and women must be adequately equipped with the right gear to maximize their combat effectiveness and provide for the best protection possible. We cannot lose focus of this objective.

This is the fourth in a series of hearings we are holding for the purpose of updating our Members on the budget request for FY 2012 and to help better understand the potential impact of the Budget Control Act of 2011 on our military

capability and deployed forces. This remains a major concern to this Subcommittee.

Today we will specifically address Marine Corps ground force acquisition and modernization programs. The subcommittee expects to receive an update from the witnesses as to what changes may have to be made in their proposed acquisition programs in fiscal year 2012. We would like to know the views of our witnesses on what the potential impacts to Marine Corps capabilities are, particularly in light of the possible reductions in the Marine Corps procurement and R&D budgets over the next ten years. We also hope to gain a better understanding from our witnesses in how potential funding reductions would be apportioned for their programs and how these funding reductions could potentially impact Marine Corps modernization programs and the approximately 21,000 Marines currently serving in Afghanistan.

An example of one of our primary concerns focuses on the affordability of the Marine Corps's ground combat and tactical vehicle modernization strategy. The subcommittee expects to gain a better understanding of the processes being used by the Marine Corps in determining what is good enough in terms of their combat and tactical vehicle portfolios, given the austere fiscal environment projected for the next 10 years. What metrics are the Marines using to determine how much modernization is needed for the combat and tactical vehicle fleets and will the Marine Corps ultimately be able to afford this ground vehicle modernization strategy?

As I have stated before, major reductions in the federal budget need to be a major element of correcting the federal deficit. The Department of Defense must share in a fair and balanced way in those reductions, and that process is already taking place under the Budget Control Act of 2011, with nearly \$500 billion in cuts planned for DOD over the next ten years. If first the Administration had reconsidered the national military strategy based on the likely resources to be available, the changes that are having to be made by DOD in acquisition programs could be better justified, but it appears we will only have a new national military strategy, after the fact.

Under the sequestration provision of the Budget Control Act, further cuts, up to a total of \$1 trillion over ten years could be possible under what Secretary Panetta has called the "Doomsday mechanism." As recently as this past Monday,

Secretary Panetta indicated that such a reduction would be “devastating for the Department.” Secretary Panetta further indicated a \$1 trillion reduction possible under the Budget Control Act sequestration provision would “amount to 23 percent if the President exercised the authority to exempt military personnel.” Under current law, the reduction would have to be applied equally to each major investment and construction program.

Finally, the Secretary noted that beyond 2013, “cuts under maximum sequestration would equal about \$100 billion a year compared with the FY 2012 plan...we would have the smallest ground force since 1940, the smallest number of ships since 1915, and the smallest Air Force in history...the threat to national security would not be reduced...we would have to formulate a new security strategy that accepted substantial risk of not meeting defense needs.”

Before we begin, I would also like to welcome the subcommittee’s newest Member, Representative Kathy Hochul, from New York. Welcome to our subcommittee.

I would now like to turn to my good friend and colleague from Texas, Silvestre Reyes, for any comments he may want to make.

**Statement of the Honorable Silvestre Reyes**  
**Ranking Member, Subcommittee on Tactical Air and Land Forces**  
**USMC Modernization**  
**November 16, 2011**

- Since the subcommittee last received testimony from the Marine Corps on ground equipment modernization plans, several key events have taken place.
- First, Congress passed the Budget Control Act of 2011, which mandates that DOD cut \$470 billion from its planned budget over the next 10 years.
- Second, President Obama decided to complete a total withdraw of US forces from Iraq, which could impact how Marine Corps forces are postured in the region.
- And third, the Commandant of the Marine Corps and Secretary Panetta have stated they want to “refocus” DOD, and the Marine Corps, on the Asia-Pacific region.
- When taken together, it appears that the Marine Corps may propose significant changes in how it plans to modernize and equip its forces in the future.
- For example, a focus on reestablishing the Marine Corps maritime presence suggests a lighter-weight force, which could greatly reduce the size of the Marine Corps’ current vehicle fleet.
- There are already plans in place to eliminate 10,000 or more heavy wheeled vehicles from the Marine Corps’ inventory, but will there be changes beyond that reduction?



- And from a budget perspective, less funding for equipment procurement may mean that it is time to look at some of the needless duplication between the Army and Marine Corps.
- For example, the Marines and Army wear different battle dress uniforms, use different personal equipment, and even wear different helmets.
- In terms of individual weapons, the Marines recently decided to no longer use the M249 Squad Automatic Weapon, which is still in use by the Army, and instead field a new weapon, the M27 "Infantry Automatic Rifle." The Marines also continue to use the M1911 .45 Caliber pistol, which the Army took out of inventory more than 10 years ago.
- This kind of duplication does not mean the Marines have the wrong equipment.
- In some cases, it may mean that the Army needs to change its plans to match what the Marines are doing.
- But overall, in times of tight budgets, it may be time for a thorough review of equipment differences between the Army and Marine Corps to determine where common equipment can be procured in the future to save money.
- Such a review can be focused on the long-term to ensure that current operations and training are not disrupted, but it may be time to start the process.

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STATEMENT OF

BRIGADIER GENERAL DANIEL J. O'DONOHUE  
DIRECTOR  
CAPABILITIES DEVELOPMENT DIRECTORATE  
COMBAT DEVELOPMENT & INTEGRATION

AND

BRIGADIER GENERAL FRANK L. KELLEY  
COMMANDER  
MARINE CORPS SYSTEMS COMMAND

AND

MR. WILLIAM E. TAYLOR  
PROGRAM EXECUTIVE OFFICER LAND SYSTEMS

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES

CONCERNING

UNITED STATES MARINE CORPS ACQUISITION AND MODERNIZATION

ON

DATE: NOVEMBER 16, 2011

NOT PUBLIC UNTIL RELEASED BY THE  
HOUSE ARMED SERVICES COMMITTEE  
SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES

**Introduction**

Chairman Bartlett, Ranking Member Reyes, and distinguished members of the Subcommittee, it is an honor to appear before you today. On behalf of all Marines and their families, we thank you for your extraordinary support.

The Marine Corps is the nation's expeditionary force in readiness. As such it is prepared for all manner of crises and contingencies. It recognizes the complex, highly adaptive threats that we face. Multiple regional powers and a host of lethal groups will exploit numerous seeds of instability, proliferating and increasingly lethal technology, extremist ideology and the advantages of networks hidden amongst the population. In an unpredictable, unstable and uncertain future security environment, there is an emphatic trend in warfare. That is the dynamic combination of conventional and irregular warfare by state, non-state and criminal threats that blurs traditional definition. The Marine Corps is manned, trained and equipped to continuously adapt to, deter and defeat this threat with increasingly discriminating and precise full spectrum operations. Through a comprehensive force structure review, we designed a post-Operation Enduring Freedom (OEF) force in readiness that mitigates hybrid threats, creates options and provides decision space for senior leadership, provides access and sets initial conditions for a joint, interagency and allied response. We operate as a Navy-Marine Corps team and are integrated with our partners in Special Operations Command.

Ten years ago today, under circumstances no one predicted, two Marine Expeditionary Units of 4,400 Marines and 6 amphibious ships were assembling to strike Al Qaeda after the horrific acts of 9/11. On short notice, this Task Force rapidly concentrated from widely dispersed forward engagement missions to decisively attack 450 nautical miles from the Arabian Sea to Kandahar and then another 300 miles to Kabul. Without special preparation, they conducted a full range of irregular and distributed operations against Al Qaeda in support of the Northern Alliance. These operations were completely integrated with SOF, the interagency, and our allies; and were conducted in an undeveloped theater with extremely limited infrastructure. No other force had the readiness, strategic mobility, self-sustainment, command and control, and scalable combat power to respond so quickly, discriminatingly and decisively. Notably this force attacked at a time and place of our choosing from amphibious ships with the strategic, operational and tactical mobility to extend the operating area beyond the enemy's ability to cope. The dynamic ability, at a moment's notice, to shape, deter, defeat, ensure access and deny our enemies sanctuary is emblematic of the crisis response capabilities that we continue to improve in our current and future force.

We recognize that the nation faces an uncertain security environment while facing tremendous fiscal challenges. While our nation moves to re-set its military in a post-Afghanistan world, it does so in increasingly complex security environments. As we explore Department of Defense (DoD) options to adjust to changing fiscal realities, there is a clear imperative for our nation to retain a credible means of mitigating risk. As the joint force-in-readiness, the Marine Corps provides efficient and effective insurance against the unexpected with an adaptive, multi-capable force that has the reach to defend American citizens, commerce and our vital national interests. 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 137 times since 1990.

Our unequivocal top priority is support to the 20,000 Marines in Afghanistan and the 10,000 others forward deployed. In stride, we are also transitioning to the post-OEF force laid out in our force structure review. Last February, the Secretary of Defense approved this review that will draw down and reshape the current 202,000 Marine Corps to a scalable, force-in-readiness that can respond to disasters such as in Japan, Pakistan, Haiti and Indonesia, crises such as Libya, major combat operations, counter-terrorism and counter-proliferation. Our modernization and equipping plans reflect this force structure review. The impact is primarily in the out years but we have already achieved savings by having a clear post-OEF direction.

In today's testimony, we will describe our plan for Balanced Modernization and our Ground Combat and Tactical Vehicle Strategy (GCTVS). We will also highlight the programs in which notable changes have been made over the course of this year – to include our efforts with the amphibious combat vehicle, the Joint Light Tactical Vehicle (JLTV), and the Assault Amphibious Vehicle survivability initiative upgrade (AAV Upgrade). Finally, we will address the potential impact of budget cuts at the level anticipated relative to sequestration.

#### **Balanced Modernization**

As a force-in-readiness, the Marine Corps must judiciously preserve readiness, manning and modernization within a budget that is only 7.8 percent of DoD's—which includes all associated Navy and Marine accounts. In order to ensure access for the joint force and meet Combatant Commander requirements, the overall Marine Corps modernization priorities are the Joint Strike Fighter, the Amphibious Combat Vehicle (ACV), a balanced Ground Combat and Tactical Vehicle portfolio and amphibious capability. This testimony focuses on our ground forces modernization which is only 14 percent of our budget and 0.6 percent of the DoD budget. Our ground procurement account is approximately \$2 billion a year to include equipment and ammunition.

Budget cuts to our relatively small ground modernization account have a disproportionate impact. This is magnified by new, exponentially larger costs to field a ground force due to the requirements of a more dispersed battlefield against a hybrid enemy that will employ increasingly lethal technology. To meet that threat, we must be able to disperse and concentrate, conduct full spectrum operations across all dimensions (air, land, sea, cyber and the electromagnetic) and provide protected mobility to both dismounted and mounted Marines. Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) capability guides operations, ensures coordinated action and provides for joint/coalition interoperability across a broad and complex operating area. Our challenge is to meet these costly trends in current and future warfare within fiscal constraints.

Our overall strategy is to accept risk as a forward deployed, crisis response force, capable of one major combat operation (MCO), that meets priority Combatant Commander requirements and accepts risk in extended operations ashore. Our supporting ground modernization strategy is to sequentially modernize priority capability, reduce equipment requirements wherever possible

and judiciously sustain remaining equipment. Our top ground modernization priority is the Amphibious Combat Vehicle (ACV). We intend to address our light combat vehicle shortfalls before and after ACV modernization. Our JLTV strategy depends on modernizing those vehicles with the most demanding mission profiles before we have to focus on ACV. The biggest risk to sequential modernization is schedule—not program schedule but rather decision schedules. If JLTV is delayed, we lose an opportunity that we cannot readdress until after ACV procurement in the late 2020s. We expect rigorous oversight and a responsible acquisition plan, but it must acknowledge the risk of unwarranted delay. This fall, the Marine Corps conducted a portfolio review for affordability - which included JLTV strategy supporting JLTV knowledge points. Today's testimony is an opportunity to provide the committee with the important developments from that review.

For both the ACV and JLTV, the Marine Corps has taken an aggressive approach to ensure we obtain the best value for the government while also ensuring program success. This approach is distinguished by:

- dealing with mature technology so the program focus is on integration and reduced cost, not technological risk;
- using affordability as a key performance parameter;
- extensive government testing;
- comprehensive system engineering and cost analysis;
- mature cost data;
- at inception, a close interaction between requirements and acquisition teams to make cost informed trades in requirements;
- a transparent, open dialogue with industry, OSD and Congress;
- streamlined acquisition process with an emphasis on competition; and
- programs considered within the entire portfolio for required capability and affordability.

Throughout all our programs, we conducted reviews to reduce requirements wherever possible. Although all of our units require a high state of readiness, not all units need to be equipped for every mission. We conducted and are refining an extensive review of core missions and associated equipment sets for all units. For core missions, such as an extended counterinsurgency, we will retain a select pool of equipment and divest remaining equipment rather than more broadly fielding the capability.

#### **Ground Combat and Tactical Vehicle Strategy**

This year the Marine Corps experienced three significant changes in its ground vehicle strategy. The year began with the cancellation of the Expeditionary Fighting Vehicle program, which had become unsustainably expensive. Later this year, we were able to work with the Army, dramatically reducing the cost estimates for the Joint Light Tactical Vehicle by identifying essential and non-essential common requirements for the vehicle. We also gained support from the Office of the Secretary of Defense for a streamlined acquisition schedule. Finally, with the fiscally constrained environment in which we are operating, we are reducing our inventory of vehicles by about 10,000 to create trade space for other investment priorities.

These three actions influenced the acquisition and modernization objectives of the Ground Combat Tactical Vehicle Strategy (GCTVS).

The Marine Corps' Ground Combat and Tactical Vehicle Strategy (GCTVS) is the basis for planning, programming, and budgeting to provide balanced maneuver and mobility capabilities to the Marine Corps' operating forces. The strategy guides our planning for the right mix of vehicles capable of supporting the full range of operations. This effort is evolutionary in approach; and includes combat vehicles such as the amphibious assault vehicles, light armored vehicles, and tactical vehicles such as the Joint Light Tactical Vehicle (JLTV). The strategic goals of the GCTVS are to field vehicles with the correct balance of performance, protection, payload, mobility, transportability, and fuel efficiency. This balance will enable rapid concentration and dispersion of Marine Air-Ground Task Force (MAGTF) combat power, support strategic deployment concepts, and meet and sustain worldwide Marine Corps commitments.

Our end-state is to develop a more relevant and affordable portfolio of combat and tactical vehicles. Through procurement, recapitalization, and service-life extension, we will provide the capacity for Marine forces to conduct irregular warfare and sustained operations ashore, and, when necessary, conduct Marine Expeditionary Force-sized forcible entry operations from the sea. The enduring challenge to the strategy is that the procurement and sustainment of new vehicles is exponentially more costly than previous vehicles.

The Marine Corps acquisition community is committed to delivering required warfighting capabilities to our Marines in a timely and affordable manner. The DoD has undertaken a number of efficiency initiatives, to include streamlining the acquisition process to focus on collaboration among stakeholders to properly align requirements and resources with acquisition strategies. Additionally, we are closely examining technological maturity of potential components and solutions in order to achieve realistic program goals. The Marine Corps is mindful of the need to leverage programs, technologies, technical skills and competencies of other Services to ensure we deliver the most effective and affordable combat capability to our Marines. We strive to be efficient in our program acquisition efforts in order to achieve programmatic goals and to yield the best value for the taxpayers. In addition to the procurement of equipment and services, our systems command conducts enterprise-level system engineering across product lines and product life cycles to ensure end-to-end integrated, interoperable, and certified warfighting capabilities. We are committed to using every resource available to maximize the overall combat effectiveness and survivability of our Marines while ensuring we are addressing the affordability needs of our Corps.

#### **Modernization Overview**

The Marine Corps is currently undertaking several initiatives to modernize the Total Force. The priority for our ground forces is the seamless transition of Marines from the sea to conduct operations ashore whether for combat operations or humanitarian assistance. Our ground combat and tactical vehicle strategy is focused on providing the right mix of assets - balancing performance, payload, survivability, fuel efficiency, transportability and cost.

On November 2, 2011, the Commandant of the Marine Corps, General Amos, testified before the House Armed Services Committee that the Amphibious Combat Vehicle and the Joint Light Tactical Vehicle are the priorities of our ground modernization initiatives. In particular, the Amphibious Combat Vehicle is crucial to our future ability to conduct surface littoral maneuver and seamlessly project Marine units from sea to land in hostile, uncertain, or permissive environments. Also, the Joint Light Tactical Vehicle will provide increased payload, performance, and protection and will replace the portion of the High Mobility Multipurpose Wheeled Vehicle (HMMWV) fleet that faces the most demanding environments. We remain firmly partnered with the U.S. Army in fielding a JLTV that lives up to its name while also being affordable.

#### **Major New Initiatives in Fiscal Year 2012**

In February of this year, the Marine Corps submitted its President's Budget request for fiscal year 2012. We appreciate the committee's support of our request. We have since made several program adjustments in light of new information and on-going development efforts.

##### **Amphibious Combat Vehicle**

Throughout calendar year 2011, the Marine Corps conducted a comprehensive systems engineering review of amphibious vehicle operational requirements in order to refine those requirements on a cost-informed basis. The review studied the requirements for water mobility, land mobility, lethality and force protection in order to develop trade-space to drive down both the production and the sustainment costs for the amphibious vehicles of the future. The results of that work informed the Amphibious Combat Vehicle (ACV) Initial Capabilities Document; and continued analysis, predictive modeling, testing, and the Analysis of Alternatives results will inform the Capability Development Document. The ACV remains the Marine Corps' #1 ground modernization priority.

##### **Assault Amphibious Vehicle Survivability Upgrade**

Since the February 2011 submission of the President's Budget, we have reevaluated the proposed program plan for the Assault Amphibious Vehicle (AAV) Survivability Upgrade and have recommended several changes. These changes are based on a revised and narrowed scope of the upgrade program to focus on critical survivability modifications.

Ultimately, the AAV Upgrade increases force protection and vehicle survivability levels of the current capability in order to conduct operations ashore against current threats and to extend its service life until replaced by the ACV.

##### **Joint Light Tactical Vehicle**

The Joint Light Tactical Vehicle (JLTV) is a joint program between the Marine Corps and the Army. We are focused on developing and procuring Multiple Mission Role Variants of the JLTV family of light vehicles to modernize those light combat vehicles for the most

demanding missions, providing increased payload, performance, and protection. The JLTV will replace a quarter of the High Mobility Multipurpose Wheeled Vehicle (HMMWV) family.

Since the budget was submitted in February, the Army and Marine Corps have agreed to a common set of requirements, a streamlined acquisition schedule that reduces the engineering design and development schedule by 15 months, and a competitive selection process to ensure affordability of the JLTV. JLTV's estimated cost, performance, and schedule have improved significantly the past six months. In addition, industry has demonstrated several competitive prototypes whose performance and projected cost have been verified by the government. At this time, JLTV is on schedule, affordable and performing to meet essential validated Marine Corps light combat capability gaps.

Also this year, the Marine Corps examined (through experimentation, testing and analysis) use of a High Mobility Multi-purpose Wheeled Vehicle (HMMWV) recapitalization program to improve survivability of the HMMWV and therefore meet our light fleet requirements. By July, we determined that with the added weight necessary to improve protection, HMMWV based platforms will not meet Marine Corps requirements in terms of reliability, payload, service life, mobility, ability to fit on Maritime Prepositioning Force shipping and growth potential. Therefore, the Marine Corps will reduce the scope of our 2011 HMMWV competitive survivability initiative to a HMMWV Modification program. The purpose of that effort is to extend the service life of our roughly 14,500 light tactical vehicle fleet out to 2030.

#### **Potential Industrial Base Impacts**

Cuts at the level anticipated with sequestration will likely cause damage to the Marine Corps as well as our industrial base. It will hollow the Marine Corps and cause us to be out of balance in manpower, procurement and modernization. Summarily reducing procurement accounts will damage the industrial base, which may not recover. The result of such cuts would weaken our nation's military superiority.

Sequestration would require the Department to revisit the National Security Strategy and reassess requirements for shaping the global environment in order to protect national interests. The nation would incur extra strategic and operational risk, which may prove dangerous the next time our nation is called upon to respond to a global crisis.

#### **Conclusion**

The Marine Corps has achieved efficiencies through a post-OEF, capabilities based review that are reflected in our ground modernization strategy. As the joint expeditionary force in readiness we achieve efficiencies by:

- mitigating risk and providing insurance to the joint force;
- providing and equipping a force that can scale from forward presence to crisis response to MCO and, if need be, sustained operations;
- efficiently optimizing increasingly scarce strategic lift as a middle-weight force;



- having a clear direction and strategy for manning, training and equipping the post-OEF Marine Corps;
- maintaining an efficient level of readiness in every unit; and
- efficiently providing strategic, operational and tactical mobility that provides options and decision space for national leaders and dilemmas for our adversaries.

As Congress and Department of Defense move forward with tough decisions on the future of our Armed Forces, the crisis response capabilities the Marine Corps provides our nation must serve as the compass in determining its ultimate end strength, equipping and training needs. Through it all, the Marine Corps will make the hard decisions and continue its commitment to provide the best fighting force at the lowest possible cost.

With the support of the Congress and the American people we can ensure our Navy and Marine Corps team is ready for the current fight and is well prepared to secure our nation and national interests in an uncertain future.



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

NOVEMBER 16, 2011

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#### **RESPONSE TO QUESTION SUBMITTED BY MR. BARTLETT**

General O'DONOHUE, General KELLEY, and Mr. TAYLOR. The Marine Corps conducted a capabilities-based Force Structure Review (FSR) one year ago in order to evaluate and refine the organization, posture and capabilities required of America's Expeditionary Force in Readiness in a post-OEF security environment. The Marine Corps employed a panel of senior officers (colonels) representing all elements of the Marine Corps. The panel received guidance from the Commandant, applied operational planning scenarios of the future, and developed a force structure that satisfied both from a capabilities perspective. In this way, the Marine Corps directly tied anticipated operational workload to planned reductions in manpower. The results of the FSR detailed a Marine Corps force that is specifically tailored in capability to anticipated workloads. Additionally, the Marine Corps is presently conducting a review of all civilian billets and service contracts. This three phase review began in July of 2011. We are also developing policies supporting the direction given by USD (P&R). These policies will be published in Marine Corps Orders which guide the development of our total force.

Although the world is continuing to change and budgets continue to fluctuate, America's requirement to maintain a forward based force-in-readiness remains. Physical presence matters. It shows our economic and our military commitment to a particular region. It deters potential adversaries, assures our friends, and permits response to crises in a timely manner. Our current combination of amphibious, air borne and, prepositioned forces provide the minimal capacity to realistically address this challenge. During these times of constrained resources, we remain committed to refining operations, identifying efficiencies, and reinvesting savings to conserve scarce public funds. [See page 15.]

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#### **RESPONSE TO QUESTION SUBMITTED BY MR. MCINTYRE**

Mr. TAYLOR. 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. Joint Service Combat Developers are leveraging recent capabilities based analysis to define the Joint Service Small Arms Modernization (JSAM) Initial Capabilities Document (ICD). [See page 19.]

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#### **RESPONSE TO QUESTION SUBMITTED BY MR. WILSON**

General KELLEY. The Marine Corps currently has three pistols in operational use: the M9 9mm Service Pistol, the M9A1 9mm Pistol, and the M45 .45 Caliber Special Operations Pistol. The M9 is the service pistol issued to senior Marine Officers (O-6 to O-9), all Navy Officers, and senior Navy enlisted (E-6 to E-9). The M9A1 provides a rail to mount laser pointers and lights and is issued primarily to security forces and law enforcement personnel. The M45 is the .45 caliber pistol issued to reconnaissance and Marine Corps Special Operations Command (MARSOC) personnel.

We are currently in source selection for a commercial-off-the-shelf (COTS) materiel solution to replace the Quantico Weapons Training Battalion, Precision Weapons Section (PWS) hand-built M45. The new COTS pistol will be a modified 1911 with Picatinny Rail and classified as the Close Quarters Battle Pistol (CQBP). The CQBP approved acquisition objective is approximately 4,000 pistols.

Along with the U.S. Army, the Marine Corps is evaluating the service pistol requirement and M9 service life. The Joint Requirements Oversight Council has already approved a Modular Handgun System (MHS) Capabilities Production Document (CPD) that would provide the requirements foundation for the next generation Joint Service handgun. Marine Corps combat developers actively participated in MHS CPD development, which focused on ergonomics, lethality, interoperability and reliability. Based on the satisfactory performance of the M9, relatively limited distribution of the service pistol, the increasingly constrained fiscal environment, and

competing priorities for limited resources, the Marine Corps has not adopted the MHS requirement. The MHS remains an option to fill our service pistol requirement should the demand signal arise and resources become available. [See page 14.]

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**QUESTIONS SUBMITTED BY MEMBERS POST HEARING**

NOVEMBER 16, 2011

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## QUESTIONS SUBMITTED BY MR. BARTLETT

Mr. BARTLETT. If Budget Control Act automatic proportional cuts are required for procurement, RDT&E and O&M for the Marine Corps then what impact would that have on the Marine Corps' ability to execute the National Military Strategy? Essentially, what is keeping you up at night?

General O'DONOHUE, General KELLEY, and Mr. TAYLOR. Cuts at the level anticipated with sequestration will likely cause irreversible damage to the Marine Corps as well as our industrial base. It will hollow the Marine Corps and cause us to be out of balance in manpower, procurement and modernization. Summarily reducing procurement accounts will damage the industrial base, which may not recover. The result of such cuts would deny our nation the military superiority required in the current and future complex and challenging security environment.

Sequestration would require the Department to completely revamp the National Security Strategy and reassess our ability to shape the global environment in order to protect national interests. The nation would incur an unacceptable level of strategic and operational risk, which may prove catastrophic the next time our nation is called upon to respond to a global crisis.

Mr. BARTLETT. Please walk us through the Army and Marine Corps Requirements Board process: How often do you meet? What have been some of the major results of your meetings? Are joint requirements generated during these meetings?

General O'DONOHUE, General KELLEY, and Mr. TAYLOR. The Army-Marine Corps Board (AMCB) is a 3-star level deliberative body co-chaired by the Service resource directors—the Army G-8 and Marine Corps Deputy Commandant, Programs and Resources (DC P&R). Regular members include 3-star or equivalent representatives from the operations and plans, requirements, doctrine, and acquisition communities. There are 4 steps involved in bringing topics before the AMCB:

1. Issue Identification. Topics are normally high level Army/USMC focused issues, e.g., concepts, capabilities/requirements, programs. These issues may come from the previous POM cycle, OSD Program Reviews, or as a result of new initiatives. The topic list is ever-changing as issues emerge.

2. Issue Development. The AMCB will assign issues to responsible subject matter expert (SME) teams and provide guidance concerning scope, timing and desired output. These SME teams, who are comprised of both Army and Marine members, will then develop assessments incorporating capabilities, Service approved requirements, and cost.

3. Issue Review. AMCB issue briefings normally employ a two-step review process. First, a Council of Colonels will meet at least three weeks prior to convening the AMCB to refine the issue briefing. Next, a Flag/General Officer review (one/two star level) will convene two weeks prior to ensure the issue is sufficiently developed and merits three-star consideration.

4. Issue Resolution. SME team leaders will brief the issues, analyzed courses of action (COA), and recommendations to the AMCB. The AMCB will either make a decision and assign actions to members; elevate the issue to the Chief of Staff, Army and Commandant of the Marine Corps for adjudication and resolution; or refer the issue to the SME team for further assessment and COA development.

The AMCB meets approximately eight to ten times a year.

AMCB accomplishments over the past four years include the following:

- Agreement on Mine Resistant Ambush Protected (MRAP) vehicle requirements and, more recently, MRAP All Terrain Vehicle (MATV) requirements.
- Agreement on the Joint High Speed Vessel (JHSV) requirements.
- Continued collaboration on body armor and helmet requirements.
- Continued collaboration on small arms requirements.
- Convergence on Service ammunition requirements.
- Continued collaboration on JLTV.

Joint requirements are not generated by the AMCB. The AMCB serves as a forum for collaborating on and discussing Service and joint requirements that impact both

land components. Formal requirements are generated through the Joint Capabilities Integration Development System (JCIDS).

Mr. BARTLETT. What impact is the continuing resolution (CR) having on modernization programs for equipping dismounted soldiers and marines?

General O'DONOHUE, General KELLEY, and Mr. TAYLOR. While the Continuing Resolution (CR) that extends through December 16 does not pose significant challenges to the Marine Corps' modernization programs, the impacts grow dramatically as the year continues. Under a CR, Department of Defense policy requires the Services to manage funds at the line item or program level vice at the appropriation level, thereby limiting flexibility to reallocate funds to higher priority requirements requested in the pending appropriations legislation. New starts and military construction cannot be initiated under a CR without specific approval; and individual projects must be specifically authorized and appropriated.

A CR extended beyond the end of the calendar year would begin to create problems with modernization programs. The more significant problem created by an extended CR would be an unmanageable shortfall in the Marine Corps manpower account. Ultimately, a long term CR creates challenges for equipment levels, training readiness, and our Marines' quality of life until there is a final appropriations bill.

Mr. BARTLETT. Does the Marine Corps plan to pursue a new handgun? Does a validated requirement exist for a new handgun and if so, is a new handgun a high priority for the Marine Corps?

General O'DONOHUE and General KELLEY. The Marine Corps currently has three pistols in operational use: the M9 9mm Service Pistol, the M9A1 9mm Pistol, and the M45 .45 Caliber Special Operations Pistol. The M9 is the service pistol issued to senior Marine Officers (O-6 to O-9), all Navy Officers, and senior Navy enlisted (E-6 to E-9). The M9A1 provides a rail to mount laser pointers and lights and is issued primarily to security forces and law enforcement personnel. The M45 is the .45 caliber pistol issued to reconnaissance and Marine Corps Special Operations Command (MARSOC) personnel.

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Mr. BARTLETT. Given limited industrial base for night vision goggles and the future constrained budget environment what concerns do you have about the ability to maintain Night Vision Goggle (NVG) production capacity and technological capability?

General O'DONOHUE and General KELLEY. There are no planned procurements for Image Intensifier systems in FY2012 and only a limited quantity to replace losses in future years (planning figure of 300 per year). A 2010 Image Intensifier (I2) Tube Industrial Capability Assessment conducted by DCMA's Industrial Analysis Center (IAC) concluded that, "[i]f DOD requirements decrease as projected, there is a strong possibility that one competitor will exit the market and the remaining producer will likely rationalize their current operations to meet the market demand." This would "likely result in lack of competition, stagnation of future innovation and development, decreased surge capacity as well as the potential for increased unit cost." DMCA IAC recommended "a periodic assessment of the financial viability of key companies engaged in I2 tube production." The Marine Corps continues to engage with Industry and the Department of Defense to monitor I2 industrial base concerns.

Mr. BARTLETT. I understand the Marine Corps plans to divest approximately 10,000 vehicles from its tactical vehicle fleet and further the Marine Corps is in the process of revising many acquisition objectives across the combat and tactical vehicle fleets. Can you walk us through your ground combat and tactical vehicle strategy? How are you factoring in MRAP vehicles?

General KELLEY and Mr. TAYLOR. The Marine Corps requires the ability to maneuver and sustain combat power across the range of military operations and in various environments. The combat and tactical vehicles required to achieve this must provide appropriate force-level maneuver and sustainment capabilities that are both compatible with rotary-wing and surface assets and complementary to enhance tactical flexibility and minimize risk. The Ground Combat and Tactical Vehicle Strategy (GCTVS) has, since 2008, been the framework within which the Marine Corps manages the future inventory of heavy, medium, and light vehicle categories, which are further divided into combat and tactical vehicle types. Combat vehicles facilitate maneuver of combat teams, while tactical vehicles facilitate the distribution of sustainment material and services by logistics teams. The three combat vehicle and three tactical vehicle categories are correlated to the range of military operations and operating environments to meet performance, protection, payload, and transportability characteristics. The entire portfolio of vehicles will possess these characteristics, so as to:

- Support rapid transition between concentration and dispersion of Marine Air Ground Task Force (MAGTF) combat power by fielding vehicles with modular and adaptable armor in multiple capability categories
- Support strategic deployment concepts by closely managing transport weights and prepositioning objectives
- Provide capacity to meet and sustain simultaneous Marine Corps commitments worldwide by maintaining operational availability and optimizing mix and distribution across the enterprise

In 2010, the Marine Corps concluded that a 10,000 vehicle reduction is feasible as reconstitution occurs post-OEF. That reduction supports the Marine Corps' re-orientation to its amphibious mission by reducing the 'footprint' of MAGTFs. That USMC vehicle inventory has also been sized to support MAGTFs that employ the concept of  $\frac{2}{3}$  of the Marines maneuvering by vehicle and  $\frac{1}{3}$  of the Marines maneuvering by foot or air.

This 2010 vehicle reduction was directed during Phase II of the GCTVS, during one of the four pre-planned Decision Points that control execution of the strategy to meet the GCTVS objectives. Future decision points will guide planning to inform Program Objective Memorandum (POM) 14 and POM 16 decisions regarding ground mobility investments. The information supporting each decision point will provide cost, effectiveness and risk information on alternative courses of action relevant to the issues challenging successful fielding of the future fleet.

As we factor use of MRAPs into our vehicle strategy, we start with the observation that a significant challenge presented by IED protection is its impact on vehicle dimensions. The MRAP-ATV and other MRAPs fit into the GCTVS as medium and heavy vehicles conducting light vehicle missions in most mission sets. Light vehicles are characterized as those that are rotary wing transportable, can be used on Class 12 or lighter Route and Bridge networks, and exhibit good soft soil mobility. Light tactical vehicles carry less than three tons of cargo and provide services associated with small teams of two to five personnel. Light combat vehicles are characterized as those that maneuver combat and combat support teams of three to five personnel and carry mission essential equipment, usually less than two tons.

A predominance of the 1,100 MRAP vehicles in the Active and Reserve force will be used by Engineer and EOD units to conduct Route Reconnaissance and Clearance missions (as conducted in theater), provide protected mobility to EOD teams, and provide protected mobility to combat engineers that are at times called upon to supplement our EOD forces for mine and obstacle clearance.

The Marine Corps is evaluating the full cost of retaining an additional 1,400 MRAPs to serve in both light tactical and some light combat mission roles in high IED, restricted maneuver environments as was the case in Iraq. The full cost of storing these vehicles in CONUS and forward positioned sites, when evaluated within the context of the projected future budgets, will determine the quantity and extent of the Marine Corps' ability to retain these additional vehicles.

The Joint Light Tactical Vehicle is specifically being developed to provide M-ATV-like protection within the light vehicle class. It will have the rotary wing lift, mobility, weight, height and payload values that characterize the light vehicle. This is important to the Marine Corps as it strives to maintain its expeditionary nature (deployable by L-Class vessels and USMC aircraft), while providing protected mobility to its forces that are deployed in environments with poor or damaged infrastructure or in environmental extremes. The JLTV will be complemented by the HMMWVs and MRAPs that remain in the inventory to provide a portfolio of vehicles, which in combination allow MAGTF Commanders to tailor equipment for the mission at hand.

Mr. BARTLETT. The Joint Light Tactical Vehicle (JLTV) acquisition strategy has been restructured to make the program more affordable and to streamline performance requirements. Can you provide more detail on this revised strategy and indicate to the committee whether the Marine Corps supports the JLTV program?

General KELLEY and Mr. TAYLOR. The JLTV is the most cost-effective program to meet capability gaps for those light combat vehicles with the most demanding missions. The Marine Corps supports the JLTV program and is aligned with Army on requirements and affordability. We are working together as the program moves toward a Milestone B (MS B) decision in April 2012. The Vice Chief of Staff of the Army (VCSA) and Assistant Commandant of the Marine Corps (ACMC) have worked together to drive down cost and inform industry regarding JLTV requirements. The Capabilities Development Document (CDD) is presently in Joint Requirements Oversight Council (JROC) staffing, and is on track for expedited approval.

Informed by Technology Development phase, both Services have defined a JLTV program that:

- is an affordable solution to essential capabilities including transportability, protection, mobility and payload,
- is low risk, enabling a streamlined acquisition strategy.

The streamlined acquisition strategy enables fielding of the JLTV meet the most critical light vehicle capabilities (gun trucks, SABRE/TOW, forward C2) prior to modernization of the Amphibious Combat Vehicle. Sequenced modernization of JLTV then ACV is key to affordably modernizing the two most critical shortfalls in the Marine Corps' Ground Combat and Tactical Vehicle fleet.

The revised Acquisition Strategy is a direct result of VCSA and ACMC engagement and cooperation between the Army and Marine Corps. The Engineering, Manufacturing, and Development (EMD) phase has been reduced from 48 months to 33 months, reducing cost and schedule, resulting in expedited delivery of affordable JLTV capability to our warfighters. The EMD phase features the following:

- Up to three vendors to participate in EMD with a down select to one in production.
- Firm-fixed Price contract approach for both EMD and production; appropriate given the competitive nature of the program.
- 12 months for competitors to deliver, test, and integrate vehicles in preparation for demanding 14 month government testing and evaluation period.

Mr. BARTLETT. The Army is pursuing the Modernized Expanded Capacity Vehicle (MECV) program which competitively recapitalizes their Up-Armor HMMWV fleet. Are the Marines conducting a similar program? If yes, then how does it align with the Marine Corps light tactical vehicle strategy?

General KELLEY and Mr. TAYLOR. The Marine Corps strategy for light vehicles is to procure 5,500 Joint Light Tactical Vehicles to meet light combat vehicle missions and to extend the service life of the remaining 13,000 HMMWVs serving in light tactical missions out to 2030. The HMMWV Modification effort was developed in early 2011 as a complementary effort to JLTV in order to extend the service life a significant number of the HMMWVs which will still make up the majority of the light tactical vehicle fleet.

The Army and Marine Corps collaboratively developed JLTV and complementary HMMWV recapitalization requirements and programs during this period.

However, Marine Corps requirements for a mobile, protected, durable light tactical vehicle cannot be met by the Army's MECV requirement set. For light tactical missions, the Marine Corps needs a two-man vehicle that can distribute a 4,000 lb mission payload of support services and supplies and a limited number of four-man vehicles that can carry 2,300 lbs of mission payload, both of which must travel 70% off-road when armored. The Army does not intend to invest to meet this requirement.

The Marine Corps approach for the HMMWV Modification effort is to explore the use of state-of-the-art automotive technologies to restore the current HMMWV platform to pre-armoring levels of performance in the areas of safety, durability, payload, mobility and reliability. These improvements will be incorporated into a kit or kits for installation at the Marine Corps Depots on the current rebuild lines or competed to industry based on best value to the Government. Phases one and two of the effort are planned to begin in FY 12 with the selection of modification kits, finalization of the design of the kits, and integration of the kits onto the HMMWV platforms. The production kit testing and technical drawing package development (Phases 3 and 4) will continue in FY 13. Proof of principle testing of the production kits will be conducted in FY14, with full rate production and integration of the kits

onto selected HMMWVs commencing in FY15. In addition to the HMMWV Modification R&D efforts, the Marine Corps program office will also continue to monitor Army Phase One Modernized Expanded Capability Vehicle (MECV) efforts that could be leveraged and incorporated to improve Marine Corps vehicles.

Mr. BARTLETT. How does the MRAP-All Terrain Vehicle and other MRAP vehicles fit into the Marine Corps wheeled vehicle fleet along with HMMWVs and JLTVs? Why not just use the M-ATV and MRAPs which have proven to be combat effective?

General KELLEY and Mr. TAYLOR. One of the significant challenges presented by IED protection is its impact on vehicle dimensions. The MRAP-ATV and other MRAPs fit into our Ground Combat and Tactical Vehicle Strategy (GCTVS) as medium and heavy vehicles conducting light vehicle missions in most mission sets. Light vehicles are characterized as those that are rotary wing transportable, can be used on Class 12 or lighter Route and Bridge networks, and exhibit good soft soil mobility. Light tactical vehicles carry less than three tons of cargo and provide services associated with small teams of two to five personnel. Light combat vehicles are characterized as those that maneuver combat and combat support teams of three to five personnel and carry mission essential equipment, usually less than two tons.

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The Marine Corps is evaluating the full cost of retaining an additional 1400 MRAPs to serve in both light tactical and some light combat mission roles in high IED, restricted maneuver environments as was the case in Iraq. The full cost of storing these vehicles in CONUS and forward positioned sites, when evaluated within the context of the projected future budgets will determine the quantity and extent of the Marine Corps ability to retain these additional vehicles.

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Mr. BARTLETT. I understand MRAPs and MATVs are being outfitted with safety, survivability, and mobility upgrades, most notably the MATV underbody improvement kit (UIK). Can you walk us through some of these product improvement modifications and provide status updates on them, particularly the UIK program? What are the funding issues, if any, associated with them?

General KELLEY. The premier safety and survivability enhancements that JPO MRAP is in the process of adding to the MRAP Family of Vehicles includes improved energy absorbing seats, the underbody improvement kit (UIK2) for M-ATV, blast attenuating floor mats, rocket propelled grenade nets, and the Universal Combat Lock Tool. There are no funding issues associated with the product improvement modifications.

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#### QUESTION SUBMITTED BY MR. WILSON

Mr. WILSON. In the wake of potential Department of Defense (DOD) budget cuts and protecting our warfighters, what is the DOD doing to ensure it does not do business with companies who are under serious investigation for fraud, corruption and questionable business practices that threaten a company's financial stability?

General O'DONOHUE, General KELLEY, and Mr. TAYLOR. We require all contracting officers to utilize the Excluded Parties List System to verify whether a prospective awardee has been suspended or debarred from receiving a government contract. Award will not be made if the contractor is on this list. Another line of defense to find fraudulent contractors is through the evaluation of past performance. Department of Defense (DOD) contracting officers are required to use past performance as a mandatory source selection evaluation factor. Additionally, our contracting officers must perform one further check on prospective awardees prior to execution of a contract. Specifically, DOD contracting officers must evaluate the contractor's overall record to determine its responsibility. No award may be made unless the contracting officer makes an affirmative determination of responsibility for the con-

tractor. As part of the process to determine responsibility, contracting officers must check and evaluate information contained in the Federal Awardee Performance and Integrity Information System. Contracting Officers are also responsible for analyzing the financial capability of potential contractors. A contracting officer's decision on contractor responsibility must consider whether the offeror has adequate financial resources or the ability to obtain them to adequately perform the contract. These multiple steps provide the government with an increased ability to weed out fraudulent contractors.

