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HEARING
ON
NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2015
AND
OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS
BEFORE THE
COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED THIRTEENTH CONGRESS
SECOND SESSION
—
SUBCOMMITTEE ON TACTICAL AIR
AND LAND FORCES HEARING
ON
**FISCAL YEAR 2015 GROUND FORCE
MODERNIZATION PROGRAMS**

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**FISCAL YEAR 2015 GROUND FORCE MODERNIZATION
PROGRAMS**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES,
Washington, DC, Wednesday, April 2, 2014.

The subcommittee met, pursuant to call, at 2:18 p.m., in room 2212, Rayburn House Office Building, Hon. Michael R. Turner (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. MICHAEL R. TURNER, A REPRESENTATIVE FROM OHIO, CHAIRMAN, SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES

Mr. TURNER. The hearing of the Subcommittee on Tactical Air and Land Forces will come to order on ground and rotorcraft force modernization programs.

The subcommittee meets to receive testimony on the Army and Marine Corps modernization requests for fiscal year 2015.

I want to welcome our witnesses: Lieutenant General James Barclay, Deputy Chief of Staff of the Army, G-8; Major General Michael Williamson, Military Deputy to the Assistant Secretary of the Army (Acquisition, Logistics and Technology); Mr. Tom Dee, Deputy Assistant Secretary of the Navy, Expeditionary Programs and Logistic Management; and Lieutenant General Glenn Walters, United States Marine Corps, Deputy Commandant for Programs and Resources.

General Barclay, it is nice to see you again.

General Williamson, congratulations on your new position. I understand you will be pinning on your third star in just a couple of days.

Thank you all for your service, and we look forward to your testimony.

Today, we will cover a broad portfolio of modernization programs, to include ground combat systems, tactical vehicles, rotorcraft, and individual gear such as body armor.

Based on this current fiscal environment, the military services are having to accept greater risk in modernization programs in the near term. That is the new fiscal reality. Programs that were top priorities a year ago are now being terminated or delayed, and modernization portfolios are being significantly restructured.

This hearing will provide an opportunity for our witnesses to inform us of the many challenges they are facing in acquisition and industrial base management.

We all know that when the military goes into harm's way that they fight in a joint environment. In other words, the full power of

all the services come together in order to accomplish our national security objectives.

What is less understood, especially outside the jurisdictions of the defense committees, is how the services depend on each other from an industrial base perspective, especially for ground, rotorcraft, and individual equipment platforms such as body armor.

For example, decisions that the Army makes about Abrams tanks or Stryker combat vehicles could affect the Marine Corps ACV [Amphibious Combat Vehicle] program. Decisions the Navy makes about Black Hawk helicopters could affect how the Army is procuring helicopters. All the military services are dependent upon the same body-armor and tactical-wheeled-vehicle industrial bases.

The point I am making is that certainly Congress takes criticism for the perceived parochial support of one platform over another, but the reality is, although we certainly support American jobs in our districts, the bigger picture of concern and oversight isn't about the survival of one platform versus another; it is about, what capabilities does an Army Brigade Combat Team or Marine Expeditionary Brigade need in order to meet the needs of our commandant commanders so that they can meet our national security requirements?

It is within that context, once we understand the threats and required capabilities, that we then must understand what industrial base capability is needed now and in the future in order to provide the right capability to our military at the right time.

I want to highlight this point about our defense industrial base because I believe there is a general misunderstanding outside of those who serve our defense committees. This industrial base cannot be turned on and off like a light switch. And it is the purview of this committee and our subcommittee's responsibilities to look into the industrial base and find ways that we need to preserve the industrial base for the service of all of our service branches.

We all understand that sequestration is still the law, but my concern is that if we don't like what is reflected in this year's budget request, we are certainly going to be facing even more difficulty in the upcoming year. This is part of our challenge and part of our discussion today and the questions that we will be having of this panel.

I want to thank each of you for being here and for your expertise as we look to the issues of not only what do each of the service branches need, what is the industrial base that supports them, and what is the interconnectivity of that industrial base and how it needs to be preserved.

With that, I turn to Ms. Sanchez for her remarks.

STATEMENT OF HON. LORETTA SANCHEZ, A REPRESENTATIVE FROM CALIFORNIA, RANKING MEMBER, SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES

Ms. SANCHEZ. Thank you, Mr. Chairman.

And thank you, everybody, for being here today.

Today's hearing, of course, will cover our Army and Marine Corps ground system modernization programs. And this is a broad range of topics, covering everything from individual equipment such as body armor, Abrams tanks, Stryker vehicles.

However, in looking at the fiscal year 2015 budget, I do see some general trends, many of them which are troubling to me.

First, it is clear that the modernization of the Army and the Marine Corps ground equipment is under serious budget pressure. And it looks to me as if these accounts are becoming the bill payer for both services' overall budget shortfalls.

With only a few exceptions, almost every major program in this area has been scaled back, delayed, or terminated, in large part, I believe, because of a lack of funding. For example, the Army is terminating the Ground Combat Vehicle program, delaying its high-priority tactical network programs, dramatically scaling back wheeled vehicle upgrades, and slowing down production of Apache attack helicopters.

The Marines: Purchases of new Joint Light Tactical Vehicles [JLTV] are delayed. The Amphibious Combat Vehicle program is being scaled back. And I don't see a lot of new investment in most areas.

And the second trend that I see is both services' ability to actually field new systems through the normal acquisition process. In the area of large-scale acquisition, Category I programs, we continue to start things with a big fanfare, and then we end up terminating because of cost growth, because of changing priorities, because of shifting service requirements.

And, in addition, constantly changing senior service leadership priorities appear to be making it very difficult for the respective service acquisition officials to keep programs funded in the budget long enough to actually see these new capabilities in the field. As a result, both the Army and the Marine Corps keep funding new programs but don't seem to get those programs across the finish line.

And you know the examples. In the Army, the termination of the Ground Combat Vehicle was the most recent example, where we spent more than a billion dollars and we have nothing to show for it. The Marine Corps has spent more than \$3 billion over 20 years trying to field a vehicle to replace the current Amphibious Assault Vehicle, but we still haven't gotten anything new for our Marines.

The third trend I see which is disturbing is the needless duplication between the Army and Marine Corps equipment. To name a few, both the Marine Corps and the Army are working on separate multi-mission radar systems, separate precision mortar rounds, and separate 120-millimeter tank ammunition.

The Army and the Marine Corps also don't use the same helicopters, despite obvious similarities between the missions that they conduct with these helicopter fleets. One example is the fact that the Army, the Air Force, and the Navy all use UH-60 Black Hawk helicopters of various models, but the Marine Corps continues to request hundreds of millions for upgrades to its aging fleet of H-1 helicopters.

And, in some cases, I am sure that duplication or differences in equipment are appropriate and necessary, but I think that there may be a way in which, if we are really looking for moneys, we should work more closely together on that.

I don't want to end on a sour note, because I am certainly a pretty big optimist, so I will just say that there are some areas where I have seen success.

Body armor, as you know, has been a big priority in looking at and being on this committee. So in the area of body armor and protective equipment, both the Army and the Marine Corps now have well-established research and development efforts and a healthy inventory of high-quality equipment. But I remain concerned of the ability for the services to maintain those investments in protective equipment.

Both services have also done a good job while keeping the Joint Light Tactical Vehicle program on track. It is a model of how competition and stable requirements and thorough testing can lead to successful acquisition programs.

So, you know, I know I am going to have some questions because these trends, for me, are a little alarming, but I look forward to today's hearing.

Thank you, Mr. Chairman.

Mr. TURNER. Thank you.

We will turn to General Barclay, who will then be followed by Mr. Dee and General Walters.

General Barclay.

STATEMENT OF LTG JAMES O. BARCLAY III, USA, DEPUTY CHIEF OF STAFF OF THE ARMY, G-8; ACCOMPANIED BY MG MICHAEL E. WILLIAMSON, USA, MILITARY DEPUTY TO THE ASSISTANT SECRETARY OF THE ARMY (ACQUISITION, LOGISTICS AND TECHNOLOGY)

General BARCLAY. Sir, Chairman Turner, Congresswoman Sanchez, distinguished members of the subcommittee, I would like to thank you for the opportunity to discuss the Army's fiscal year 2015 President's budget request as it pertains to the Army modernization program.

On behalf of our Secretary, the Honorable John McHugh, and our Chief of Staff, General Ray Odierno, Major General Williamson and myself look forward to discussing the Army's fiscal year 2015 modernization budget.

Over the past 3 years, the Army has absorbed several budgetary reductions in the midst of conducting operations overseas and rebalancing the force for a wider array of missions called for by the President's defense strategy. And during this period of fiscal and strategic uncertainty, our goal has been to maintain the proper balance between end strength, readiness, and modernization across the Total Army.

We are reducing our end strength as rapidly and as responsibly as possible, while at the same time doing our best to meet our operational requirements. Additionally, we need to concentrate funds on rebuilding readiness at the same time. However, to do this, we must accept greater risk in our modernization programs in the near term.

As a result of this, the research, development, and acquisition investments have declined 37 percent since the fiscal year 2012 budget planning cycle. Historically, the Army's RDA [Research, Development and Acquisition] account has averaged about 22 percent of its

obligation authority, and for fiscal year 2015, the RDA account is at 17 percent, or about \$20 billion of obligation authority.

And regardless of the austere fiscal conditions, it remains the Army's responsibility to ensure every soldier deployed is equipped to achieve decisive overmatch. And to do this, the Army has developed several initiatives that guide equipment modernization.

We are using incremental improvements to modernize our critical systems, and we will build new systems only by exception. We are divesting older systems and niche capabilities to decrease the sustainment cost and generate additional resources that we can invest in our modernization and readiness posture.

We are also procuring smaller quantities, because the Army cannot afford to equip and sustain the entire force with the most advanced equipment. And we are focusing our science and technology investments where we are technology makers and reducing the S&T where we are the technology takers.

These guiding principles ensure the Army will maximize every dollar towards putting the best equipment in the hands of our soldiers.

First and foremost, the soldier and the squad is the centerpiece of Army equipment modernization, from which we build outward by enabling them with the network and key equipment. And within this year's budget request, we seek to empower and unburden the soldier through funding for enhanced weapon capabilities, next-generation optics and night-vision devices, and advanced body armor and individual protection equipment.

We will modernize the network to improve soldier decision-making with information and connectivity down to the lowest tactical level. Our priorities include the Warfighter Information Network-Tactical [WIN-T] systems, the family of network radios, and the Joint Battle Command-Platform. Investments in the network, however, are not untouched by resource constraints. And, as a result, we will delay a portion of our WIN-T Increment 3 and reduce investments in the tactical radio systems.

We are committed to developing and fielding the Armored Multipurpose Vehicle to replace our obsolete M113 family of vehicles and augmenting our wheeled fleet through the Joint Light Tactical family of vehicles, the JLTV.

We also have the Paladin Integrated Management remaining a significant priority. And we will continue funding a third brigade set of double-V hull Strykers while supporting incremental upgrades to existing double-V hull power and mobility.

A new infantry fighting vehicle remains a key requirement for the Army. However, due to significant fiscal constraints, the Department will conclude the Ground Combat Vehicle program upon completion of the technology demonstration phase, expected in June of 2014.

Instead, the Army will now focus its efforts on refining concepts, requirements, and key technologies in support of a future infantry fighting vehicle. This will include investment in vehicle components, subsystem prototypes, and technology demonstrators. In the distant future, we anticipate initiating a new combat vehicle program informed by these efforts as resources become available.

The Army will also restructure aviation formations to achieve a leaner, more efficient and capable force that balances operational capability and flexibility across the Total Army.

The Army National Guard will transfer all AH-64 Apache helicopters to the Active Army, where they will be teamed with unmanned systems for armed reconnaissance and continued traditional attack role.

The Active Army will transfer 111 UH-60 Black Hawk helicopters to the Army National Guard, which will significantly improve its capabilities for support of civil authorities, homeland defense, and disaster response.

The UH-72 Lakota will replace the TH-67 training helicopter fleet. We will divest almost 900 legacy helicopters, including the entire Kiowa Warrior and TH-67 training helicopter fleets.

The Active Army's overall helicopter fleet will decline by 23 percent, almost 700 helicopters, while the Army National Guard's fleet will decline by 8 percent. The resulting Active and Reserve Component force mix will result in better and more capable formations which are able to respond to contingencies at home and abroad.

And, in closing, we are adjusting to those resources that have been cut, which means we must accept greater risk in our Army modernization. The Army's ability to modernize equipment relies on sufficient, consistent funding. While the Bipartisan Budget Act of 2013 provided greater budget certainty for fiscal year 2014 and 2015, reductions in the modernization accounts continue to challenge the Army.

And the forecast in the future beyond 2015 is questionable. Without Congress' intervention, sequestration-level budget caps will return in fiscal year 2016 and impose greater risk on Army equipment modernization, leaving our soldiers less prepared in an unpredictable world.

Mr. Chairman, members of the subcommittee, again, thank you for your steadfast and generous support of our outstanding men and women in the United States Army and the Army civilians and their families, and we look forward to your questions today.

Thank you.

[The joint prepared statement of General Barclay and General Williamson can be found in the Appendix on page 25.]

Mr. TURNER. General, thank you for your very clear statement. Those are very particular words that I think charge us.

We are going to go to Mr. Dee and then come back to General Walters.

STATEMENT OF TOM DEE, DEPUTY ASSISTANT SECRETARY OF THE NAVY, EXPEDITIONARY PROGRAMS AND LOGISTICS MANAGEMENT

Mr. DEE. Chairman Turner, Ranking Member Sanchez, distinguished members of the subcommittee, thank you for the opportunity to appear before you today to address the Marine Corps ground force modernization and the acquisition programs that support the future capabilities of our Marines.

Lieutenant General Walters and I have submitted a joint statement for the record, so, with your permission, I will be very brief in my opening remarks.

As you have pointed out, the fiscal environment resulting from the BCA [Budget Control Act], although mitigated somewhat in the near term by the Bipartisan Budget Act, has presented us with challenges as we plan for and execute the modernization of our ground force.

Given the Marine Corps role as America's expeditionary force in readiness, we necessarily place a priority on current readiness and crisis response. Nevertheless, our capability-development community and our programmers, led by General Walters, diligently strive to appropriately balance the varied Marine Corps capability portfolios within the available resources provided to them.

Similarly, the Marine Corps acquisition community diligently endeavors to squeeze every dime out of every dollar and deliver the very best warfighting capabilities for the least cost. In the service with the smallest investment account, there is no alternative.

And we are proud of what our acquisition Marines have accomplished this past year.

Under program leadership of the Army, the Joint Light Tactical Vehicle team was recognized by USD(AT&L) [Under Secretary of Defense for Acquisition, Technology and Logistics] with the David Packard Excellence in Acquisition Award for its success at reducing both development and procurement costs while also reducing schedule. JLTV is on schedule to begin production in 2015.

Our G/ATOR, Ground/Air Task-Oriented Radar, program successfully completed its developmental testing and is preparing for its first LRIP [low-rate initial production] contract award with an IOC [initial operating capability] in fiscal year 2017.

We went into full production and began fleet delivery of the Enhanced Combat Helmet, which delivers the best-performing protective capability per ounce of any helmet ever fielded.

We completed intensive and very deep technical and cost analysis of our ACV program, providing Marine Corps leadership with the detailed and objective information that they needed to decide the future shape of the Marine Corps' top ground program priority.

And in partnership with the Navy, our CH-53 Kilo is on schedule to record its first flight this year. And when it achieves IOC in fiscal year 2019, it will triple the external lift capacity of the legacy CH-53 Echo.

So, although just a few examples of the efforts of the Navy and the Marine Corps acquisition force, often in partnership with the Army, they are representative of the diligence with which the acquisition force strives to achieve the very most with every dollar that the American taxpayer, as represented by this committee, entrusts to us.

So thank you for this opportunity to appear today, and I look forward to your questions.

[The joint prepared statement of Mr. Dee and General Walters can be found in the Appendix on page 38.]

Mr. TURNER. Thank you.

General Walters.

**STATEMENT OF LTGEN GLENN M. WALTERS, USMC, DEPUTY
COMMANDANT FOR PROGRAMS AND RESOURCES**

General WALTERS. Chairman Turner, Ranking Member Sanchez, distinguished members, it is my pleasure to speak to you today regarding the Marine Corps' modernization efforts.

Throughout our 238-year history, the Marine Corp has answered our Nation's call to be the most ready when the Nation is least ready. Today, we operate freely throughout the world, responding to the wide spectrum of threats, doing so from the sea, oftentimes in austere environments.

Our ability to deploy at a moment's notice is supported by our investment in modernization—modernized equipment. We see this not just as buying new equipment but as an investment in our Marines, our most important resource. When our Marines have the best, most modern equipment, they can meet every mission we give to them. Through the generosity of Congress, much of what the Marines deploy with today is the best and most modern equipment.

Over the past decade of combat, the cost to equip a Marine has increased by almost six times, but we are providing Marines with better equipment and more of it. In 2000, the basic set of equipment we sent Marines who deployed included 14 items totaling about \$2,400 in today's dollars. Today, Marines deploy with 45 items that cost about \$13,700.

We have given the Marines more capability to operate, a radio set, an upgraded first aid kit, improved body armor, cold-weather gear, and the list goes on and on.

We also recognize the importance of mobility through better performance and lighter weight for individual equipment. As we better equipped our Marines over the past decade, we have become mindful to find the right balance between performance, weight, and affordability. We have worked hand-in-hand with the Army to find the best solution, leveraging each other's research and development efforts on individual protective equipment.

We are currently working to field the Enhanced Combat Helmet, the Modular Scalable Protective System, and Improved Modular Tactical Vests.

Even with a significantly modernized individual equipment set, many of our ground vehicles have been worn from over a decade of sustained conflict and have either been reset or will be reset over the next few years. Reset will provide a bridge until our major acquisition efforts begin to deliver significant quantities.

As described in my prepared statement, our ground tactical vehicle portfolio will replace several aging platforms. Working with the Army, we continue to develop the Joint Light Tactical Vehicle, replacing the Humvee. We are also replacing our 40-year-old Amphibious Assault Vehicles [AAVs] with the Amphibious Combat Vehicle, or ACV, the Marine Corps' top ground modernization priority.

The program has been refined to reflect a family-of-systems approach that will permit amphibious operations rapidly from further offshore while enhancing protective mobility for the mission on land. We will do this in a phased approach in concert with a revision of our concept of operations for littoral maneuver.

The first phase will leverage work done on the earlier Marine Personnel Carrier program. We examined nondevelopmental wheeled combat vehicles that can provide several capabilities we desire: maneuverability, protection, and limited water mobility.

In parallel with the development of the first phase, we will mitigate near-term risk in the high-end amphibious operations by fully funding survivability upgrades in a limited number of our AAVs.

This will allow the AAV to serve as an effective bridge until it is replaced by the second phase of ACV. The effort will continue research and development to explore capabilities that will better enable us to conduct extended-range littoral maneuver from ship to shore.

As we have modified our ACV program, our necessity for lift by sea or by air for our ground vehicle portfolio remains constant. For our aviation programs, that means following through on our multiyear procurement of the MV-22 and continuing research and development of the CH-53K Heavy Lift Replacement program.

For fiscal year 2015, we are requesting \$1.53 billion to procure 19 MV-22s. For the entire multiyear procurement program, we will be purchasing 93 and saving approximately \$1 billion when compared to single-year procurements.

For the CH-53K, we are requesting \$573 million. That will continue EMD, engineering and manufacturing development. The dollars will be used to continue development test flights, deliver the final engineering development model aircraft, and start assembly of four systems demonstration test articles.

All of these investments are critical to the Marine Corps' ability to maintain near-term readiness. However, full implementation of sequester-level caps outlined in the Budget Control Act will force us into a less ready force while also imposing severe restrictions on our modernization efforts. We are proud of our reputation of frugality and remain one of the best values for the defense dollar, but we will sacrifice our modernization in order to be the most ready Marine Corps for the Nation.

Thank you, and I look forward to your questions.

[The joint prepared statement of General Walters and Mr. Dee can be found in the Appendix on page 38.]

Mr. TURNER. Thank you, General.

General Williamson, again, congratulations on your upcoming third star.

I have a relatively long question, but it is just one. And I will limit myself to one, because there is a relatively long statement in setting up the question.

But before I do, I would certainly want to acknowledge and thank again General Barclay for your comments on the budgetary challenges, your statement of "during this period of fiscal and strategic uncertainty."

The fiscal uncertainty is obviously something that we should be tackling. Strategic uncertainty, we will never be able to determine what those who might threaten us do, but the issue of fiscal uncertainty is something that we are imposing upon ourselves—not just lower numbers, but the issue of uncertainty.

And I appreciate your calling on Congress to give you that certainty and address the issue of sequestration in 2016. You should

not be facing either a cliff coming after 2015, making you cut a glide path through 2015, nor should you be facing the threat of what everyone has testified before this entire committee and subcommittee as being unacceptable levels of funding in which our military would not be able to function and would significantly damage readiness.

General Williamson, the question of uncertainty also falls upon our industrial base. Because, as your posture is uncertain, then it falls upon the industrial base for uncertainty. And that affects investment, that affects employees, people in even their personal plans.

But I would like to take a moment to elaborate just a little more on one of the industrial base concerns that I have and that I raised during my opening statement.

As you know, Congress has leaned forward on many critical national security issues that have included providing additional funding beyond what the Department of Defense [DOD] has requested for current operations. We have done so in body armor; up-armored Humvees; Mine-Resistant Ambush-Protected Vehicles, or MRAPs; and critical ISR [intelligence, surveillance, and reconnaissance] capabilities. All these come to mind in areas where Congress has leaned in and increased the funding above what the Department of Defense has requested that all came out to be critical capabilities.

In many cases, the requirement process hadn't caught up and validated the need for this funding, but ultimately these congressional actions proved to be invaluable in addressing the needs of the warfighter. It is in this context that the committee views previous initiatives directed at the industrial base for the Abrams tanks, Bradley Fighting Vehicles, and Stryker Combat Vehicles, as well as others.

Take the Joint Systems Manufacturing Center, JSMC, at Lima as an example. Now, this is not in my congressional district, but it is in Ohio and I do have familiarity with it.

Last year, the Army testified that it was not their intent to close this facility. The Army indicated that the real issue was based on constrained resources, and they were going to rely on foreign military sales [FMS] alone to keep the facility viable until the next major Abrams tank upgrade came along in 2019.

Because of the uncertainty in foreign military sales, Congress took the position that foreign military sales alone was an unacceptable level of risk. So the Army and Congress were agreeing that the facility should not close, but Congress and the Army were in disagreement as to whether or not the foreign military sales alone would be sufficient to keep the facility open.

To be fair, the Army has taken considerable strides in addressing some of the committee's concerns. For example, with this budget request, the Army has moved the next major series of upgrades to some of their major weapons systems, called engineering change proposals, or ECPs, from 2019 to 2017, which, by the way, is something that this committee recommended last year.

I am still concerned about the timing of when some of the foreign military sales funding will be available, and we are taking a close look at that. But I am glad to see that the Army is now taking positive actions in better managing its industrial base. Again, the

industrial base cannot be flipped on and off like a switch. And if we disagree as to the certainty or uncertainty of foreign military sales, then the outcome could be incredibly detrimental to our industrial base.

However, I am still wondering if there aren't things that we can do or things that you could do with our help that are acquisition-reform-related, as opposed to just looking at the issue of is your number right or is our number right.

For example, it is my understanding that when a foreign government wants to buy Abrams tanks using FMS funding that they are required to pay a usage fee, which is sent directly to the U.S. Treasury.

Now, I asked why these funds can't be kept at the facility, with the production base support funding line versus facility maintenance, which then could be used for such things as critical safety and environmental deficiencies requirements. My understanding is that the Department's position is the government may not retain proceeds, either in the form of credits or cash, from the rental of government property. To allow the Army, in this case, to retain the process would be an improper augmentation of its funds and a violation of Title 31 U.S. Code, Section 3302(b), which I am certain you are more familiar with than I am, which is also called the "miscellaneous receipts" statute.

I am still in the process of gaining more information about this subject and how it crosses the committee's jurisdiction, but it seems to me interesting that if we are going to look to foreign military sales to support our industrial base, that it is odd that we should also look to foreign military sales as a revenue source that supports other areas of the government than our defense posture.

So my question gets to this: During this limited resource environment, how can we find more efficient ways to utilize the commercial sector, the depots, and government-owned, contractor-operated facilities such as the Joint Systems Manufacturing Center so we can try to avoid these spikes and peaks? And they will continue to put these critical facilities at risk. And do you have thoughts as to what should we be doing in acquisition reform so that we can get beyond the lever of on and off or the lever between your number and our number?

General.

General WILLIAMSON. Mr. Chairman, thank you for the question.

And so there are a couple parts to the answer, but I want to start with one of the comments that you made, and that is this notion of risk.

So when you start to have a conversation about the industrial base, you have to understand really where the risks lie. And what has to happen at this point is that we can't offer a solution that just relies on FMS, as you have stated, but I believe there has to be a three-pronged attack on this.

One, FMS provides us a lot of capability, and it is important in terms of adding that capacity, that work into our industrial base. So it is an answer. And I would be the first to tell you, having dealt with FMS, foreign military sales, directly for the last year, that not all FMS cases come through. And so I acknowledge that. And so that can't be the only plan.

The second part, though, I would offer is, there are some efficiencies that we probably need to look at. So when I talked about risk earlier, the thing that we have to identify is, where is the risk? Is that in the skill sets, critical skill sets? Is that in the tooling and the special machinery that is used in these facilities? Is it a combination of the two? And so what do we have to do, what is the minimum level that we have to have operating at any of these facilities?

And then, in terms of acquisition reform, one of the things we have to look at is, is there enough or is there too much specific statute, rules, police forces, where money can and cannot go, that adds to the overhead costs associated with running these facilities? But the good news, sir, is that this committee has asked us to look at acquisition reform, and so we are doing some research in that area.

And so when you take a look at not only the research that has been done by the Department of Defense in their sector-by-sector, tier-by-tier study, what we had a third party do in the early A.T. Kearney results that help us to understand the industrial base, and then a third aspect where the AMC Commander, the Army Materiel Commander, General Via, and my boss, Ms. Shyu, have started to go to each facility to start to get detailed understanding of what are the cost drivers, what is causing the overhead costs, and where are there opportunities.

I think as we work along all three of those fronts—leveraging FMS when it is available; we have done some things, as you have indicated, by ECPs where we have been able to smooth those peaks and valleys so that we can assure some level of work and some capacity throughout these facilities; and then, third, find opportunities where changes in some of our acquisition rules policy may allow us to reduce the overhead costs—I think these three things will help us in looking at not only the efficiency piece but also the effectivity.

And so the combination of those things are what I believe will allow us to maintain these national assets.

Mr. TURNER. Thank you. I look forward to continuing this discussion, because I think both your insight and the financial circumstance we are in just require that we pursue these and actually find solutions that we can implement. So thank you for your expertise.

General WILLIAMSON. Yes, sir.

Mr. TURNER. I will turn to my ranking member, Loretta Sanchez.

Ms. SANCHEZ. Thank you, Chairman Turner.

And, again, thank you, gentlemen.

This question is about body armor and the industrial base, because last year we tasked the Army with a review of the current body armor and soldier protection equipment and the industrial base and the outlook for future development and procurement—production and procurement.

And the committee asked for this analysis based on the end of a large-scale—two wars, land wars, outfitting everybody, et cetera. And now we are looking at bringing back some of the end strength—bringing down some of the end strength, et cetera, and

body armor and what it is going to look like and how we are going to procure it.

The briefing that was provided to Congress painted a mixed picture. On one hand, it showed that the Army has a solid plan to invest about \$178 million in research and development over the next 5 years and that it is also starting a new program, the Soldier Protection System, to integrate new protective equipment. However, the briefing also pointed out that there is probably not enough funding in the budget for procurement of the new body armor to keep the two current domestic producers or vendors that we have producing this.

So my question is, how much additional funding would we need, in your opinion, in this fiscal year 2015 to keep both of these vendors in production? And, in your opinion, is it good to have that competition going or have these two vendors going? And if we went down to just one vendor, will that make it more difficult in the future if we have to ramp up in the way that we needed to do for Iraq and Afghanistan?

General WILLIAMSON. Ma'am, so I would like to start by saying, the answer for me is that competition is always better. And so, maintaining an industrial base that provides us with choice is obviously going to help us to get a better price.

The challenge that I have in this case is really tied to the item. And so you have to look at this, kind of, from two lenses. The first lens is from an RDT&E [research, development, test and evaluation] look. So our drive is, how do you improve the protection level of that equipment and, at the same time, how do we drive the cost down and the weight down?

So if you look from 2007 to 2014, there has been a significant drop in weight and increase in protection. And what has allowed us to do that is the investment in the research and development and the ability for people, organizations, companies, vendors to manufacture. And so we have to have both of those capabilities.

But the first question that I ask to the folks who do the work here is, I don't understand—tell me what happens when you store, for instance, that body armor. And so, how quickly do you see deterioration? How fast do we have to recycle and replace? So, obviously, there are those things that are damaged, lost, that you have to do replacement, but is there some life expectancy for this material that affects its protection capability?

And so, understanding all of those pieces of the set that we have today, the set that we are going to need in the future and the ability for industry to manufacture that, helps us to shape our engagement with the vendor community. And so I think my short answer is that, obviously, I would like to maintain that competition. The challenge, as you indicated, though, is the funding level associated with the procurement of additional sets and our ability to use those.

We have asked the PO [Program Office] to conduct that study. They are starting to get some of the feedback from that. And I would be happy to bring that information in to you as we get smarter on what the industrial base looks like and the capacity that is required as we deal with the risk that we know today and expected risk.

Ms. SANCHEZ. General, before we worked on this body-armor issue here on the committee, we had the body-armor issue of just our regular law enforcement folks; you know, our police departments and sheriffs, et cetera. And one of the things, you know, with respect to body armor, of course, is what kind of wear and tear does it take. In that case, we knew that, after 5 years, because of sweat and conditions and everything—you know, in fact, we passed a grant program that gave Federal funds to the police departments to actually procure body armor for their officers.

So I think there is a lot of—and what they had is what we kind of started with in the military, but we have evolved so much, as you know, over the last 10 years, with wraparound and lighter. And so I think it is definitely something that we need to continue to work.

And in the time that I have been on this committee looking at this issue, I certainly have seen several companies go out of business and drop off because they could not really compete with respect to the weight and the deterrent factor and the wraparound and everything.

So I think we have at least two really, really good companies now, who I think will continue to try to outperform each other, and I do believe that that is better for us. But how we keep them alive during this time where we really don't know if we will procure or not.

So I go back to that question of, how much do you think in this budget that we are talking about would we need to take a look at or put in to ensure that at least these two companies stay on their feet to duke it out for a while? Do you have any estimate at all? And how long will that study that you are anticipating take before we will know?

General WILLIAMSON. Ma'am, at this point, I don't have a good number in terms of what it would take for the industrial base to keep two companies going. And so what I would ask is that I be given the opportunity to come back and give you some details on what we are finding.

And, if I could, I would also just add that your comment about the police force and other organizations that use vests. The other aspect that we have to include is how do we capitalize that we are not the only organization that is procuring these? So, in addition to the other services, when you start to look at police forces and security forces, is there a way to leverage them in terms of us using the industry to help us drive down cost and, in addition, keep the industrial base going.

And, if possible, I would like to come back and provide that information.

[The information referred to can be found in the Appendix on page 57.]

Ms. SANCHEZ. I will look forward to your ideas on that. Thank you—

General WILLIAMSON. Thank you, ma'am.

Ms. SANCHEZ [continuing]. General.

And thank you, Mr. Chairman, for the time.

Mr. TURNER. Thank you.

Mr. Bridenstine.

Mr. BRIDENSTINE. Thank you, Mr. Chairman.

The Army's artillery schoolhouse is in my State at Fort Sill. And I was wondering if you could comment, General Barclay and General Williamson, if you could comment on the Army's commitment to the Paladin Integrated Management [PIM] System and, of course, modernization, in general, of artillery systems in the Army.

General BARCLAY. Sir, I will take the first part, and then I will let Michael finish up with it.

But I will tell you that the PIM—and, as you noticed, it was in my opening statement, and it is also in my written statement, about the importance of that program to—

Mr. BRIDENSTINE. I did notice. Thank you.

General BARCLAY. That ought to tell you that that is one of our critical programs, along with the JLTV, that we know that we have to continue moving ahead on that. It is very critical to the operational impact but, also, as we look down the road of how we integrate across the different components of the Army.

So from an operational perspective in equipment modernization, the PIM is one of our critical programs that we are continuing to push in the future.

General WILLIAMSON. So, sir, I have to start by saying, as an air defense artillery officer, I also know that the school has moved up to Oklahoma.

And here is where I would start. And that is, the PIM program is critically important for us. As you can see in the budget, we have invested substantial dollars in not only supporting that program from an RDT&E position, but what you really see in there is that we are starting to produce those PIMs, and you will see 66 of those coming off the line.

And so I am impressed with the program. It is one of the programs that I would admit had a rocky start, but I would tell you now that it is performing very well.

Mr. BRIDENSTINE. General, do you think it would be appropriate to do multiyear procurement of PIM for the purposes of getting it to the field sooner and at a lesser cost per unit?

General BARCLAY. Sir, again, I think both of us will comment. I mean—but from a programming perspective, we have had great success in multiyear programs. And your support from Congress in allowing us to do that has allowed us to save a great bit of dollars.

So far, most of those programs, as you know, have been in the aviation arena, on the multiyear. But in this era we are in, with fiscal uncertainty and reduced dollars, anything we can do. And if the multiyears allow us to continue modernization at the levels we know we need to, then I would say we will look at that every opportunity we get.

General WILLIAMSON. Sir, the only thing I would add is, purely as an acquisition view, is that multiyear gives me a lot of leverage in a negotiation. And so, as you know, there are some rules that are applied, that we don't do multiyears unless it returns a significant savings. And so the opportunities to use those we fully support.

But, again, what I would offer is that the challenge we have is understanding the funding that would be available and to be able to steady-state that. But just like the question on competition, so

multiple vendors are a good thing; multiyear in the right negotiation is also a very good thing.

Mr. BRIDENSTINE. Roger that, gentlemen.

I yield back, Mr. Chairman.

Mr. TURNER. Thank you.

Ms. Duckworth.

Ms. DUCKWORTH. Thank you, Mr. Chairman.

General Williamson, again, congratulations on your third star.

I want to talk to you a little bit about the procurement process, especially through the use of NGREA [National Guard and Reserve Equipment Account] funding. Can you tell me whether or not there has been a review of the validity of the plan that General Barclay put forward to transition—to move equipment such as the LUH-72s and the Apaches from the Guard to the Active Duty when those systems are either upgraded with NGREA funds or purchased, as in 2008 for the 72s, with NGREA funds?

General BARCLAY. Ma'am, I will address, and then I will let Michael do it.

But, first of all, we are taking or moving no LUHs out of the National Guard. Under this Aviation Restructure Initiative, all of the LUHs, 72s, that the National Guard has remain in the National Guard. So all those special mission aircraft that they have added some special mission equipment using NGREA-type funds to do that will remain within the Guard.

Ms. DUCKWORTH. Okay.

General BARCLAY. So all the LUHs that are going to move into the training are coming out of the Active Component, and then we are going to procure some more LUHs to finish out, round out that number that is needed for that. So we are not moving any of that.

And on the Apaches, as you know, there are no NGREA funds that go. Those are all straight Army funds as we program those systems.

Ms. DUCKWORTH. As you move the—I have neither Apaches nor LUHs in my State, so no dogs in that hunt for me. But as you move the Apaches out of the combat aviation brigades, you are fundamentally changing the nature of those brigades so that they are no longer similar to Active Duty ones, which then means that you have now taken the attack—part of the attack capacity away from the National Guard's divisions. So now you have fundamentally affected the composition of what a division is in the National Guard.

Can you talk a little bit about the decision to go that route? And is that something that obviously is acceptable? Because now it is not just about the Apaches, it is about the composition of an entire division.

General BARCLAY. Yes, ma'am. We looked very hard at that in doing our analysis. And there will be active Apaches on line with the National Guard divisions and those combat aviation brigades. You and I, as Black Hawk pilots, will tell you that Apaches are not the only combat aircraft. Most—

Ms. DUCKWORTH. Yeah, I have seen videos of them hanging the—hanging the missiles on Black Hawks and had my fantasies, too, General.

General BARCLAY. No, it is not just hanging missiles on them. It is the combat mission roles they do and those assaults and stuff, so—

Ms. DUCKWORTH. Right.

General BARCLAY. So by moving those Apaches out, you know, it doesn't mean that we will not keep them on line. And there will be, again, a multi-mission combat, but, again, it will be active Apaches aligned to the National Guard divisions.

And we are not changing the name; those brigades in the Guard continue to be combat aviation brigades. Because they have Chinooks that do combat missions, Black Hawks that do combat missions, they have Medevac, and we all know that Medevac go into some of the most, you know, strenuous missions that we have on the battlefield.

But, yes, we did look at that. But again, it is based on the fiscal constraints we had to meet the overall operational demands of the Total Army, to best-case where we could turn to meet those demands. And so, with the design that we have presented, we think we have met that.

Ms. DUCKWORTH. But, I mean, ultimately, you are still taking the attack capacity away from those combat—from those aviation brigades. I mean, it is—air assault pilots, we like to think we are as bad—that we are as big a stud and as bad as the Apache guys. They may disagree with us. But when you take the Apaches out, you have taken away the guns, that capacity. So it does fundamentally change, and I think we need to be clear that that is what is happening.

I am going to, with my remaining time, talk to General Walters, just very briefly, if you could.

General Amos was up here a couple weeks ago and spoke about the Marine Corps' ground vehicle strategy, and he gave a very nuanced description that I thought was well thought out. And, you know, my understanding is that it is a mix of acquiring the JLTV and maintaining and recapitalizing of the MRAPs and the up-armed Humvees until full acquisition of the JLTV is completed, at which point the Humvees, I think, will be phased out.

You know, I know that the JLTVs, they are a long-term solution, and obviously you are trying to bridge that gap with the up-armored—with the Humvees and MRAPs in the meantime. But I am concerned about a potential capabilities gap, especially with a legacy system like the Humvees.

Could you update us on the Humvee sustainment and modernization efforts? And is it being sufficiently resourced in order to fill that gap in the meantime?

You know, I am just basically concerned that you are trying to balance a number of different programs simultaneously as you are trying to work towards the JLTV.

General WALTERS. No, ma'am. Thanks for the question. And you are right, we are trying to balance three different legs on the same stool.

We are partnering with the Army on the JLTV. That is not going to deliver for a while. We have about 24,000 Humvees in our inventory right now in varying conditions. As we draw down and as we reduce our force, we have done the analysis to date that says we

are going to need about—in light vehicles, we need about 17,000. I know these numbers don't wow the Army, but they are big for us. We need about 17,000 of these things.

So we are in for about 5,500 JLTV. We are in for a Humvee SMI [Sustainment Modernization Initiative] to put back the capability on the up-armored Humvee that it used to have when it wasn't armored. We have about 6,800 of those. You add those two together, and that is about 12,000, if you will accept my Marine math for a moment. That is about 12,000, so we need about another 5,000 vehicles to get that 17,000. And those are going to be the legacy, you know, platforms that we will hold around, and those will be the first ones that roll off.

All of this is colored by our requirement to come in in September of this year with a new Ground Combat Vehicle strategy. So that is the analysis that is going on right now. The numbers I just gave you are our current position.

So as we go through this and we see that there could be decisions made, and what I think you are alluding to is, should we be buying more JLTVs and less of these or more, absolutely, that will be an option. And then the requirements folks will come in, we will get the strategy done, and then we will see if we can fiscally afford it.

Thank you.

Ms. DUCKWORTH. Thank you.

I yield back, Mr. Chairman.

Mr. TURNER. Thank you.

General Barclay, I had the opportunity in December to travel to Fort Rucker, Alabama, with Congresswoman Roby. And we certainly recognize you as the senior aviator in the Army, and we know you are very familiar with the Army's aviations needs and Fort Rucker and, of course, the restructuring initiative.

So, for the record, let me just go down part of what you had said in your opening statement about the Aviation Restructure Initiative. It includes divestiture of the OH-58D Kiowa Warrior helicopters and TH-67 helicopters, consolidation of all AH-64 Apache helicopters in the Active Component, as Ms. Duckworth was saying, as well as providing additional UH-60 Black Hawks to the National Guard and additional LUH-72 Lakotas for the Active Component.

The Army's and Office of the Secretary of Defense assessment is that by reducing from seven types of rotorcraft to three and divesting the oldest platforms while preserving the most capable, survivable, and modern aircraft, the Army can retain its ability to meet warfighting demands and any Title 32 domestic or emergency response requirements from State governments.

As currently proposed, as you indicated in your statement, the ARI reduces the Active Component rotary-wing by 32 percent and the National Guard fleet by 8 percent. So, General, my question to you is, is this eliminating excess capacity or actual capability?

General BARCLAY. Well, sir, I will tell you that we really didn't have excess capacity, but what we could not afford was to sustain seven different models.

We had an aging training fleet. We had an aging Kiowa Warrior fleet for the armed reconnaissance mission that we had tried to replace that did not produce any vendors that could meet those re-

quirements. So, based on the fiscal constraints we were under, the only thing we could do was to consolidate and then take this initiative to streamline, take out older airframes, and get us down to those that we can afford within the fiscal constraints that we are under and still meet the mission set.

So I think, as we looked across the board and did the analysis, both with Fort Rucker and we also had the National Guard in as we were doing analysis to look at the numbers, the options that we came up with, this was the best case that we could do within the dollar amount that we were given.

Mr. TURNER. Thank you for the clarity of that.

General Walters, could you give us an answer with respect to the Marine Corps and what decisions they are making in their rotorcraft programs that we might need to have highlighted?

General WALTERS. Yes, sir. Thanks.

I mentioned the V-22 multiyear; it is very, very hot on our mind that we need to maintain that. I worry about that, because if we get sequestered, you know, the mechanical nature of that busts that, and then instead of—for example, we are asking for 19 in fiscal year 2015, part of a multiyear. If we were sequestered in 2015—I know we are facing that in 2016, but if we were sequestered in 2015, you know, we—

Mr. TURNER. Hopefully you are not facing that in 2016.

General WALTERS. Yes, sir.

Mr. TURNER. It is currently on the books, but hopefully you are not facing that.

General WALTERS. There is an old axiom in the military, sir, that you plan for the worst and hope for the best. But I think it is an exemplar of what worries us about our rotary-wing aircraft programs.

We asked for 19. If we somehow got sequestered—thank God, we didn't. Thank you very much for doing that in 2015. But if we did get sequestered in 2015, then I wouldn't have enough—we would bust the multiyear one. And instead of the dollars we are putting in there buying 19 of those aircraft, we had to go to single-year procurement. And for the same number of dollars, I would have to—I could only probably buy 17, so I am losing 2. You do that across the 5 years, so I have lost two squadrons' worth of aircraft over a 5-year period.

We are very concerned—or we are not very concerned—we are watching very closely our 53-Kilo program. That is the key to our future. That thing is going to lift everything we need to off the ships. And we are trying to keep our H-1 program on track.

So those are our three biggies: V-22, 53-K, and the H-1.

Mr. TURNER. Thank you.

General Williamson, the Army continues to declare that fielding of the network is your highest priority when it comes to modernization. Yet the fiscal year 2015 request for two major network programs is lower than prior years. These programs are WIN-T and HMS [Handheld, Manpack, and Small Form Fit] radios. And it would seem to me that lower funding means less systems being fielded to the warfighters.

Can you please elaborate on this? And how long would it take the Army to field this network across the country?

General.

General WILLIAMSON. So both of those programs, obviously, are critical to the Army. And the challenge that we have is, when you start to look at that, the cost associated with both, it is an area where we have taken some risk, but not, I think, excessive risk.

So the intent is, with those lower numbers that will go out, we will hit the most critical units as quickly as possible. We have reduced some of the capability. So, as General Barclay indicated, some of the things that we would have done in WIN-T Increment 3, which enhanced not only some of the bandwidth capability but the levels and the mobility associated with that, we have accepted some of that risk and combined some of that capability into the current increment.

On the HMS Manpack—on the HMS programs, whether it is the vehicle radios or the manned portable radios, it will affect the density, if you will, of how many of those we get out to units.

And so I am not going to sit here and tell you that it doesn't come with some risk, but we do believe that the approach that we have taken gets the capability out to the Army, if not the entire Army, faster.

General Barclay.

General BARCLAY. Well, sir, I think, you know, in our opening statements, we are still committed to the network, but the lack of funding has caused us to delay these out.

And so, if you look at the forehand, I guess if you look at the HMS radio or handheld radio, I mean, we are looking at, probably it is going to be out to 2026. I mean, so that has pushed that way out. So all of those, as you said in your opening statement, all—everything is being moved, you know, to the right, and it is because of the fiscal constraints we are under.

But we are not backing away from our commitment to the network and its overall importance. As the Chief and the Secretary have testified, the soldier and the squad are the centerpiece of all of our modernization. And the network around them is what will make them powerful and be able to meet those mission sets. So that is why we are committed to it. It is just the timeline based on funding.

Mr. TURNER. That is the end of our questions. I do want to ask if anyone has any closing remarks or any additional remarks that they would like to make for the record.

Seeing none, then this hearing will be closed.

Thank you, gentlemen.

[Whereupon, at 3:18 p.m., the subcommittee was adjourned.]

A P P E N D I X

APRIL 2, 2014

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

APRIL 2, 2014

RECORD VERSION

STATEMENT BY

**LIEUTENANT GENERAL JAMES O. BARCLAY III
DEPUTY CHIEF OF STAFF OF THE ARMY, G-8**

AND

**MAJOR GENERAL MICHAEL WILLIAMSON
PRINCIPAL MILITARY DEPUTY TO THE ASSISTANT SECRETARY OF THE ARMY
FOR ACQUISITION, LOGISTICS AND TECHNOLOGY AND
DIRECTOR, ACQUISITION CAREER MANAGEMENT**

BEFORE THE

**SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES
COMMITTEE ON ARMED SERVICES
UNITED STATES HOUSE OF REPRESENTATIVES**

ON

**FISCAL YEAR 2015 GROUND FORCE MODERNIZATION AND INDIVIDUAL
EQUIPMENT MODERNIZATION PROGRAMS**

SECOND SESSION, 113TH CONGRESS

APRIL 2, 2014

**NOT FOR PUBLICATION UNTIL RELEASED BY THE
COMMITTEE ON ARMED SERVICES**

Introduction

Chairman Turner, Congresswoman Sanchez, distinguished Members of the Subcommittee on Tactical Air and Land Forces, thank you for the opportunity to discuss the Army's Fiscal Year 2015 (FY 15) President's Budget request as it pertains to Army Modernization.

The world today continues to present our Army and our Nation with dynamic and uncertain security challenges. It is imperative that the Army clearly assesses the future security environment and prioritizes investments and allocates resources accordingly. Potential adversaries will develop disruptive technologies and increasingly destructive weapons making it imperative that the Army continues to develop and field overmatching capabilities. The demand for Army units will continue to meet combatant commander requirements for the range of military operations to Prevent, Shape and Win in support of national interests. Accordingly, the objective of Army equipment modernization is to enable our Soldiers to conduct that range of military operations by developing and fielding versatile and tailorable equipment; equipment that is affordable, sustainable and cost-effective. We want our Total Army to be ready and capable of conducting operations in any location and environment while maintaining tactical and operational overmatch with our adversaries. On behalf of our Secretary, the Honorable John McHugh, and our Chief of Staff, General Ray Odierno, we look forward to discussing with you the Army's FY15 modernization budget that takes the next step towards meeting these future challenges.

Resourcing Army Modernization

Over the past three years, the Army has absorbed several budgetary reductions in the midst of conducting operations overseas and rebalancing the force for a wider array of missions called for by the President's defense strategy. During this period of fiscal and strategic uncertainty, our goal has been to maintain the proper balance between end strength, readiness and modernization across the Total Army. We are reducing end strength as rapidly as possible, while still meeting our operational commitments, to concentrate remaining funds on rebuilding readiness. However, to do this we must

accept greater risk in our modernization programs in the near-term. As a result, Research, Development, and Acquisition (RDA) investments planned for FY 2015 have declined 39 percent since the FY 12 budget planning cycle. Historically, the Army's RDA accounts have averaged 21.9 percent of its obligation authority. For FY 15 the RDA account is 17.1 percent, or \$20.1 billion, of obligation authority.

Even under these austere fiscal conditions, it is the Army's responsibility to ensure every Soldier deployed is equipped to achieve decisive overmatch regardless of the situation. To do this, the Army has developed several initiatives that guide equipment modernization during this period of fiscal constraint. First, we use incremental improvements to modernize existing critical systems as our primary option, and build new systems to address key capability gaps. Second, the Army is divesting older systems and niche capabilities to decrease sustainment costs and re-allocate those resources for modernization and readiness. Third, we are slowing procurement and limiting quantities because the Army cannot afford to equip and sustain the entire force with the most advanced equipment. Fourth, we will insert technologies and capability improvements only as needed, leveraging commercial investment where we are "technology-takers" (e.g., information technology, fixed wing aviation) and focusing our Science and Technology investments where we are "technology-makers" (e.g., lethality, armor). Finally, each equipment decision is scrutinized to ensure it is both affordable within the overall budget and is cost-effective in addressing capability gaps. The Army has established overarching equipment objectives and budget priorities to help guide this investment strategy for which I will provide you some specifics.

Equipment Objectives

Enhance the Soldier for Broad Joint Mission Support.

The centerpiece of Army modernization continues to be the Soldier and the squad. The Army's objective is to facilitate incremental improvements by integrating technologies and applications that empower, protect, and unburden the Soldier and smaller formations. This provides the Soldier with the right equipment, at the right time, to accomplish their assigned mission. The FY 15 budget supports this priority by investing in technologies that provide the Soldier and squad with advanced war fighting

capabilities. We are pursuing enhanced weapons effects, next generation optics, night vision devices, advanced body armor and individual protection equipment.

Enable Mission Command.

The Army's objective is to facilitate overmatch through better decision-making of our leaders and Soldiers with real-time networked data and connectivity across the Joint Force down to the Soldier as well as across platforms through commodity-like procurement and rapid innovation. The FY 15 request resources enhanced mission command capabilities and platform integration of network components through Operational Capability Sets, and software applications for the Common Operating Environment (COE), in concert with operations and intelligence network convergence efforts.

Remain Prepared for Decisive Action.

The Army's objective is to facilitate fleet capabilities to increase lethality and mobility while optimizing survivability by managing the full suite of capabilities to enable the most stressing joint war fights. This year's budget request continues to support the Armored Multi-Purpose Vehicle (AMPV), Paladin Integrated Management (PIM) program, Joint Light Tactical Vehicle (JLTV), and critical Aviation programs.

Budget Priorities

To satisfy our equipment objectives, the Army has identified several critical systems, discussed in detail below:

The Network

- Warfighter Information Network-Tactical (WIN-T)** is the Army's deployed mobile network, providing intranet and telephone service to command posts from Theater to Company level. It extends an Internet Protocol (IP) based satellite and line-of-sight (LOS) communications network throughout the tactical force supporting telephone, data and video. Increment 2 provides initial on-the-move capability as well as a robust LOS transmission network and greater satellite data down to company level for maneuver brigades and division headquarters. FY 15

funding fields Increment 2 sets to one Division headquarters, one Brigade Combat Team (BCT), and 11 Battalions. Increment 3 will improve throughput for LOS and beyond LOS transmissions through the development of the Highband Networking Waveform (HNW). Fiscal realities forced a delay of the Increment 3 aerial layer. FY15 funding will focus on the development of a common Network Operations tool and completion of the HNW.

- Family of Networked Tactical Radios** is the Army's future family of tactical radio systems. It provides advanced joint tactical end-to-end networking data and voice communications to dismounted troops, ground, and aircraft platforms. Formally known as the Joint Tactical Radio Systems, these multi-band/multi-mode radio capabilities leverage IP-based technologies. FY15 funding reduces investments in the development and limited procurement of Mid-Tier Networking Vehicular Radio systems, Manpack and Rifleman radios.
- Joint Battle Command-Platform (JBC-P)** is the next generation of Force XXI Battle Command Brigade and Below and Blue Force Tracking and is the foundation for achieving affordable information interoperability and superiority on current and future battlefields. JBC-P is the principal command and control/situational awareness system for the Army and Marine Corps at the brigade level and below. FY 15 funding procures JBC-P for BCTs and Brigades to include replacement of Enhanced Position Location and Reporting Systems in BCTs.
- Distributed Common Ground System-Army (DCGS-A)** provides integrated Intelligence, Surveillance, Reconnaissance (ISR) Processing, Exploitation and Dissemination (PED) of airborne and ground sensor platforms providing commanders, at all levels, access to the Defense Intelligence Information Enterprise and leverages the entire ISR community. The DCGS-A program modernizes and procures components for fixed sites and data centers needed for the Army's ISR component of the COE. The DCGS-A hardware and software will be integrated into select ISR current Programs of Record systems to enable networked PED capabilities. Although fiscal challenges have caused a reduction in the number of software releases, FY 15 funding continues the development

and testing effort for Increment 1 software, to include integration into the Command Post Computing Environment.

- Nett Warrior** is a dismounted Soldier mission command system that provides unprecedented command, control, and situational awareness capabilities for dismounted leaders down to the squad level. The design leverages commercial technology, while incorporating operational unit mission needs and provides assured power in austere environments. Nett Warrior is the foundational program to converge handheld devices onto one technology – the Handheld Computing Environment in the COE. FY 15 funding procures Soldier worn communications sets for Capability Set 15 fielding.

Combat Vehicles

- AMPV** replaces the M113 family of vehicles at brigade and below. It will provide required protection, mobility and networking for the Army's critical enablers including mortars, medical evacuation, and command and control vehicles. The FY 15 request provides for one Engineering, Manufacturing and Development contract and program management support.
- PIM** provides readily available, low risk upgrades enhancing the responsiveness, force protection, survivability, and mobility of the self-propelled howitzer fleet. The PIM replaces the current M109A6 Paladin and M992A2 Field Artillery Ammunition Supply Vehicle with a more robust platform incorporating Bradley common drive train and suspension components in a newly designed hull. The FY 15 request supports procurement of 18 low-rate initial production (LRIP) systems, 18 self-propelled howitzers and 18 ammunition carriers.

Light Tactical Vehicles

- JLTV** is the centerpiece of the Army's Tactical Wheeled Vehicle modernization strategy. The Army will procure 49,099 JLTVs by 2041. The JLTV family of vehicles is being designed to provide the necessary leap in protection, performance, and payload to fill the capability gap remaining between the High Mobility Multipurpose Wheeled Vehicle and the Mine Resistant Ambush Protected family of vehicles. This multi-mission vehicle will provide protected, sustained and networked mobility for personnel and payloads across the full range of military operations. The FY 15 funding completes limited user testing

and procures 176 vehicles for LRIP. The Army anticipates down-select to one vendor in FY 15.

Aviation

- Aviation Restructure Initiative.** Following a comprehensive review of our aviation strategy, the Army will restructure aviation formations to achieve a leaner, more efficient and capable force that balances operational capability and flexibility across the Total Army. The Army National Guard will transfer all AH-64 Apache helicopters to the Active Army, where they will be teamed with Unmanned systems for Armed Reconnaissance or continue their traditional attack role. The Active Army will transfer 111 UH-60 Black Hawk helicopters to the Army National Guard, which will significantly improve its capabilities for support of civil authorities, such as disaster response. The UH-72 Lakota will replace the TH-67 helicopter fleet as the next generation glass cockpit, dual engine training helicopter. We will transfer nearly all Active Army UH-72 Lakota helicopters to our training base at Fort Rucker, Alabama. With no sequestration, the Army will procure an additional 100 UH-72 Lakotas to support the initial entry rotary wing training requirement. Also, we will sustain the current fleet of Army National Guard UH-72 helicopters, which perform dual-purpose state and homeland defense missions. The Active Army's overall helicopter fleet will decline by about 23 percent, and the Army National Guard's fleet of helicopters will decline by eight percent. This smaller, more efficient force will facilitate Aviation readiness when needed.
- AH-64E Apache** is the Army's world class heavy attack helicopter for the current and future force assigned to Attack Helicopter Battalions. The AH-64E provides the capability to simultaneously conduct close combat, mobile strike, armed reconnaissance, security and vertical maneuver missions across the full spectrum of warfare, when required in day, night, obscured battlefield and adverse weather conditions. AH-64E enhancements consist of several technical insertions to include Level IV Manned-Unmanned Teaming, Cognitive Decision Aiding, improved drive system, composite rotor blades, new fuselage, and open system architecture. Apache investment is also key to the Army Aviation Restructure Initiative. AH-64 aircraft will be assigned to Armed Reconnaissance

Squadrons as part of the Manned-Unmanned teaming capability that will provide a viable option and allows divestment of legacy Kiowa Warrior aircraft. The FY 15 request supports the remanufacture of 25 AH-64D aircraft to the AH-64E models, and associated modifications to the existing AH-64D fleet.

- **H-60 Black Hawk** aircraft comprises the Army's largest helicopter fleet. The Black Hawk is a vital asset to fulfill lift and medical evacuation missions in the current and future force theater operational plans. The Black Hawk also serves a key role in the Army Aviation Restructure Initiative by supporting maneuver commanders through air assault, general support, command and control, and aero-medical evacuation missions. The Black Hawk is the mainstay of the homeland defense mission. With its day, night and adverse weather capability it is a key component of the Army National Guard's forest fire, tornado, hurricane, and earthquake relief missions. In addition to supporting the Army Aviation Restructure Initiative, the FY 15 Black Hawk funding request procures 55 UH-60M, 24 HH-60M; continues the Improved Turbine Engine program and UH-60 Digital L efforts; and purchases mission equipment packages.

Other Major Changes in Fiscal Year 2015

The Army has carefully prioritized our efforts to ensure we maximize every dollar toward putting the best equipment in the hands of our Soldiers. The most notable change is the conclusion of the Ground Combat Vehicle (GCV) program. GCV will conclude at the end of the technology development phase, expected in June 2014, and will not continue further development. In the near-term, the Army will focus on refining concepts, requirements and key technologies in support of a future Infantry Fighting Vehicle (IFV) modernization program. This will include investment in vehicle components, sub-system prototypes and technology demonstrators to inform IFV requirements and future strategies for developing a needed replacement for the Bradley Infantry Fighting Vehicle. Over the long-term, the Army anticipates initiating a new IFV modernization program informed by these efforts as resources become available.

The Army will also re-scope Network Integration Evaluation (NIE). NIE continues to provide the mechanism to evaluate and incrementally improve the network baseline,

incorporating critical Soldier feedback into system functionality and training methods. The reduction in funding for these biannual events will extend some timelines for Programs of Record or divert their tests to alternative events. In addition, accepting risk in this program will reduce opportunities to evaluate new technologies in an operational network.

In addition, the Army will accept risk in the Integrated Air and Missile Defense – Battle Command System (IBCS). IBCS is a network centric system-of-systems that integrates sensors, shooters, and battle management, command, control, communications and intelligence systems for Army air and missile defense. The program decrements will cause a two-year delay in fielding the initial operational capability, from FY 16 to FY 18.

The FY 15 request will also reflect a significant acceleration of funding for Patriot Advanced Capability, or PAC-3, launcher upgrades for combatant commanders in FY 16 and FY 17. Additionally, we will also continue to fund a third brigade's set of Double V-Hull (DVH) Stryker vehicles, while supporting an incremental upgrade to DVH Strykers for power and mobility improvements.

Finally, the Army will not pursue the Armed Aerial Scout and will halt the Cockpit and Sensor Upgrade Program for the Kiowa Warrior. We will divest almost 900 legacy helicopters including the entire single engine OH-58D Kiowa Warrior and TH-67 helicopter training fleets. Instead, the Army will fund modernization and sustainment of our most capable and survivable combat-proven aircraft: the AH-64 Apache, UH-60 Black Hawk and CH-47 Chinook helicopters.

Defense Industrial Base

As lower funding levels for the Army continue, we are concerned about the health of the Army's commercial and organic industrial bases and the subsequent consequences for the Army and our Nation. Shrinking demands and corresponding budgets for new combat platforms and smaller production rates lead to higher proportional costs. A smaller commercial industrial base may reflect a workforce with reduced expertise in design, development, and manufacturing. Diminished capacity in this industrial base

may decrease competitiveness and increase response time to future requirements. The likely loss of critical skill sets and suppliers at all tiers, and an increase in the number of single-points failure in the supply chain is of particular concern to the Army.

The Army continues to assess the commercial industrial base to provide leadership with evaluations of current operations, risks, and issues in the Army Industrial Base. We intend to address critical impacts through planning for ongoing and future modernization efforts within our equipment portfolios.

The Army has also conducted a comprehensive Combat Vehicle Portfolio Industrial Base Study through A.T. Kearney, a global management consulting firm. In response to the findings of these assessments, the Army has:

- Initiated Engineering Change Proposals, to upgrade fielded vehicles, earlier to help fill production gaps at Joint Manufacturing Center for the Abrams vehicle;
- Slowed production deliveries of the Abrams vehicle to distribute workload and prevent workforce furloughs;
- Provided production funding to second-tier suppliers to mitigate critical production breaks;
- Developed second source suppliers for financially fragile suppliers for Abrams and Bradley vehicles; and
- Continued advocacy for Foreign Military Sales (FMS) with defense industry.

We are equally concerned about the health of the organic industrial base containing our depots, arsenals, and ammunition plants. The Army is preserving needed capabilities by modernizing facilities through new technology, training, and plant equipment. We will maintain our depots by workloading them to preserve their core functions and capabilities and encouraging depots to partner with commercial firms to meet future requirements. The Army also advocates FMS, extended production in certain programs, and investment in key suppliers on a case-by-case basis. In terms of

monitoring the health and management of the community, the Army has initiated Joint Acquisition and Sustainment Reviews to synchronize efforts to address issues faced by our Program Executive Offices and our depots and arsenals. These periodic reviews led by the Army Materiel Command and Army Acquisition Executive help effectively manage challenges across the materiel enterprise.

Closing Comments

Our Total Army remains the best in the world today. It has unique capabilities to provide regionally aligned, expeditionary, and decisive land power, but its capacity and capability overmatch is eroding. Adequate resources are essential to meet the President's defense strategy and defense budget priorities. Ultimately, the ability to modernize Army equipment relies on sufficient, consistent funding. While the Bipartisan Budget Act of 2013 provides greater budget certainty for FY 14 and FY 15, reductions in RDA continue to challenge the Army's ability to deliver capabilities to our Soldiers now and in the future. Without Congress' intervention, Sequestration level budget caps will return in FY 16 and impose additional risk on Army equipment modernization. Those risks include fewer mitigation options, aging fleets, eroding overmatch, higher sustainment costs, longer timelines to re-generate and higher costs, leaving our Soldiers less prepared for future conflicts.

Mr. Chairman, members of the Subcommittee, I thank you again for your steadfast and generous support of the outstanding men and women of the United States Army, Army Civilians and their Families. We look forward to your questions.



**Lieutenant General James O. Barclay III
Deputy Chief of Staff, G-8**

Lieutenant General James O. Barclay III became the Deputy Chief of Staff, G-8 on 27 July 2012. Prior to assumption of this position, he served as the Army's Assistant Deputy Chief of Staff, G-3/5/7 United States Army, Washington, DC.

LTG Barclay received his commission in 1978 from the United States Military Academy at West Point in the Armor Branch. He is a 1990 graduate of the Army Command and General Staff College, where he earned a Master of Military Arts and Sciences Degree, and a 1998 graduate of the United States Naval War College where he earned a Master of Arts from in National Security and Strategic Studies.

LTG Barclay has held numerous command positions. His command assignments include: Commanding General, United States Army Aviation Center of Excellence and Fort Rucker; Commander, Aviation Brigade, later Chief of Staff, 4th Infantry Division (Mechanized), Fort Hood, Texas and OPERATION IRAQI FREEDOM, Iraq; 3d Battalion, 25th Regiment, re-designated 2d Battalion, 10th Aviation, 10th Mountain Division (Light), Fort Drum, New York; and Headquarters and Headquarters Company, 101st Aviation Battalion, 101st Airborne Division (Air Assault), Fort Campbell, Kentucky.

Previously, he was the Director, Joint Center for Operational Analysis-Lessons Learned, United States Joint Forces Command, Suffolk, Virginia; Assistant Division Commander (Maneuver), 1st Infantry Division, United States Army Europe and Seventh Army, Germany; Assistant Division Commander (Maneuver), 42d Infantry Division, OPERATION IRAQI FREEDOM, Iraq; Executive Officer to the Commander, Multi-National Force-Iraq, OPERATION IRAQI FREEDOM, Iraq; Executive Officer to the Vice Chief of Staff, United States Army, Washington, DC; and Executive Officer to the Deputy Chief of Staff, G-8, United States Army, Washington, DC.

LTG Barclay's awards and decorations include the Distinguished Service Medal, Defense Superior Service Medal, the Legion of Merit (with oak leaf cluster), the Bronze Star Medal (with oak leaf cluster), the Defense Meritorious Service Medal (two oak leaf clusters), the Meritorious Service Medal (with 5 Oak Leaf Clusters), Army Commendation Medal (with oak Leaf Cluster), and the Army Achievement Medal. MG Barclay is a Master Army Aviator and has earned the Master Aviator Badge, the Senior Army Aviator Badge, and the Army Staff Identification Badge.

LTG Barclay is a native of Scottsboro, Alabama. He and his wife, Deborah, have three children, Mary Margaret; James O. Barclay IV; and William, a Warrant Officer in the United States Army.



BRIGADIER GENERAL MICHAEL E. WILLIAMSON

BG Michael E. Williamson assumed his duties as Joint Program Executive Officer for the Joint Tactical Radio System in March 2011.

General Williamson was born in Tucson, Arizona. He was commissioned at the University of Maine as a Second Lieutenant in the Air Defense Artillery in 1983.

His assignments include service as the Automation Officer for the 32nd AADCOM in Darmstadt Germany. He then served as a Chaparral Platoon Leader, Vulcan Platoon Leader, Maintenance Officer and Executive Officer in C Battery, 108th Brigade, Hahn Air Force Base, Germany. After attending the Air Defense Artillery Advance Course, he served as the Chief, Forward Area Air Defense Weapons, Development Branch at Fort Bliss, Texas. He then

commanded B Battery, 3/1 ADA (Hawk) in the 11th Brigade at Fort Bliss and also in the 31st ADA Brigade at Fort Hood, Texas. After completing command, he served as the Assistant S-3 in the 31st ADA Brigade.

His acquisition experience began as Sr. Military Software Analyst at NATO's military headquarters in Mons, Belgium. He then served as the Associate Director, Battle Command Battle Lab at Fort Leavenworth, Kansas. After attending Command and General Staff College, he served as the Chief of Information Technology, Acquisition Career Management, within the Office of the Assistant Secretary of the Army for Acquisition Logistics and Technology. He was then selected as a Congressional Fellow and served as a legislative assistant to a Member of Congress. After completing the fellowship, General Williamson served as the Product Manager for the Global Command and Control System-Army, and then as the Acquisition Military Assistant to the Secretary of the Army. He served as Commander of Software Engineering Center-Belvoir (SEC-B), He was then assigned as the Project Manager, Future Combat System (Brigade Combat Team) Network Systems' Integration within Program Manager, Future Combat System (Brigade Combat Team). He then served as the Director of Systems Integration, within the Office of the Assistant Secretary of the Army for Acquisition Logistics and Technology. Prior to his current assignment, General Williamson served as the Deputy Program Manager, Program Executive Office, Integration.

General Williamson's awards and decorations include the Legion of Merit with two Oak Leaf Clusters; the Meritorious Service Medal with 2 Oak Leaf Clusters; the Joint Service Commendation medal, the Army Commendation Medal with two Oak Leaf Clusters, the Joint Service Achievement Medal, the Army Achievement Medal with two Oak Leaf Clusters, the Army Superior Unit Award, the National Defense Service Medal with Bronze Star, the Global War on Terrorism Service Ribbon, the Army Service Ribbon, the Overseas Ribbon and the Army Staff Identification Badge.

General Williamson's education includes a Bachelor of Science from Husson College in Business Administration, a Masters of Science in Systems Management from the Naval Postgraduate School and a PhD in Business Administration from Madison University. He also has graduate certificates in Public Policy from the JFK School of Government, Harvard University and the Government Affairs Institute at Georgetown University. He is a graduate of the Army Command and General Staff College, a graduate of the Advanced Management Program at the Harvard Business School and was a Senior Service College Fellow at the University of Texas at Austin. He is Level III certified in Program Management and Communications and Computers.

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BY THE HOUSE ARMED SERVICES
COMMITTEE SUBCOMMITTEE ON TACTICAL
AIR AND LAND FORCES

STATEMENT

OF

LIEUTENANT GENERAL GLENN M. WALTERS
DEPUTY COMMANDANT FOR
PROGRAMS & RESOURCES

AND

MR. TOM DEE
DEPUTY ASSISTANT SECRETARY OF THE NAVY
EXPEDITIONARY PROGRAMS AND LOGISTICS MANAGEMENT

BEFORE THE

SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

MARINE CORPS MODERNIZATION

DATE: APRIL 2, 2014

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SUBCOMMITTEE ON TACTICAL AIR AND LAND FORCES

Introduction

Chairman Turner, Ranking Member Sanchez, and distinguished members of this Subcommittee, we appreciate the opportunity to appear here today and discuss Marine Corps modernization. As always, we thank you for your continued support to our Marines, Sailors and their families.

The Marine Corps remains the nation's premiere Expeditionary Force in Readiness. This means that we remain most ready when the nation is least ready to answer the call globally and respond to all matter of unforeseen events. We operate capably and freely throughout the spectrum of threats, whether they are conventional, irregular or the uncertain hybrid areas where they overlap. Our ability to deploy from the sea in austere environments at a time and place of our choosing - a significant asymmetric, strategic and operational advantage- remains our most important characteristic.

Our modernization investments allow us to develop and sustain a ready and flexible force that serves as a highly effective hedge against global and regional instability. Our innovative spirit, strong leadership, and enduring stewardship of the Nation's resources guide our modernization efforts. We invest in our Marines as they are the foundation of the Marine Corps. We continue to reset our warfighting equipment and reconstitute our force after more than a decade of combat operations. We maintain our investments in the research and development of new equipment and technologies that ensure our nation's crisis response force remains relevant and ready well into the 21st century.

However, as fiscal realities continue to constrain the Department of Defense's budget, the Marine Corps will postpone some critical investments over the next few years in order to maintain near-term readiness as detailed in the Fiscal Year 2015 President's Budget. As America's crisis response force, however, your Corps does not have a choice. We are required to maintain a posture that facilitates our ability to deploy at a moment's notice. While the Bipartisan Budget Act provided some certainty that will allow us to sustain ourselves and mitigate some gaps in the near term, full implementation of the sequestration-level caps outlined in the Budget Control Act will force us into a less ready force while also imposing severe restrictions on our modernization efforts.

The modernization of our ground and rotorcraft equipment is critical to the success of the Marine Corps to meet an international security environment that will remain uncertain and complicated. Crises, such as responding to natural disasters such as Typhoon Haiyan or evacuating United States citizens from unstable environments, will continue to arise at an ever increasing pace. The 2014 QDR states, “(t)he United States will likely face a broad array of threats and opportunities and must prepare to address both effectively in the coming years.” Among these threats is the rapid diffusion of disruptive technologies to both state and non-state actors. In what has been described as a ‘new normal,’ extremism, economic disruption, identity politics and social change generate new potential security threats at an accelerating pace.

The recently approved “Expeditionary Force 21” is the Marine Corps’ capstone concept that establishes our vision and goals for the next 10 years. It provides a plan for guiding the design and development of the future force that will be asked to fight and win in this new environment. It will inform future decisions regarding how we will adjust our organizational structure to exploit the value of regionally focused forces and it provides the basis for future Navy and Marine Corps capability development to meet the challenges of the 21st Century. Expeditionary Force 21 provides guidance for how the Marine Corps will be postured, organized, trained, and equipped to fulfill the responsibilities and missions required around the world. Through Expeditionary Force 21 we intend to operate from the sea and provide the right sized force in the right place, at the right time. Our FY 2015 budget submission reflects the tenets of this vision.

Equipment Modernization

With the smallest modernization budget in the Department of Defense, the Marine Corps continually seeks to leverage the investments of other services. Within our budget submission, there are many areas of joint investment and programs, from tactical vehicles to personal protective equipment. We avoid redundant development efforts and focus our slim modernization resources in those areas that are the most fiscally prudent and those which promise the most operationally effective payoffs for the joint force.

Innovative war-fighting approaches and can-do leadership are hallmarks of the Corps, but these cannot overcome the vulnerabilities created by our rapidly aging fleet of vehicles, systems

and aircraft. As previously discussed, long-term shortfalls in modernization will have a detrimental impact on readiness and would ultimately cost lives during crises. At some point, sustaining fleets of severely worn vehicles becomes inefficient and no longer cost-effective, diverting modernization resources from an already small account, degrading our ability to effectively operate in the complex security environment of today and the future.

ACV

The Amphibious Combat Vehicle (ACV) is the Marine Corps' top ground modernization priority and the FY 2015 President's Budget request includes \$106 million for this effort. Many of our systems show the signs of age, but none more than the current Amphibious Assault Vehicle (AAV) which has been in service since 1972. The legacy AAV has served the Corps well for over 40 years, but faces multiple component obsolescence issues that affect readiness, sustainment costs, safety, and our ability to respond from the sea. The ACV is needed to replace this aging fleet.

Following the cancellation of Expeditionary Fighting Vehicle (EFV) due to affordability, the Marine Corps has assessed multiple alternatives to satisfy the need for a replacement for the AAV. The Corps conducted a series of studies to reexamine the required capability and the preferred alternative for a modern amphibious combat vehicle. Included in this effort was the development of the Marine Corps Ground and Tactical Vehicle Strategy which validated the need for a mix of vehicles. Also included was the 2011 establishment of an Amphibious Capabilities Working Group that examined current and emerging intelligence, surveillance, and reconnaissance (ISR) capabilities, strike capabilities, and their integration into potential adversaries' approaches to anti-access, area denial. We concluded that our concepts for operational maneuver from the sea and ship-to-objective maneuver remain valid, but that, in the face of the evolving and proliferating threat, to include future loitering top-attack munitions, guided rockets, artillery, missiles, and mortars, we must continue to refine our complimentary portfolio of capabilities and be prepared to launch initial entry forces from a range of distances from the shore.

Prior to initiation of the ACV program, we further conducted an extended and very detailed material solutions analysis to ensure that we fully understood the technical and cost risks

of potential solutions, as well as required capability trades to stay within affordability parameters. This analysis reviewed the results of prior analysis, verified the required capabilities, and quantified the technical feasibility, operational value, capability trades and opportunity costs of potential alternatives to provide an affordable mix of vehicles to satisfy the combat vehicle pillar of Operational Maneuver from the Sea. This comprehensive evaluation, which drew upon the best brains within the Navy, Marine Corps, and industry, validated the presumption that there was no single solution that would optimize performance both at sea and ashore.

Leveraging work done on the earlier Marine Personnel Carrier (MPC) program, we also examined commercial off-the-shelf/non-developmental wheeled combat vehicles and discovered several important points. First, modern wheeled vehicles have substantially closed the maneuver performance gap that previously existed between tracked and wheeled vehicles with improved cross country performance. Second, current wheeled vehicle technology contributes to improved protection against mines and improvised explosive devices. Third, wheeled vehicles can provide a limited capability for water mobility.

The current ACV program has subsequently been refined to reflect a family of systems approach to the military problem – the necessity to conduct amphibious operations rapidly from further offshore while enhancing protected mobility for the mission on land. It leverages experience gained in the EFV program, the MPC program, the ACV material solution analysis, the current threat analysis, and combat experience.

The ACV will be procured on a phased approach in concert with a revision to our concept of operations for littoral maneuver. ACV, Phase I will provide a robust capability to maneuver and survive ashore, which would provide our ground combat element with the modern capabilities they need to conduct the full range of military operations ashore while complementing the existing AAV fleet. The ACV will conduct most of its ship-to-shore movement via existing and programmed high-speed connectors.

In parallel with the development and procurement of a wheeled ACV in phase I of the program, we will mitigate near term risk in high end amphibious assault operations by fully funding survivability upgrades in a limited number of AAVs. An additional initiative to improve

sustainability of the AAV fleet is being developed that will focus on obsolescence drivers and improving reliability that will allow the AAV to serve as an effective bridge until it is replaced by the ACV Phase II.

Our long-term Phase II effort will continue research and development to explore capabilities that better enable us to conduct extended range littoral maneuver from ship to shore. The fruits of this phased effort are aimed at producing an amphibious vehicle capable of deploying from greater distances and speeds that ensure greater stand-off distances for the Naval Forces. Given continuing advancements in applicable technologies, we believe that further investment in these technologies will lead to the envisioned high water speed capability. While high-speed technology exists today, it currently requires too many capability tradeoffs to be an acceptable solution.

Other Ground Programs

Our ground vehicle modernization strategy is to sequentially modernize priority capabilities, reduce equipment inventory requirements wherever possible, and judiciously sustain remaining equipment. Our plans focus on achieving the right mix of assets, while balancing performance, payload, survivability, fuel efficiency, transportability and cost.

While the ACV remains the Marine Corps' number one priority, it will be part of a broader acquisition strategy aimed at providing the Marine Corps with balanced maneuver and mobility capabilities and capacities. This strategy involves retaining and recapitalizing portions of our Mine Resistant Ambush Protected (MRAP) vehicle and High Mobility Multi Wheeled Vehicle (HMMWV) fleets. In addition to preserving these legacy systems we remain firmly partnered with the U.S. Army in fielding a Joint Light Tactical Vehicle (JLTV) that lives up to its name, while also being affordable.

JLTV

The JLTV is needed to provide the Marine Air Ground Task Force (MAGTF) with modern expeditionary light combat and tactical mobility while increasing the protection of our light vehicle fleet. Working closely with the Army as the lead Service, the Marine Corps is an equal partner in developing this key system in the tactical wheeled vehicle fleet of the joint force.

The FY15 budget request includes \$11.5M for RDT&E and \$7.5M for procurement of seven test vehicles. Between FY16-21 the Marine Corps will purchase and field a total of 5,500 vehicles which will replace approximately one-third of our legacy HMMWV fleet. The JLTV will greatly enhance reliability and survivability from these overburdened platforms that currently perform critical missions in unforgiving conditions.

MRAP

Complementary to JLTV, the Marine Corps has an enduring requirement to keep a large portion of our current MRAP fleet for those future threat environments that require large and heavily armored ground mobility options. We will place MRAPs in our Prepositioning Programs, with designated MEF units for potential use during contingencies, position them at various training and exercise locations and place several hundred in long and short-term storage programs. The Marine Corps will also make the excess portion of its MRAP fleet available for inter-service transfer and to other partner nations who have identified a requirement for Excess Defense Articles (EDA).

In March, the Marine Corps revisited its enduring requirement to ensure we retain the right mix and quantity of MRAPs. We concluded that an increased number of MRAPs was critical to support the realities of today's security environment. The new MRAP strategy calls for the retention of just over 2,500 vehicles following the conclusion of Marine Corps operations in Afghanistan. To fulfill this enduring requirement, we will return the balance of our MRAPs currently in Afghanistan today, leaving none to be demilitarized in theater.

LAV

The FY15 budget includes a request for \$77.7M to upgrade a portion of our Light Armored Vehicle (LAV) fleet. The upgrades made to the Command and Control (LAV-C2) and Anti-Tank (LAV-AT) variants will both extend the life of this important platform and provide lethality and survivability upgrades that are sorely needed to maintain the relevance of this unique platform on the battlefield. In addition to ensuring the operational effectiveness of these vehicles through 2035 it will align the main weapon system of the LAV-AT with similar systems in the Army increasing commonality, and gaining overall efficiencies in both the acquisition of parts and ammunition.

Connectors

The Navy Marine Corps team will continue its investment in future connectors. These connectors with enhanced speed and range will provide future expeditionary force commanders greater flexibility to operate in contested environments. The President's Budget includes \$191 million for the Ship to Shore Connector (SSC) air-cushioned vehicles and \$4 million for the Surface Connector Replacement (SC(X)(R)) program that will replace the aging LCUs. These platforms are essential in connecting the combat power and logistical sustainment that the sea base provides, with the forces that are operating in the littorals and inland for all missions. We will continue to explore future connector options that will increase our ability to exploit the sea as maneuver space by increasing range, speed, and capacity.

G/ATOR

In addition to our critical investments in mobility, the FY15 budget includes a request for \$89.2M to procure the next generation radar that will begin to replace five of our legacy systems. These funds will support the second low rate initial production contract to deliver units to the Marine Corps for operational assessment. The Ground/Air Task Oriented Radar is a multi-role, ground based, expeditionary radar that satisfies the capabilities requirements of both Marine Air Command and Control System and Counter Fire/Counter Battery systems. This critical system interfaces with existing Navy systems and provides unprecedented reach volume and precision to identify and track both friendly and hostile forces.

Individual Equipment Modernization

The Marine Corps acquisition community is also committed to delivering required warfighting capabilities to our individual Marines in a timely and affordable manner. Over the past decade of combat, the importance of individual mobility through better performance and lighter weight has become evident. As performance has increased, so has the cost of providing it. Our goal is to provide Marines the equipment that gives them the mobility and confidence to go in harm's way and accomplish the Nation's objectives. In collaboration with the Army, our acquisition efforts strive to attain the right balance between performance, weight and affordability.

The Marine Corps is committed to using every resource available to maximize the overall combat effectiveness and survivability of our Marines within the current fiscal realities. Towards that end, and in addition to such major programs such as JLTV, the Marine Corps and the Army continually leverage each other's research and development efforts on individual protective equipment

A recent example of such joint coordination and collaboration is the Enhanced Combat Helmet (ECH). Using the latest lightweight material technology, the ECH provides increased ballistic capability for Marines on the battlefield at the same weight as the current Lightweight Helmet and it is the first ever helmet designed to meet small arm rifle threats. The ECH is in full production and Marines in I MEF and II MEF began receiving this advanced helmet in March.

Another program, the Modular Scalable Protective System, focuses on approaching the protection of the warfighter as an integrated system and aims to provide a single, scalable system with load distribution capabilities. The development of a single system that scales across all Armor Protection Levels will reduce life cycle costs, operational footprint and overall weight while providing greater mobility through integrated load carriage and flexibility. The Modular Scalable Vest (MSV), the developmental torso protective system of the MSPS, currently provides these capabilities in prototype form.

As we strive to fulfill our solemn commitment to provide the most capable protective systems to all of our Marines, we approach the sizing/fit of body armor as a question of body stature rather than gender. Stemming from surveys and workshops with respect to sizing, fit and comfort of body armor, results indicated a need for smaller stature Improved Modular Tactical Vests (IMTVs). Subsequently, we are currently procuring 3,780 IMTV "Short" sizes with initial fielding later this year. The development of the small stature IMTV allows for better fit, mobility, and longer combat effectiveness for all Marines on the battlefield.

MV-22

The Fiscal Year 2015 President's Budget requests \$ 61.2 million in RDT&E,N for continued product improvements and \$1.53 billion in APN for procurement of 19 MV-22s (Lot 18) under the current multi-year procurement contract (FY13-FY17). This contract will procure at least 93 MV-22s over five years and includes significant savings of approximately \$1 billion

when compared to single year procurements. The APN request also includes \$135.6 million to support the ongoing Operations and Safety Improvement Programs (OSIP), including Correction of Deficiencies and Readiness Improvements.

MV-22 Osprey vertical flight capabilities coupled with the speed, range, endurance of fixed-wing transports, are enabling effective execution of current missions that were previously unachievable on legacy platforms. This capability is at the core of the Marine Corps' recently fielded SPMAGTF-CR. The Marine Corps continues to field and transition aircraft on time. As the MV-22 approaches the 200,000 flight hour milestone, it is on pace to be one of the safest of any DoD aircraft dating back to the 1960s.

CH-53K Heavy Lift Replacement Program

The Fiscal Year 2015 President's Budget requests \$573.2 million RDT&E,N to continue Engineering and Manufacturing Development (EMD) of the CH-53K. The program is completing assembly of the first five test aircraft; one Ground Test Vehicle (GTV) and four Engineering Development Model (EDM) aircraft. The GTV has successfully completed numerous ground test requirements, to include the "Bare Head Light-Off." The program is currently on schedule to execute its first flight by the end of 2014. During Fiscal Year 2015, the program will continue to execute developmental test flights, deliver the final EDM, and start assembly of four System Demonstration Test Article (SDTA) aircraft which will be production representative aircraft utilized for Operational Test. The program will also contract for two additional SDTA aircraft in order to effectively demonstrate that manufacturing processes are mature and stable when the program transitions to production in FY16.

The new-build CH-53K will fulfill land and sea based heavy-lift requirements not resident in any of today's platforms, and contribute directly to the increased agility, lethality, and presence of joint task forces and MAGTFs. The CH-53K will transport 27,000 pounds of external cargo out to a range of 110 nautical miles, nearly tripling the CH-53E's lift capability under similar environmental conditions, while fitting into the same shipboard footprint. The CH-53K will also provide unparalleled lift capability under high-altitude and hot weather conditions, greatly expanding the commander's operational reach. Expeditionary heavy-lift capabilities will continue to be critical to successful land and sea-based operations in future anti-access, area-

denial environments, enabling sea-basing and the joint operating concepts of force application and focused logistics.

The Fiscal Year 2015 President's Budget requests \$38.2 million in APN for both near and mid-term enhancements to the nearly 30 year old CH-53E. These modifications include Condition Based Maintenance software upgrades, T-64 Engine Reliability Improvement Program kit installations, Critical Survivability Upgrade (CSU) installations, Smart Multifunction Color Display (SMCD) and sustainment efforts such as Kapton wiring replacement and improved Engine Nacelles. With the exception of the CSU and SMCD, the same modifications are also made to the USN MH-53E helicopters.

UH-1Y // AH-1Z

The Fiscal Year 2015 President's Budget requests \$44.1 million in RDT&E,N for continued product improvements and \$859.7 million in APN for 26 H-1 Upgrade aircraft: 15 UH-1Y and 11 AH-1Z. The program is a key modernization effort designed to resolve existing safety deficiencies and enhance operational effectiveness of the H-1 fleet. The 85 percent commonality between the UH-1Y and AH-1Z will significantly reduce life-cycle costs and the logistical footprint, while increasing the maintainability and deployability of both aircraft. The program will provide the Marine Corps with 349 H-1 aircraft through a combination of new production and a limited quantity of remanufactured aircraft.

The H-1 Upgrades Program is replacing the Marine Corps' UH-1N and AH-1W helicopters with state-of-the-art UH-1Y "Yankee" and AH-1Z "Zulu" aircraft. The new aircraft are fielded with integrated glass cockpits, world-class sensors, and advanced helmet-mounted sight and display systems. The future growth plan includes a digitally-aided, close air support system designed to integrate these airframes, sensors, and weapons systems together with ground combat forces and other capable DoD aircraft. Integration of low-cost weapons such as the Advanced Precision Kill Weapon System II (APKWS II) has increased lethality while reducing collateral damage.

In December 2011, to address existing attack helicopter shortfalls, the Marine Corps decided to pursue an all AH-1Z Build New (ZBN) procurement strategy and leave AH-1W airframes in the inventory rather than removing them from service to begin the remanufacture

process. The transition to an all ZBN airframe strategy began with Lot 10 (Fiscal Year 2013) as reflected in the current USMC program of record. The aircraft mix is 37 remanufactured AH-1Z and 152 ZBN aircraft. The total aircraft procurement numbers remain the same at 160 UH-1Ys and 189 AH-1Zs for a total of 349 aircraft.

Conclusion

On behalf of the Marines and Sailors who provide the Nation with its forward deployed crisis-response force, we thank you for your constant support in an era of competing challenges. We are proud of our reputation for frugality and we remain one of the best values for the defense dollar. These critical modernization investments, among many others, will ensure our success not if, but when future conflict occurs. Fiscal uncertainty has threatened both our capacity and capabilities, forcing us to sacrifice our long-term health for near-term readiness. Recognizing these fiscal challenges, we remain committed to fielding the most ready Marine Corps the Nation can afford.

The priorities reflected in the FY15 budget are the modernization efforts that we must have to remain an affordable insurance policy for the American people. These efforts will allow the Marine Corps to remain a highly efficient and effective hedge against global and regional tensions that cause instability. As always, we will continue to provide our nation's leaders with the time and decision space they need by responding to today's crisis, with today's forces...TODAY.

Lieutenant General Glenn M. Walters

Deputy Commandant for Programs and Resources

Lieutenant General Walters was commissioned a Second Lieutenant on 12 May 1979, after graduating from The Citadel with a degree in Electrical Engineering. Upon completion of the Officers Basic Course in November 1979, he was assigned to 3rd Battalion, 2nd Marines at Camp Lejeune as a Platoon Commander in Weapons Company. He attended flight training in Pensacola, Florida and was designated a Naval Aviator in March 1981.



After receiving his wings, Lieutenant General Walters was assigned to MAG-39 for training in the AH-1T, subsequently transferring to HMA-169 as the Flight Line Officer, Flight Scheduler and Adjutant. He completed two WESTPAC cruises in 1983 and 1984 with HMM-265.

During June 1986 Lieutenant General Walters was assigned to 1st Reconnaissance Battalion, 1st Marine Division at Camp Pendleton for duty as Air Officer and Operations Officer. In July 1987 he was re-assigned to HMT-303 for refresher training in the AH-1J and subsequent transition to the AH-1W. In July 1987 he was deployed on MAGTF 1-88 in support of Operation Ernest Will in the Arabian Gulf on the USS Okinawa. After returning to the United States he was assigned as the Assistant Operations Officer and S-4 in HMLA-169.

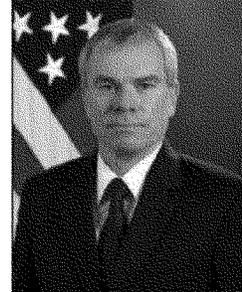
Departing MAG-39 in September 1989, Lieutenant General Walters attended Multi-Engine Transition Training at NAS Corpus Christi, Texas. He then attended the United States Naval Test Pilot School in 1990. After graduation from Test Pilot School, Lieutenant General Walters was assigned to the Attack/Assault Department of the Rotary Wing Aircraft Test Directorate at Naval Air Station, Patuxent River. His duties included Flight Test lead for the AH-1W Night Targeting System, Integrated Body and Head Restraint System and AH-1W Maverick Missile feasibility testing. He was elected to the Society of Experimental Test Pilots in October 1994.

In April 1994, after his tour in Flight Test, Lieutenant General Walters was assigned duties in the Fleet Introduction Team for the AH-1W Night Targeting System at MAG-39 in Camp Pendleton. Upon completion of Fleet Introduction of the NTS system, Lieutenant General Walters assumed the duties as Operation Officer for HMLA-369, deploying to Okinawa in November 1995. Returning from Okinawa in May 1996, Lieutenant General Walters assumed the duties as XO of HMLA-369.

Lieutenant General Walters took command of HMT-303 on 4 June 1997 and relinquished command 21 months later on 2 March 1999. He was subsequently assigned the duties of XO, Mag-39. During April 1999, Lieutenant General Walters was transferred to the Aviation Branch, Headquarters, United States Marine Corps, for service as the Head, APP-2 in the Aviation Plans and Programs Division. In March 2001 was transferred to the Office of the Under Secretary of Defense, Acquisition, Technology & Logistics, Defense System, Land Warfare, where he was an Aviation Staff Specialist.

Lieutenant General Walters assumed command of VMX-22 on 28 August 2003, becoming the first Commanding Officer of the Squadron. In Aug 2006 Lieutenant General Walters was assigned as head of the Aviation Requirements Branch (APW) in the Department of Aviation at HQMC. From January 2007 to April 2008, he served as head of the Plans, Policy and Budget Branch (APP). In Mar 2008 he assumed the duties of Assistant Deputy Commandant for Aviation. After his promotion to Brigadier General in August 2008, he was assigned to the Joint Staff as Deputy Director J-8, DDRA. Lieutenant General Walters came to 2d Marine Aircraft Wing in July 2010, and assumed command of 2d Marine Aircraft Wing (Forward) in November 2010. He was promoted to Major General while deployed in August 2011, and returned in March of 2012. Lieutenant General Walters assumed command of 2d Marine Aircraft Wing in May 2012 and relinquished command in May 2013. Lieutenant General Walters was promoted to his current rank on 7 June 2013 and is currently assigned as the Deputy Commandant of Programs and Resources.

Lieutenant General Walters personal awards include the Defense Superior Service Medal, Legion of Merit, Meritorious Service Medal (second award), Air Medal, Navy Commendation, and Navy Achievement Medal.

Thomas P. Dee

**Deputy Assistant Secretary of the Navy
(Expeditionary Programs and Logistics Management)
Office of the Assistant Secretary of the Navy
(Research, Development & Acquisition)**

Mr. Tom Dee assumed responsibilities as DASN (E&LM) on 29 Dec 2012. He serves as principal advisor to ASN (RD&A) on matters relating to expeditionary capabilities, urgent needs processes and acquisition logistics. His portfolio includes U.S. Marine Corps ground programs and Navy expeditionary programs to include combat vehicles, explosive ordnance disposal, counter-IED, and multiple other programs that support our Naval expeditionary forces.

Mr. Dee joined the civil service in 2007 following a 26 year career as a Naval officer. Upon his retirement from the Navy he assumed duties as the first Director of Defense Biometrics within the Office of the Secretary of Defense. On behalf of the Assistant Secretary of Defense, Research and Engineering, he executed Secretary of Defense Principal Staff Assistant responsibilities for oversight of all aspects of the DOD biometrics enterprise. In March 2009, Mr. Dee was appointed to the Senior Executive Service and served as the Director, Joint Rapid Acquisition Cell in the Office of the Under Secretary of Defense Acquisition, Technology and Logistics. While there he oversaw the resolution of immediate warfighting needs as identified by the Defense Department's Combatant Commanders. He concurrently served as the Executive Secretary to the Deputy Secretary of Defense, Deputy's Management Action Group (DMAG) where he coordinated the preparation of strategic issues for executive decision.

While on active duty from March 1980 until his retirement in Jan 2007, he held a variety of worldwide leadership positions spanning operations Desert Storm, SFOR and KFOR in the Balkans, and operations Iraqi Freedom and New Dawn, and Operation Enduring Freedom. In Washington, he served on the SECNAV's USS Cole Task Force, the Joint IED Defeat Task Force / Organization, and as the CNO's Requirements and Resource Sponsor for Expeditionary Force Protection capabilities including EOD, Naval Coastal Warfare, and Navy non-lethal weapons. He culminated his Naval career as Commanding Officer, Naval EOD Technology Division in Indian Head, Maryland where he was responsible for executing science and technology, acquisition, and information programs for the joint service EOD community and providing material and information support to operations in Iraq and Afghanistan.

Mr. Dee holds a master's of sciences degree (national resource strategy) from the Industrial College of the Armed Forces, National Defense University; a master's of arts degree

(international relations) from University of Southern California; and a bachelor's of arts degree (history) from New York University. In 2011 he was awarded the Department of Defense Medal for Distinguished Civilian Service for his support of warfighter requirements.

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

APRIL 2, 2014

RESPONSE TO QUESTIONS SUBMITTED BY MS. SANCHEZ

General WILLIAMSON. The Army is committed to maintaining competition for combat helmets and body armor such as hard armor ceramic plates and ballistic vests. The Army uses a combination of modernization and sustainment funds to incentivize competition and maintain the industrial base capacity. The Army's current requirement for body armor and helmets has been satisfied. Further, the Army is experiencing a reduction in demand due to the drawdown of combat forces in Operation Enduring Freedom (OEF), and an associated reduction in Overseas Contingency Operations funding. In order to maintain competition and industrial base capacity, the Army must balance this reduction in demand, while maintaining production at the Minimum Sustaining Rates from multiple vendors. Due to competing priorities, the Army is not currently funded to maintain a minimum of two competing vendors for hard armor plates. This is an assumed risk, and it will take additional time to ramp up the industrial base to the previous levels of production during the height of the Operation Iraqi Freedom and OEF conflicts if that is needed. We are exploring various stockage levels to mitigate that risk.

The Army is supporting a Secretary of Defense led study in accordance with Section 146 of the Fiscal Year 2014 National Defense Authorization Act, which in part will evaluate the U.S. personal protective equipment industrial base and its ability to sustain competition and innovation. We look forward to seeing how we can use the result of that study to help shape our near term strategies.

Regarding the existing stockpile of personal protective equipment, the Army is conducting limited surveillance testing on body armor and helmets to attempt to broadly determine their lifespan. This is a complex issue because no single piece of body armor is subjected to the exact same wear and tear, and environmental conditions. We will not be able to establish service life from this limited testing, but the analysis may enable us to establish a shelf life for future body armor requirements. [See page 14.]

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

APRIL 2, 2014

QUESTIONS SUBMITTED BY MR. TURNER

Mr. TURNER. Please elaborate on your enduring requirements for MRAP vehicles and what the long-term strategy is for incorporating these vehicles into the fleet.

General BARCLAY. The Army has an enduring requirement for 11,133 MRAP Family of Vehicles which includes 2,548 route clearance vehicles and 8,585 protected mobility vehicles. The Army also has current Foreign Military Sales (FMS) requests for 4,000 MRAPs, and an additional 5,000 vehicles are being made available to other U.S. Government agencies, offered through new FMS requests or under the Excess Defense Articles program. The 2,548 route clearance vehicles include the Buffalo, Husky, Medium Mine Protected Vehicle Type I (Panther/RG33L+) and MMPV Type II (RG31). These vehicles will be employed within formations designed to execute Route Clearance (RC) and Explosive Ordnance Disposal (EOD) missions and will be managed as a separate Family of Vehicles (FoV).

The 8,585 protected mobility vehicles include the MRAP All Terrain Vehicle (MATV), the MaxxPro Dash and MaxxPro ambulance. These variants will be employed as Key Leader Vehicles across the force, in Mission Dependent Augmentation Sets (MDAS) stored in Army Preposition Sets for use in future contingencies, in select table of organization (TOE) units and within the training base.

The Army carefully considered current and future requirements and its ability to man, equip, train and sustain MRAPs to determine which vehicles should be retained as the Army's enduring capability of protected mobility, route clearance and Explosive Ordnance Disposal (EOD) platforms. Beginning in 2009 and culminating in 2013, the Army conducted a series of three studies to determine its requirements for MRAP combat vehicles.

The requirements were derived from comprehensive reviews of battlefield performance, Soldier and leader feedback and careful analysis of mission flexibility and sustainment costs. The Army selected the best performing and most technologically advanced vehicles, while divesting those that are not "best fit" for enduring requirements.

Mr. TURNER. It has been reported that the Army fielded a Modular Catastrophic Recovery System (MCRS) in Afghanistan. I understand this is a modified HEMTT recovery system. I understand that as part of the MRAP vehicle program, a recovery wrecker variant has been developed and produced. Why can't the MRAP wrecker variant be used for the MCRS requirement? Was there an Analysis of Alternatives that included an upgraded MRAP recovery vehicle?

General BARCLAY. The MaxxPro Recovery Vehicle (MRV) has significant capability gaps in mobility and combat towing that impact its ability to conduct recovery operations in cross-country terrain. These gaps are identified in the Army Testing and Evaluation Command's Limited User Test Memorandum, dated June 15, 2011. The MRV is incapable of recovering a Stryker. Although the Original Equipment Manufacturer has developed solutions to these gaps, those solutions will cost approximately \$230,000 per MRV to install; therefore the Army will divest MRVs following Operation Enduring Freedom. The MRV was not included in an Analysis of Alternatives. MRVs currently in service in Afghanistan will continue to support vehicle recovery and other missions consistent within its proven capabilities.

The Modular Catastrophic Recovery System (MCRS), consisting of the M983A4 Light Equipment Transporter (LET) as the prime mover, along with the fifth wheel towing recovery device (FWTRD) and the tilt deck recovery trailer (TDRT), provides more recovery capability than the MRV. This is a lift-tow recovery system which couples with a companion trailer tilt-deck cargo bed permitting swift extraction and evacuation of catastrophically damaged vehicles by winching onto TDRT. The LET can de-couple from its trailer to permit FWTRD lift of blown-off sub-assemblies for loading onto TDRT. As a combined system, the MCRS is capable of evacuating up to 35 tons of catastrophically damaged vehicles from the battlefield. The LET is a four-axle eight-wheel tactical truck that is designed to haul trailers using the fifth wheel coupling. It is equipped with a recovery winch with a rated capacity of 45 tons. The FWTRD coupled to the LET provides a lift tow capability of 70 tons. The MCRS provides the capability for flat tow, lift tow, winching, overturning and up

righting and evacuation scenarios for all tactical wheeled vehicles to include the Stryker Family of Vehicles.

Currently, 97 MCRSs have been fielded to support operations in Afghanistan under an Urgent Material Release to meet urgent operational requirements. The MCRS became a program of record on January 12, 2014. The Army is developing the Full Material Release (FMR) package now. An FMR signifies that the Army has rigorously tested and evaluated the item and determined it is completely safe, operationally suitable and logistically supportable for use by Soldiers. The target date for FMR is second quarter, fiscal year 2015.

Mr. TURNER. It was two years ago that the Army evaluated replacements for the Kiowa Warrior Scout Helicopter and decided to extend the lives of the existing fleet instead. Were the results of that evaluation considered when selecting the Apache as the new armed scout helicopter? Was a formal analysis of alternatives conducted?

General BARCLAY. The Analysis of Alternatives conducted following the cancellation of the Armed Reconnaissance Helicopter program determined that the best solution for armed reconnaissance was a team of AH-64E Apache helicopters and Unmanned Aircraft Systems (UAS). The AH-64 and UAS Manned-Unmanned-Teaming solution was not employed at the time because it was unaffordable to buy and sustain additional AH-64s. The reduction in Aviation Force structure now allows the Army to employ AH-64s and Shadow UAS that the Army already owns and sustains to meet the Armed Aerial Scout requirement. The AH-64 with its Modernized Target Acquisition and Designation System teamed with unmanned platforms is already being employed with tremendous success across Afghanistan.

Mr. TURNER. What is the future of the Armed Aerial Scout mission? Does the Army still intend to develop a new helicopter specific to that role? If so, when?

General BARCLAY. The Army maintains a valid requirement for the Armed Aerial Scout; however we currently do not have the fiscal resources to pursue a new procurement program at this time. The Army will examine the success of Manned-Unmanned Teaming between attack helicopters and unmanned systems and may reconsider the development of an aircraft in the future.

Mr. TURNER. I have concerns about the viability of the tactical wheeled vehicle industrial base. I'm focusing here on the medium and heavy truck fleet. To use the Family of Medium Tactical Vehicles as an example, I understand the Army has planned a two year production break for FMTVs. There are no funds for new production in fiscal year 2015 and 2016, but you do have funds programmed for fiscal years 2017 and 2018. Can you explain the reasons behind this strategy?

General WILLIAMSON. There are no funds programmed for new production Family of Medium Tactical Vehicles in fiscal years 2015 and 2016 (FY15-16). However, Overseas Contingency Operations funds have been requested for both fiscal years to replace vehicles destroyed by battle or vehicles that are beyond repair due to battle damage. The funds programmed for FY17-18 are procurements for Data Interchange and Force modernization.

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Mr. TURNER. Years of protracted conflict have taken their toll on the tactical wheeled vehicle (TWV) fleet. Thousands of TWVs returning from multiple theaters will require some level of recapitalization or replacement. When does the Army plan to complete and release an updated TWV acquisition strategy document?

General WILLIAMSON. The Army's TWV Strategy will be release in the First Quarter of Fiscal Year 2015.

Mr. TURNER. Congress has previously urged the Defense Department to consider requesting multiyear contracting authority as a means to generate potential cost savings and sustain an efficient and cost effective TWV industrial base. Most recently, the Fiscal Year 2014 National Defense Authorization Act (NDAA) requires the Defense Department to conduct a business case analysis (BCA) of a multiyear, multivehicle TWV contract to determine any potential increases in cost, savings, or risks that may derive from such a contract in comparison to standard contracting methods. If the required BCA supports a multiyear, multivehicle contract for TWVs, would the Army pursue such a contract as a means to increase cost savings while continuing to modernize its TWV fleet?

General WILLIAMSON. The report you mentioned is in staffing, and we look forward to submitting it by the end of May 2014. If the BCA indicates useful savings over the lifespan of already planned purchases, we absolutely expect to consider multiyear procurements as an option for future purchases. It is likely that the Joint Light Tactical Vehicle will provide significant cost efficiencies by implementing a multiyear procurement approach. That program's strategy has Full Rate Production beginning in Fiscal Year 2018. We would make a final determination on a multiyear approach at that time.

Mr. TURNER. What are the Army plans for female specific equipment (to include clothing, individual equipment, and body armor) development? To what degree do these plans depend on sustainment funding and/or new program funding?

General WILLIAMSON. The Army has numerous individual equipment and clothing items that have been developed or are currently in development to better fit female Soldiers. The development of these items relies on Research and Development appropriations. Various improvements to date include the female specific jacket and pants of the new Army Physical Fitness Uniform, new female sized Protective Undergarments (which are worn in conjunction with the Protective Outer Garment), the Army Combat Uniform Alternate, the Army Aircrew Uniform Alternate and Women's Flame Resistant Undergarments (to be worn by female aviators with the Army Aircrew Uniform).

The Army has also developed and fielded body armor that provides female Soldiers with a better fit, allowing them to perform their missions more effectively. The Generation III Female Improved Outer Tactical Vest (FIOTV) continues to provide the same unsurpassed ballistic protection of existing Army body armor, while providing eight additional sizes in conjunction with other modifications designed to provide a better fit. These efforts provide female Soldiers critical protection and the improved ability to conduct missions in combat environments. Another program known as the Family of Concealable Body Armor consists of two vests for military law enforcement and corrections officers and they will have a female specific sizing chart and female variant vests (both types). Finally, the Army will continue to address female sizing and fit issues as it develops the new Soldier Protection System. The data used to develop the female variant vests (FIOTV) has been shared with our industry partners and is being incorporated into the Army's Soldier Protection System. The Soldier Protection System entered Engineering and Manufacturing Development in fiscal year 2013 (FY13), and is scheduled to enter into Production in the 3rd quarter FY15.

Mr. TURNER. I understand the Army has decided to pure fleet the force with M4A1 carbines. Does the Army plan to revisit the Individual Carbine program?

General WILLIAMSON. The Army does not plan to revisit the Individual Carbine program at this time.

Mr. TURNER. Please elaborate on your enduring requirements for MRAP vehicles and what the long-term strategy is for incorporating these vehicles into the fleet.

General WALTERS. The Marine Corps' enduring requirement for MRAP vehicles is approximately 2,500. This number of MRAPs provides the required capabilities and adequate capacity to meet the operational demands of post-OEF roles and missions. As the Marine Corps transitions out of Afghanistan and reconfigures and re-fits to meet the future security environment, we are conducting a detailed review of our entire ground combat and tactical vehicle portfolio and strategy to ensure that our requirements value lethality and sustainability and align with the protected mobility requirements of the future force.

Mr. TURNER. Years of protracted conflict have taken their toll on the tactical wheeled vehicle (TWV) fleet. Thousands of TWVs returning from multiple theaters will require some level of recapitalization or replacement. When does the Army plan to complete and release an updated TWV acquisition strategy document?

General WALTERS. The Marine Corps' Ground Combat and Tactical Vehicle Strategy (GCTVS) provides the basis for planning, programming, and budgeting to provide balanced maneuver and mobility capabilities to the Marine Corps' Operating Forces. We remain committed to the process and continually assess the requirements of the force as we refine the platforms that will be available. The Office of the Secretary of Defense requested the Marine Corps update the GCTVS by September 2014.

Mr. TURNER. What are the Marine Corps plans for female specific equipment (to include clothing, individual equipment, and body armor) development?

General WALTERS. The Marine Corps fields, researches and develops the most capable and functional individual combat and personal protective equipment for all Marines, regardless of sex or stature. However, our future body armor system, the Modular Scalable Vest (MSV) has incorporated female anthropomorphic data from its initiation and will offer sizes that fit the full range of female body types. In addition, the Load Distribution System (LDS) that has been incorporated into MSV better allows female Marines to distribute the weight across their hips and shoulders instead of just their shoulders like the current vests.

Current hard armor technology does not exist to allow ballistic plates to be formed in a shape that accommodates the female form and still retain current ballistic capabilities without greatly increasing weight. Several Marine Corps units have procured the Army's Female Urinary Diversion Device (FUDD) for use by forward deployed female Marines in Afghanistan, but the capability is not registered as a formal requirement or program. The Marine Corps will work with the Army to review the use of the FUDD in both services and determine the feasibility and advisability of making it a programmed capability for Female Marines.

Marine Corps Systems Command (MCSC) recently conducted surveys to better understand the sizing, fit and comfort concerns of current individual ballistic protection systems including torso, armor, pelvic protection and helmets. The survey identified some concerns regarding the fit, function and comfort of the currently issued Improved Modular Tactical Vest (IMTV) and Plate Carrier (PC). Data from the surveys is being referenced to enhance the sizing, fit, function and comfort of the IMTV and PC.

MCSC plans additional surveys targeting female and smaller stature male Marines to gain greater insights on the functionality of individual combat and personal protective equipment to inform ongoing research and development efforts of current and future individual combat and personal protective systems.

Mr. TURNER. To what degree do these plans depend on sustainment funding and/or new program funding?

General WALTERS. The Marine Corps has not developed or fielded female specific PPE; accordingly, sustainment funding is not required. All future requirements would depend entirely on new program funding.

QUESTIONS SUBMITTED BY MR. ENYART

Mr. ENYART. Is it still the Army's philosophy that you train as you fight?

General BARCLAY and General WILLIAMSON. Yes, "train as you will fight" remains a guiding principle of unit training. "Train as you will fight" means training under an expected operational environment, or establishing in training what the unit can expect during operations to include the culture of an operational environment. The purpose of unit training is to build and maintain ready units to conduct unified land operations for combatant commanders. Units build flexibility, integration, adaptability, depth and synchronization through the mastery of individual and collective tasks under the conditions of the anticipated operational environment.

The Army trains to provide ready forces to combatant commanders worldwide. Collective training provides the full range of experiences needed to produce agile, adaptive leaders and Soldiers and versatile units. Training must be relevant, rigorous, realistic, challenging and properly resourced. Collective task proficiency results from developing tactical and technical skills through instruction, experience and repetitive practice.

Mr. ENYART. What cost savings are derived from transferring the Apaches from the Reserve to the Active Component? What other rationale other than cost savings does the Army have for transferring the Apaches?

General BARCLAY and General WILLIAMSON. The transfer of AH-64s from the Army National Guard (ARNG) to the Active component (AC) is one aspect of the Secretary of Defense-approved comprehensive Aviation Restructuring Initiative (ARI), which is designed to achieve a leaner, more efficient and capable force that balances operational capability and capacity across the Total Army. The low-density, high-demand AH-64 Apaches transferring out of the ARNG will be repurposed to replace AC OH-58D Kiowa Warriors that are being divested. The transfer will enable the teaming of Apaches with unmanned aircraft systems (UAS) for armed reconnaissance, filling a critical capability need for an Armed Aerial Scout created by the elimination of the Armed Reconnaissance Helicopter program. In addition, consolidation of Apache airframes in the AC will enable the Army to better meet the operational demands of our Combatant Commanders due to the increased operational availability that it will provide due to the reduced dwell times that are required in the AC.

Necessary savings are generated by divesting three entire fleets of aircraft—the OH-58A/C Kiowas; the TH-67 training helicopters and the OH-58D Kiowa Warriors—an overall reduction of 798 aircraft. The Fiscal Year 2015 President's Budget incorporated this reduction. The net effect of the reduction is a 23 percent decrease in aircraft to the Active component with only an 8 percent reduction to the ARNG. In addition to procurement and modernization cost savings, the Army would also avoid the significant operations and sustainment costs of retaining these aging aircraft fleets. ARI avoids approximately \$12 billion in imminent costs. If the Army were to not execute ARI, we would be forced to retain many of our oldest and least capable aircraft while divesting several hundred modernized airframes. Upgrades to the Kiowa Warrior would cost over \$10 billion. Replacing the legacy TH-67 training helicopter would cost another \$1.5 billion. In addition, lower procurement rates of modernized aircraft would cost the Army approximately \$15 billion. These costs would be unbearable for the Army under the current budget constraints and would risk creating a hollow force, with less overall capability and less investment in modernization.

