RECORD VERSION

STATEMENT BY

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

AND
LIEUTENANT GENERAL ANTHONY R. IERARDI
DEPUTY CHIEF OF STAFF OF THE ARMY, G-8

BEFORE THE

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

ON
FISCAL YEAR 2016 U.S. ARMY GROUND FORCE MODERNIZATION AND
ROTORCRAFT MODERNIZATION PROGRAMS

FIRST SESSION, 114TH CONGRESS
MARCH 19, 2015

NOT FOR PUBLICATION UNTIL RELEASED BY THE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 2016 (FY16) President's Budget request as it pertains to Army Modernization.

The U.S. Army remains the world's decisive land force. Soldiers and units operate as part of joint, inter-organizational, and multi-national teams. The Army protects the homeland, prevents conflict through regional engagements, shapes security environments, and gives our political leadership multiple options for crisis response. The Army must be equipped to win in a complex world across multiple mission sets, under widely varied conditions, in unforgiving geographies, and against evolving threats. The strategic environment is complex, meaning that it is unknown, unknowable, and constantly changing. In the last year the Army had to rapidly respond to assure our allies in Europe by expanding our regionally aligned forces to respond to the deteriorating situation between Russia and Ukraine; deploy to conduct humanitarian assistance in Africa in response to the Ebola crisis; and deploy to deter our enemies in the deteriorating security environment in Iraq. These three diverse, yet critically important missions highlight that our Army and our Army's equipment needs to be effective as the foundation of the Joint Force in diverse environments and mission sets, be tailorable and scalable across all echelons, and support equipping demands across all warfighting functions.

In the midst of this uncertain strategic environment, the Army continues to balance end strength, current force readiness, and equipment modernization. To equip Soldiers to meet the Army Warfighting Challenges and become a leaner, more lethal, and expeditionary asset to the Joint Force, we will have to invest in both non-developmental and developmental capabilities. Non-developmental capabilities will leverage commercial technologies that don't require significant Army Science and Technology (S&T) or Research and Development, such as information technology, in order to save time and money. Developmental capabilities will most often be utilized in areas where

the Army drives advancement and investment, such as combat vehicle technology; lethality; rotary aviation; watercraft; and Intelligence, Surveillance, and Reconnaissance (ISR). To achieve this, we require an industrial base that is rewarded for reducing costs and can react to the increased quantity demanded during national emergencies while still retaining the Army's ability to affordably procure smaller quantities between major conflicts. We will continue to take advantage of existing technologies, while investing in the research to produce significant technological change with military application.

The Army's modernization budget remains near historic lows. Still, our modernization mission – to develop and procure systems that allow our Soldiers to dominate across the full spectrum of operations – remains essential. We must always ensure our Soldiers have the right equipment, at the right time, and at the right place to accomplish the assigned mission.

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 FY16 modernization budget request that takes the next step towards meeting the equipping needs of our Soldiers.

Resourcing Army Modernization

Decreases to the Army's overall budget over the last several years have had a significant impact on modernization and threaten our ability to retain overmatch through the next decade. From FY12 to FY16, Research, Development and Acquisition (RDA) investments declined roughly 28 percent. In FY12, the Army's RDA budget was $32 billion. In FY16, the RDA budget request is $23 billion. The proposed increase of $2.6 billion for procurement, over the FY15 budget request, is vitally important to ensure that our Soldiers have the best equipment available and to maintain critical parts of our industrial base.

The Budget Control Act continues to cause significant instability to our programs across all portfolios. Army modernization is particularly hurt by sequestration. With another round of defense sequestration looming for FY16, hundreds of programs are

in flux. Major impacts include delays in equipping to support expeditionary forces, delays in combat vehicle modernization, increases in sustainment costs to fix older equipment, increases in capability gaps, and limited options.

Few choices remain if modernization continues to bear the brunt of sequestration. Most programs are already at minimum economic sustaining levels and further reductions will increase the number of cancellations. Those programs remaining will have higher unit costs and procurement schedules will be significantly stretched out. Overall, long-term funding uncertainties inhibit the Army's ability to plan and execute programs which provide critical operational capabilities for our Soldiers.

A Balanced Approach to Modernization

It is the Army's responsibility to address current and emerging threats and to ensure every deployed Soldier is equipped to achieve decisive overmatch, regardless of the situation. Overall, long-term funding uncertainties challenge the Army's ability to plan and execute programs and provide new capabilities to our Soldiers. Therefore, to ensure a balanced modernization strategy, the Army will ensure we (1) protect S&T investments in key technologies that will enable next-generation capabilities when resources become available; (2) selectively invest in new capabilities for priority areas; (3) incrementally upgrade existing platforms; (4) reset equipment returning from current contingency operations; and (5) divest select platforms to reduce operations and sustainment costs. These areas allow us to Enable Mission Command, Remain Prepared for Joint Combined Arms Maneuver, and, most importantly, Enhance the Soldier for Broad Mission Support.

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 rapidly integrating technologies and applications that empower, protect, and unburden the Soldier and our formations. This provides the Soldier and our formations with the mobility, protection, situational awareness, and lethality to accomplish assigned missions. The FY16

budget supports this priority by investing in technologies that provide the Soldier and squad with advanced warfighting capabilities. We are pursuing enhanced weapons effects, next generation optics, night vision devices, advanced body armor and individual protection equipment, unmanned aerial systems, ground based robots, and Soldier power systems.

☐ **Enable Mission Command.**

The Army's objective is to facilitate the decision-making of our leaders and Soldiers with information to the point of need across the Joint Force down to the Soldier and across platforms. The FY16 budget request supports this priority by resourcing enhanced mission command capabilities and platform integration of network components through Operational Capability Sets, software applications for the Common Operating Environment, operations/intelligence network convergence efforts, and platform integration of network components in support of Operational Capability Sets.

☐ **Remain Prepared for Joint Combined Arms Maneuver.**

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. The FY16 budget request continues to support the Armored Multi-Purpose Vehicle, Paladin Integrated Management program, Joint Light Tactical Vehicle, and critical Aviation programs.

Budget Priorities

The Army has identified critical programs that provide overmatch capabilities at the tactical and operational levels of combat operations. These critical programs are discussed below:

- ☐ **Family of Networked Tactical Radios** is the Army's future deployable mobile communications family of radio systems. It provides advanced joint tactical end-to-end networking data and voice communications to dismounted troops, ground, and aircraft platforms. FY16 funding supports the operational test assets for 240 Manpack radios, and the continued ramp up of production for 300 Rifleman

Radio Secret and Below. FY16 funding also supports the remaining portion of Project Management Administration costs, supports the purchase of generic ancillary components for continued platform integration efforts, and sustainment as the program readies for fielding Capability Sets 17 and 18.

- **Joint Battle Command-Platform (JBC-P)** is the next generation of Force XXI Battle Command Brigade and Below / 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. FY16 funding supports the procurement of 2,988 vehicle platform computer systems, 300 command post systems, satellite receivers, encryption devices, ancillary equipment, program management support, training, fielding, publications, support equipment, and post deployment software support.
- **Warfighter Information Network-Tactical (WIN-T)** provides broadband communications for the tactical Army. It extends an Internet Protocol based satellite and line-of-sight communications network throughout the tactical force supporting voice, data, and video. FY16 funding supports upgrade of 31 WIN-T Increment 1 units to enhance interoperability with units fielded with WIN-T Increment 2, procurement of 248 communications nodes for WIN-T Increment 2, and continues fielding and support for previously procured WIN-T Increment 2 Low Rate Initial Production (LRIP) equipment.
- **Distributed Common Ground System-Army (DCGS-A)** provides integrated ISR Processing, Exploitation and Dissemination of airborne and ground sensor platforms providing commanders, at all levels, access to the Defense Intelligence Information Enterprise and leverages the entire national, joint, tactical, and coalition ISR community. FY16 funding supports correction of any issues identified during the May 2015 Limited User Test, support for the Increment 2 Request for Proposal and milestone decisions, including plans to begin Increment 2 development, as well as modernize and procure commercial off the shelf software and hardware components for DCGS-A (fixed, mobile, and data centers), integrate hardware and software, and equip and train next deployers and high priority units.

- **Nett Warrior** is a dismounted Soldier worn mission command system that provides unprecedented command, control, and situational awareness capabilities supporting the dismounted combat leader. The design incorporates operational unit mission needs and leverages operational lessons learned, while maintaining power requirements in austere environments. FY16 funding supports fielding an additional 3,016 units.
- **Armored Multi-Purpose Vehicle (AMPV)** replaces the obsolete M113 family of vehicles within the Armored Brigade Combat Teams and provides required protection, mobility, and networking capability for the Army's critical enablers including mortars, medical evacuation, medical treatment, general purpose, and mission command vehicles. FY16 funding supports entry into the Engineering and Manufacturing Development (EMD) phase to integrate the Mission Equipment Package and technologies in development in Army programs and produce prototypes for use in testing.
- **Patriot** is a high demand / low density program, currently deployed in multiple theaters supporting operational and strategic requirements. Patriot provides critical, sustained, tactical ballistic missile defense capability to defeat current and advanced threats while protecting Soldiers, Sailors, Airmen, and Marines. FY16 funding supports procurement of 80 Missile Segment Enhancement missiles to increase Patriot's capability against the current threat, as well as emerging threats.
- **M109A7 Paladin Integrated Management (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. FY16 funding supports the final EMD testing and LRIP of 30 PIM vehicle sets.
- **Joint Light Tactical Vehicles (JLTV)**, a Joint program with the U.S. Marine Corps, is the centerpiece of the Army's Tactical Wheeled Vehicle modernization strategy replacing 49,099 of the light wheeled vehicle fleet by 2041. This multi-mission vehicle will provide protected, sustained, and networked mobility for personnel and payloads across the full range of military operations. FY16 funding will support a LRIP decision in July 2015. A single vendor will be selected to

produce vehicles that provide the most capabilities at a $250,000 or less average unit manufacturing cost.

- **Maneuver Support Vessel-Light (MSV-L)** represents a modernization of current Army watercraft capabilities provided by the aging Vietnam War era Landing Craft. The MSV-L adds new capabilities intended to meet the Army's future tactical and operational movement and maneuver requirements. The MSV-L is intended to access austere entry points, degraded ports, and bare beaches without dependency on support ashore, in support of land maneuver support and/or maneuver sustainment operations. FY16 funding supports extending the service life of the Landing Craft Utility (LCU-2000), as well as to begin early plans to extend the service life of the Modular Warping Tug and Causeway Ferry until new procurement.
- **AH-64 Apache** is the Army's world-class heavy attack helicopter for the current and future force, assigned to Attack Helicopter Battalions and Armed Reconnaissance Squadrons. The AH-64E provides the capability to conduct simultaneously close combat, mobile strike, armed reconnaissance, security, and vertical maneuver missions across the full spectrum of warfare, can operate in day, night, obscured battlefield, or adverse weather conditions. FY16 funding supports procurement of 64 remanufactured AH-64E aircraft and associated modifications to the AH-64D fleet.
- **UH-60 Black Hawk** is the world's premier utility aircraft and the Army's largest helicopter fleet. The Black Hawk is vital in supporting lift and medical evacuation missions in the current and future force operational plans. It is critical to the homeland defense mission and a key component of the Army National Guard's forest fire, tornado, hurricane, and earthquake relief missions. FY16 funding supports procurement of 70 UH-60M and 24 HH-60M, purchases mission equipment packages, and upgrades the UH-60V, which will help to reduce life cycle costs while digitizing the last analog aircraft in the operational fleet.

Other Aviation Priorities

The Army will continue to incrementally modernize the existing fleet while investing in the next generation of rotary wing capabilities. These aviation programs and efforts are discussed below:

- **CH-47 Chinook** will provide the Army's heavy lift capability through 2060, making it the Army's first 100 year aircraft. FY16 funding supports procurement of a base quantity of 27 remanufactured aircraft and 12 new build aircraft, along with associated modifications to the CH-47 fleet. The **CH-47 Block II** is the first increment of a potential multi-block strategy designed to insert incremental technology upgrades into the Chinook fleet and to maintain the platform's relevance and affordability over time while meeting Warfighter requirements. The CH-47 Block II upgrade seeks to buy-back performance that eroded over time due to the addition of mission equipment packages since system fielding in 2007.
- **Improved Turbine Engine Program (ITEP)** will be a new 3,000 Shaft Horse Power (SHP) turbo shaft engine that will replace the T700 family of engines for the UH-60 Black Hawk and AH-64 Apache fleets, which comprise 75% of the total Army helicopter fleet. As increasing demands continue to add weight to the aircraft, the T700, originated in the 1970s as a 1600 SHP engine, no longer retains the significant power growth potential necessary to meet the required capabilities. ITEP provides significantly increased operational capability, fuel efficiency, range, and payload to meet Army mission requirements.
- **Joint Multi-Role (JMR) Technical Demonstrator (TD)** is intended to investigate and demonstrate selected vertical lift aircraft design and performance technologies. JMR is an Army S&T program to develop, expand, and demonstrate new capabilities in vertical lift technology and aircraft capabilities.
- **Future Vertical Lift (FVL)** is an Army lead joint procurement effort to set joint requirements, develop, and procure the next generation of vertical lift aircraft that will replace the current Department of Defense vertical lift fleet. The focus of FVL is based on three major tenets: (1) improve the performance; (2) improve the survivability; and (3) significantly reduce the operating cost. The FVL Family of

Systems capability desires 90 percent common components/parts to reduce overhead and logistical footprint, as well as enable mission flexibility.

- **Future Utility Aircraft (FUA)** will enable the Army to replace worn out or retired Operational Support Airlift (OSA) aircraft with a more technologically advanced aircraft better suited to support the needs of commanders in current and future operations. FUA will reduce the amount of resources required to train pilots and sustain the aircraft. The Fixed Wing Utility Aircraft will be a commercial off-the-shelf solution that will be Instrument Flight Rules capable and equipped with Civil and Military Communications, Navigation, Surveillance, and Survivability Systems that enable the aircraft to operate in Civil and Military environments throughout the world.

Other Major Programs in Fiscal Year 2016

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 Army will continue S&T investment in combat vehicle technologies, ITEP, and JMR-TD to inform FVL efforts. We will also focus our modernization efforts on procurement of AMPV and incremental upgrades to the Abrams, Bradley, and Stryker families of vehicles.

The Army also maintains a valid requirement for the development of an Armed Aerial Scout (AAS), but currently lacks the fiscal resources to pursue a new procurement program. Apaches teamed with Unmanned Aerial Systems (UAS) will provide the AAS capability under current Army plans.

The Army is continuing the development of The Joint Air to Ground Missile (JAGM) which increases the lethality of the Army's attack aircraft by increasing the performance of our aircraft-launched precision munitions in degraded environments and against advanced threats. Investments in the Army's current air to ground missile, Hellfire, continue during JAGM development to ensure sufficient stockpiles are maintained and customers from outside the Army (other services and allied nations) can continue to have access to the best and newest missiles currently available.

The Army continues to invest in the MQ-1C Gray Eagle UAS with JAGM integration, increased survivability efforts, and achieving acceptance into the national airspace. In FY16, the Army added another company to U.S. Army Intelligence and Security Command (INSCOM) formations thereby increasing globally allocable ISR capabilities. The program continues to field to Army Divisions, U.S. Special Operations Command, and INSCOM with completion scheduled for FY18.

The Army's Network Integration Evaluations continue to provide valuable Soldier-driven performance evaluations and suitability assessments of network technologies which the Army continues to leverage as a means of focusing Tactical Network modernization efforts. The Army is committed to developing and fielding the Army Tactical Network as part of a modernized Army network that improves effectiveness, security, and efficiency while providing the same basic capabilities from home station to the deployed tactical unit.

Network dominance and defense is an integral part of our national security. The Army is focused on proactively providing increased capabilities to the Joint force. The evolving Cyber environment is forcing the Army to adapt to cyber threats by transforming processes, organizations, and operating practices to mitigate vulnerabilities. In terms of new and emerging initiatives, the U.S. Army Cyber Command at Fort Gordon, GA, and the Army acquisition community are pursuing ways to bring "big data" analytic capabilities to Army operations in order to improve our cyber defense capability. These efforts, as well as cyber S&T initiatives focused on the enabling technologies for future capabilities, will generate resourcing requirements which will compete against other modernization priorities.

Defense Industrial Base

As lower funding levels for the Army continue, we are concerned about the availability of needed skills and capabilities in the defense manufacturing and supplier base. Teaming and collaboration with our industrial base, early in the process, will help reduce risk. In crafting our equipment modernization strategy, we carefully assessed risks across all portfolios to ensure balanced development of new capabilities, incremental

upgrades to existing systems, and protection of ongoing production and manufacturing to sustain the industrial base.

The Army has initiated studies to independently assess the health and risk to key industrial base sectors. Based on the results to date, the Army is making investments in specific portfolios to mitigate risk. In the aviation portfolio, multi-year contracts for Black Hawk and Chinook helicopters provide stability and predictability to the industrial base while achieving significant cost savings for the Army. In the combat vehicle portfolio, new production of PIM and AMPV, as well as incremental upgrades to Abrams, Bradley, and Stryker help to ensure that a sufficient workload will sustain critical workforce skills and suppliers. The Army also continues to advocate for Foreign Military Sales (FMS), extend production in certain programs, and invest in key suppliers on a case-by-case basis.

The Army is equally concerned about the health of the organic industrial base, including our depots, arsenals, and ammunition plants. We are evaluating how to preserve needed skills and capabilities by modernizing facilities with new technology and plant equipment, promoting arsenal manufacturing capabilities across the Department of Defense, and conducting personnel training. The Army will maintain critical skills sets in our depots by identifying workload to preserve capabilities, exploring FMS opportunities, and encouraging depots and arsenals to partner with commercial firms and other Army and DoD organizations such as the Defense Logistics Agency to meet future requirements.

Closing Comments

We appreciate the generous support from Members of Congress for strengthening the Defense acquisition workforce, which is the critical component for the success of a well-equipped force. With more than 38,000 Army military and civilian acquisition professionals worldwide, this dedicated component of the Defense acquisition workforce is comprised of engineers, scientists, logisticians, contract specialists, testers, program managers, cost estimators, and many other acquisition career field specialties who effectively manage the Army RDA enterprise in a challenging budget environment.

Army equipment modernization enables the U.S. Army to remain the world's decisive land force. Soldiers and units operate as part of joint, inter-organizational, and multi-national teams that are tailorable and scalable to the mission. As we continue to examine how to achieve effective balance among force structure, modernization, and readiness, we must have stable, predictable, long-term funding to modernize our force to meet evolving threats and fully execute our mission.

The security challenges of tomorrow will be met with the equipment we develop, modernize, and procure today. Because adversaries will continue to invest in technology to counter or evade U.S. strengths and exploit vulnerabilities, resource reductions and insufficient force modernization place at risk the Army's ability to overmatch its opponents.

With the possible return of sequestration in FY16, Army equipment modernization faces significant risks. Those risks include fewer mitigation options, aging fleets, eroding overmatch, higher sustainment costs, longer timelines to regenerate battle lost equipment, and higher costs, which will leave our Soldiers less prepared for future conflicts.

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