

**FINAL VERSION**

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**BEFORE THE**

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## **Introduction**

Chairman Lieberman, Senator Brown, and distinguished Members of the Subcommittee on Airland, we thank you for this opportunity to discuss the Fiscal Year 2013 (FY13) budget request as it pertains to Army Modernization. We are pleased to represent U.S. Army leadership, members of the Army Acquisition workforce, and the more than one million courageous men and women in uniform who have deployed to combat over the past ten-plus years, and who have relied on us to provide them with world-class weapon systems and equipment to ensure mission success. On behalf of our Secretary, the Honorable John McHugh and our Chief of Staff, General Ray Odierno, we would like to take this opportunity to thank the members of this committee for your steadfast support and shared commitment in this endeavor.

## **Army Equipment Modernization Strategy**

Today we are faced with uncertain strategic and operational environments coupled with declining resources. The Army's equipment modernization strategy reflects the need to be able to support the current fight, respond to uncertainties and implement the emerging Army strategy for the force in 2020. The President's Budget (PB) 13 Research and Development request reflects the Army's priority materiel programs and highlights the critical capabilities we need to give our Soldiers and units the decisive edge in the range of military operations. This strategy is focused on equipment needed to (1) empower, unburden, and protect our Soldiers; (2) network the force; and (3) replace, improve or transform our combat platforms in order to deter and defeat hybrid threats.

We recognize we must shape the Army with an understanding of both our national security obligations and current fiscal constraints. The equipment modernization strategy for the Army aligns the ends, ways, and means to develop and field a versatile and affordable mix of the best equipment available to enable Soldiers to succeed in current and future complex operational environments. This entails four lines of effort:

- **Modernize.** Develop and acquire new equipment or improve, upgrade or adapt existing equipment to meet identified capability gaps and to achieve dominance in core capabilities while evaluating modernization efforts for redundancy.
- **Sustain.** Close capability gaps or avoid creating them by extending the useful life of existing equipment and divest or store equipment providing less value.
- **Mitigate.** Procure mission-specific equipment for immediate capability needs.
- **Distribute.** Provide the appropriate quantity and type of equipment to Soldiers and units at the proper time in accordance with the Army Force Generation (ARFORGEN)

readiness model and Army priorities to enable training, preparation and employment for mission success.

To meet the challenges of strategic, operational, and fiscal realities, the Army is working toward a truly collaborative process for requirements, resources and acquisition. The Army aims to develop and field a versatile and affordable mix of equipment to enable Soldiers and units to succeed across a full range of missions today and tomorrow and to maintain our decisive advantage over any adversary we face. “Versatile” encompasses the characteristics of *adaptable* (to changing missions and environments); *expansible* (able to add, update or exchange capabilities in response to changed circumstances); and *networked* (to enable interoperability within our formations and with those of our partners). “Affordable” relates to making fiscally informed decisions that provide greatest capability value in accordance with senior leader priorities, within projected resources and within acceptable risk parameters. To achieve that goal, the Army is transforming its Requirements and Acquisition processes.

#### Requirements Transformation

Our future is filled with uncertainty with respect to operating environments, adversaries, resources, and other constraints; the Army continues to evolve its requirements generation process to find improved ways to shape future requirements.

The Army has vigorously implemented processes and procedures to put the most capability in the hands of our Warfighters. We are consistently challenging costly, duplicative, or unrealistic requirements and embracing innovation and Warfighter feedback. Synchronization of our analytical efforts with Combatant Commanders, Combat Developers, Capability Portfolio managers, requirements generators, analysts and analytical agencies, and the acquisition community is leading to refined, realistic, and innovative requirements. Our goal is to have the “right” requirement at the start of a program.

#### Acquisition Transformation

Over the past year, the Army has continued to make progress on changing the paradigm for acquisition to one that emphasizes affordability and agility throughout the acquisition cycle. We are challenging costly or unrealistic requirements, implementing systems engineering, and cost estimating, early in the acquisition cycle backed up by developmental testing and operational assessments. We are also embracing incremental modernization, commercial innovation and soldier-industry feedback to deliver improved capabilities as technology matures, or resources are available. Integrated Portfolios are used to align the modernization community to ensure integration across requirements, acquisition, resourcing and sustainment. We are also

actively supporting increased competition and rewarding technological maturity during the developmental cycle followed by open competition during the procurement cycle, to the maximum extent possible. The men and women of the Acquisition Corps are working hard to deliver capability to our Warfighters and they are doing outstanding work.

This approach is evident in several programs, to include JLTV, Nett Warrior and GCV, where we have already shown success in revising military requirements to avoid unnecessary cost and to develop executable strategies. For instance, in the JLTV program, a thorough review enabled us to revise our Acquisition Strategy which reduced the schedule for the next development phase from 48 to 33 months while reducing the projected cost of the vehicle by \$400 million, a 50 percent reduction.

The Stryker Double-V Hull (DVH) program is yet another example, In the DVH program, we partnered with the testing community to efficiently conduct simultaneous test and production on an expedited basis. By taking a more collaborative approach, we provided Soldiers with critical improvements and enhanced protection on a timely and effective basis. In a recent trip to Kandahar, Afghanistan, we saw and heard first-hand from Soldiers the remarkable capability the DVH provides.

### **Priority Army Programs in FY13**

Based on the Equipping Modernization Strategy, the priority equipment modernization programs in our PB 13 request are:

Warfighter Information Network-Tactical (WIN-T). Provides the broadband backbone communications necessary for the tactical Army. It extends an Internet Protocol (IP) based satellite and line-of-sight communications network through the tactical force, supporting voice, data, and video. Increment 1 fielding is completed in FY12 and will begin Increment 1b Engineering Change Proposal (ECP) implementation for interoperability with increment 2. Increment 2 extends the network to the Company and provides on-the-move IP communications for the first time. It begins fielding in FY 13. PB 13 will procure seven new Brigade Combat Team (BCT) sets and funds fielding Increment 2 systems to nine BCTs and procuring upgrades for 32 additional brigades to provide interoperability with Increment 2 systems.

Joint Tactical Radio System (JTRS). Provides the future deployable mobile communications family of tactical radios. It provides advanced joint tactical end-to-end networking data and voice communications to dismounted troops, aircraft and watercraft platforms. PB 13 procures Handheld / Manpack Small Form Fit (HMS) and Rifleman

Radios to provide voice/data communications to eight BCTs. These radios will link mounted and dismounted Soldiers and leaders into a robust, integrated network. The Ground Mobile Radio (GMR) was the primary JTRS vehicular radio. This program was re-structured in favor of a more competitive Non-Development Item (NDI) program called the Mid-Tier Networking Vehicle Radio (MNVR) using the government owned programmable waveforms developed as part of the JTRS program. This change in acquisition strategy will allow rapid delivery of capabilities (fielding in FY 14) at lower cost while meeting the mobility requirement of the restructured GMR program. In FY13, the Army will field the PRC-117G as a bridge solution for the MNVR.

Joint Battle Command-Platforms (JBC-P). Provides a foundation for achieving information interoperability on current and future battlefields and will be the principal Command and Control/Situational Awareness system for the Army and Marine Corps at the brigade-and-below level. Leverages our investment in 88,000 Force XXI Battle Command Brigade and Below (FBCB2) systems (all maneuver formations) with improved situational awareness capabilities. JBC-P is the incremental improvement to the already fielded Blue Force Tracker (BFT) family of systems.

Nett Warrior. Provides an integrated situational awareness system to the dismounted leader which allows for fast and accurate decisions in the tactical fight. As a result of Network Integration Evaluations and Soldier feedback, the Army re-baselined the program to achieve a smaller, lighter handheld capability at significantly reduced cost to the Army. PB 13 funds delivery of this capability to maneuver BCTs in support of next deployers.

Distributed Common Ground System-Army (DCGS-A). Provides integrated intelligence, surveillance, and reconnaissance processing, exploitation, and dissemination of data from airborne and ground sensor platforms. DCGS-A satisfies 100 percent of the Army intelligence enterprise requirements by pulling data from over 300 DoD and National databases. No other system completely addresses the broad range of intelligence requirements satisfied by the DCGS-A program. PB 13 funds development of the Army Common Operating Environment and Command Post Environment and procures equipment for one Army Service Component Command, 10 theater commands, three division headquarters, 14 BCTs, one Special Forces Group, and 15 support brigades.

Ground Combat Vehicle (GCV). The Ground Combat Vehicle is the U.S. Army's replacement for Infantry Fighting Vehicles in Heavy Brigade Combat Teams (HBCTs). Modernization imperatives include improved protection, mobility and sustainment; built-in growth capacity; and network integration. PB 13 funds two competitive Technology Development (TD) contracts leading to a Milestone B decision in 1<sup>st</sup> Quarter 2014 and

Engineering and Manufacturing Development (EMD) Phase. The Milestone B decision will be informed by a comprehensive analysis, an examination of non-developmental vehicles, and progress made during the current TD phase.

Joint Light Tactical Vehicle (JLTV). Provides Army and Marine Corps Warfighters more payload, protection and network capability than High Mobility Multipurpose Wheeled Vehicle (HMMWV), and more fuel efficiency than the HMMWV or Mine Resistant Ambush Protected (MRAP). PB 13 fully funds JLTV Engineering and Manufacturing Development (EMD) using an acquisition strategy that maximizes full and open competition opportunities for interested companies and reduces EMD costs and schedule. The program is scheduled for a Milestone B decision in July 2012.

Paladin Integrated Management (PIM). The PIM program replaces the current M109A6 Paladin and M992A2 Field Artillery Ammunition Supply Vehicle by incorporating Bradley common drive train and suspension components. PIM addresses a long standing capability gap in the self-propelled artillery portfolio brought about by an aging fleet and the termination of prior modernization efforts. PB 13 funds continued development and integration of Bradley common components (Engine, Transmission, and Suspension System) into prototype vehicles for government testing. The program remains on schedule to meet a Milestone C in June 2013.

Armored Multi-Purpose Vehicle (AMPV). The AMPV program is an essential element of the Army's Combat Vehicle Modernization strategy to replace an aging M113 fleet that lacks protection, mobility, and the ability to accept future upgrades. The AMPV addresses critical capability gaps in protection, networking interoperability, and mobility for critical enablers (mortars, medical evacuation and treatment, mission command, and company command and control) of the combined arms team. The current M113 fleet has reached its growth margin in these areas and a new design is needed. PB 13 funds development of the competitive source selection package. The AMPV program is an essential element of the Army's Combat Vehicle Modernization strategy.

Kiowa Warrior. PB 13 funds continued development of the Cockpit and Sensor Upgrade Program (CASUP) and procurement of fielded fleet upgrades and CASUP long lead items. CASUP replaces the OH-58D's outdated systems with a new onboard processor, communications suite, and navigation equipment along with a lighter, more capable sight to fill the immediate interoperability gaps existing in the fleet today. The fielding of these improvements begins in FY16 and will be complete by FY21. A decision to pursue either the development of a new aircraft to replace Kiowa Warrior or a Service Life Extension Program (SLEP) of Kiowa Warrior will be made in FY13.

## **Other Programs of Interest**

### Support to the Warfighter in Afghanistan

PB 13 fully funds priority Warfighter equipment requirements and supports efforts toward a successful conclusion of Army missions in Afghanistan. PB 13 Overseas Contingency Operations funding procures replacement aircraft, missiles, rockets and C4I equipment; specialized Distributed Common Ground System-Army (DCGS-A) equipment for Intelligence units; Carl Gustav Recoilless Rifles for selected units; Enhanced Combat Helmets, and OEF Camouflage Pattern clothing for deployers. The PB 13 Base funding procures seismic/acoustic intrusion devices for deploying Military Police and Engineer Companies, Brigade Combat Teams (BCT) and Special Operations units; Command, Control, Communications and Intelligence equipment for Civil Affairs units; Enhanced AN/TPQ-36 (EQ-36) Radars and Lightweight Counter Mortar Radars; M2 and M240 Machine Gun modifications; and Precision Guided Artillery Fuzes for example.

Lightening the Load. The Army is committed to a continuous, holistic effort to lighten the individual Soldier's load. We have continued to reduce the weight of individual protection equipment while improving the level of protection provided. The weight of crew-served weapons like machine guns and mortars has also been reduced. We are expanding the scope of our weight reduction efforts to address consumable items. For example, we are developing case-less ammunition which will reduce the weight of ammunition. A lightweight solar battery charger is under development to reduce the number of batteries a soldier carries on patrol.

Combat Vehicle Programs. Two Combat Vehicle Programs are Priority Programs in FY13 and discussed above. They are the Ground Combat Vehicle (GCV) and the Advanced Multi-Purpose Vehicle (AMPV). Other combat vehicle programs include:

- Stryker Family of Vehicles. Provides an integrated combined arms team with maximum versatility across Unified Land Operations. The Stryker fleet has emerging capability gaps in Protection, Network Interoperability, and Mobility due to a lack of space, weight, power and cooling capabilities (SWaP-C). Modernization of the Stryker Fleet is focused on an Engineering Change Proposal (ECP) that will buy-back SWaP-C to integrate future protection technologies, provide the electrical power to integrate the future network, and regain some mobility lost through wartime protection enhancements.
- M1 Abrams. Provides the main battle tank capabilities to defeat armored vehicles in Unified Land Operations. The capability to integrate future protection improvements,

integrate network technologies and regain mobility lost through wartime protection improvements is needed. Modernization efforts are currently focused on engineering changes that will provide increased space, weight, power and cooling capabilities.

- M2/M3 Bradley Fighting Vehicles. Provides the current Infantry Fighting Vehicle, Cavalry Fighting Vehicle, and armored fire support, engineer and reconnaissance capabilities with the Bradley Fire Support Team (BFIST) Vehicle, Engineer-Bradley Fighting Vehicle. Capability gaps exist with respect to SWaP-C to integrate future protection improvements, integrate network technologies and regain mobility lost through wartime protection improvements. Modernization is currently focused on engineering changes that will provide increased space, weight, power and cooling capabilities.

Army Aviation Programs. The Kiowa Warrior, OH-58D is a Priority Program in FY13 and discussed above. Other Aviation programs include:

- Apache, AH-64D. FY13 funds the continuation of the Block Three incremental modernization strategy which includes the remanufacturing of block one and block two aircraft along with a small number of new build helicopters. Fielding of the first Block Three unit began 1<sup>st</sup> quarter of FY12 and remains on schedule to be complete by the 1<sup>st</sup> quarter FY13. Apache Block Three will ensure the Apache remains a viable combat multiplier well into the future.
- Armed Aerial Scout. The Army strategy is to pursue a replacement for the OH-58D Kiowa Warrior through the Armed Aerial Scout (AAS) Analysis of Alternatives (AoA) and a voluntary flight demonstration to inform the acquisition process. If it is determined in mid FY13 that an affordable alternative does not exist, the Army will apply a Service Life Extension Program. Should the Army determine that an affordable Kiowa Warrior replacement is available; the Defense Acquisition Executive will determine the milestone entry point for the AAS program.
- Chinook, CH-47F. This program is currently in the last year of its first five year, multi-year contract. The current budget request includes a second multi-year contract that would complete the modernization fielding in 2018 with a fleet end state of 533 aircraft.

#### Transformation for Network Capabilities

In support of the transformation of our requirements and acquisition processes, the Army is designing a suite of network systems and equipment to answer the projected requirements of a two-year cycle. Every year, we integrate the next capability set, reflecting any changes or advances in technology. This incremental modernization



allows the Army to buy fewer capabilities, but more often, to ensure that we leverage industry advancements and provide our formation the most up-to-date capabilities. These Capability Sets are aligned to units in the queue for deployment or in the available pool to provide mission command capability from the command post, commander on the move, to the dismounted Soldier.

We have and will continue to encourage industry to participate in the acquisition process by submitting material solutions to solve capability gaps on a semi-annual basis. This allows for large and small scale industry involvement and leads to increased competition and lower costs.

Capability Sets are a break with tradition in another very important way. Rather than conducting limited user tests of individual systems, the entire Capability Set undergoes two operational evaluations prior to fielding to assess the collective functionality, compliance with architectural standards, and interoperability with existing network capabilities.

The Army will assess capability gaps, rapidly form requirements, solicit mature industry solutions and perform laboratory and field evaluations in order to inform acquisition decisions semi-annually through the Network Integration Evaluation (NIE) construct. The intent of the NIE construct is three-fold: 1) reduce/eliminate the integration burden on operational formations, 2) develop/integrate network enabled mission command Capability Sets (CS) and 3) provide a forum to leverage industry innovation and to rapidly acquire promising capabilities that solve operational gaps. FY 13 PB fully funds the semiannual NIE which provides a venue to evaluate new commercial technologies and network capabilities, in an operational environment, for possible inclusion into the Network. Resources have been added to the FY13 PB request to allow procurement of commercial products evaluated and recommended for fielding based on NIE results.

### **Major Program Changes in FY13**

Fiscal realities caused us to make significant changes in almost 100 programs. Nevertheless, the Army is committed to maintaining the most capable Army in the world with the resources the American people provide us through Congress. In order to do so in an era of decreasing resources, we must make hard choices to maintain balance. To that end, we continuously examine programs to find where we may have overlapping or joint capabilities that meet the need, or where programs are simply unaffordable or where the resulting capability risk is acceptable. We believe that even with these changes, we still have balance in our equipping strategy and are on track to equip the Army of 2020. However, further reductions run the risk of upsetting that balance and

force us to make very hard choices about where we sacrifice capabilities for the Army of 2020.

Among the changes in our PB 13 request is the restructure of over 20 programs, primarily due to affordability issues, honed requirements or availability of off-the-shelf items. These include Nett Warrior, JTRS, Joint Land Attack Cruise Missile Defense Elevated Netted Sensor (JLENS), Joint Air-to-Ground Missile (JAGM) and JLTV. In more than 50 programs we accepted risk by slowing deliveries of systems based on the current operational environment. These include EQ-36 radars, Heavy Expanded Mobility Tactical Trucks (HEMTT), and Apache III Attack Helicopters. Finally, funding will cease for eight programs. These include: Mounted Soldier System; Long Range Advanced Surveillance Systems (LRAS3); Knight Targeting Under Armor; Liquid Logistics Storage and Distribution (Camel); HMMWV Recap; Family of Medium Tactical Vehicles (FMTV); Joint Precision Approach and Landing Systems (JPALS); and Airborne Common Sensor and Enhanced Medium Altitude Reconnaissance and Surveillance system (EMARSS).

We also accelerated 11 programs to provide new capabilities to our Warfighters faster. Examples include: Improved Target Acquisition System for Soldiers, Patriot PAC-3 Missiles, and Combat Communications for Casualty Care (MC4).

## **Equipping Strategy**

The goal of our Equipping Strategy is to ensure Soldiers are equipped for the current fight and for future contingencies as we transition the Army. With the support of the Congress, the Army significantly improved the Equipment On Hand (EOH) and modernization levels for the Army National Guard (ARNG), the US Army Reserve (USAR) and the Active Components (AC). The EOH levels for the individual components as of November 2011 are as follows: the AC 87 percent, ARNG 87 percent and the USAR 86 percent. Based on planned procurements and assuming the inventory in theater and depot is made available for redistribution, EOH levels have the potential to be AC 94 percent, ARNG 92 percent and the USAR 90 percent for FY13. The modernization levels for the individual components as of November 2011 are as follows: AC 70 percent, ARNG 71 percent and the USAR 66 percent. Modernization has the potential to be AC 76 percent, ARNG 74 percent and the USAR 69 percent for FY13, if theater and depot stocks are made available for redistribution. Although we are a force in transition during a period of declining resources we must continue to provide the Army with the best equipped most modernized and most highly capable units that will prevail on any battlefield against any foe.

## **Closing Comments**

These continue to be challenging times for our Nation and for our military. We can assure the members of this committee – your Army’s senior leaders remain focused and are working hard to address current challenges and the needs of the Army now and in the future enable continued readiness and expansion should the Army be needed. We will do this with affordability as our watchword as we endeavor to remain good stewards of our Nation’s resources.

Mr. Chairman, members of the subcommittee, we 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.