

RECORD VERSION

STATEMENT BY

**LIEUTENANT GENERAL JOHN M. MURRAY
DEPUTY CHIEF OF STAFF OF THE ARMY, G-8**

AND

**LIEUTENANT GENERAL PAUL A. OSTROWSKI
MILITARY DEPUTY TO THE ASSISTANT SECRETARY OF THE ARMY
FOR ACQUISITION, LOGISTICS AND TECHNOLOGY**

BEFORE THE

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

ON

ARMY MODERNIZATION

**SECOND SESSION, 115TH CONGRESS
APRIL 18, 2018**

**NOT FOR PUBLICATION UNTIL RELEASED BY THE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

INTRODUCTION

Chairman Turner, Ranking Member Tsongas, distinguished Members of the House Armed Services Subcommittee on Air and Land Forces, thank you for your continued support and demonstrated commitment to our Soldiers, Army Civilians, Families, and Veterans. On behalf of our Army Secretary, the Honorable Mark Esper, and our Chief of Staff, General Mark Milley, we thank you for the opportunity to appear before you today. We look forward to discussing the Fiscal Year 2019 Army Modernization Budget Request with you.

Modernization is critical to the future of our Army. For the last several decades, the U.S. Army possessed overmatch based on its qualitative edge in capabilities. It enabled our Army to defeat enemy formations, underpinned credible deterrence, and served as a critical pillar of Joint Force capabilities in all domains – air, land, maritime, space, cyberspace, and the electromagnetic spectrum. Now, a combination of strategic, technological, institutional, and budgetary trends places at risk the Army's competitive edge over near-peer adversaries in the next fight.

The Army has reached an inflection point: we can no longer afford to choose between near term readiness and modernization and, specific to modernization, we can no longer afford to choose between improving our existing systems and developing new ones - we must be able to do both. The American people expect their Army to win, and meeting this expectation requires the Army to maintain overmatch against emerging threats and adversaries. While we continue to work hard to improve our readiness, we are now expanding our focus on a dedicated and robust modernization effort. As you know one of the most critical elements in achieving this objective is sufficient resources. We believe that the Fiscal Year (FY) 2019 Budget Request reflects the President's commitment to restoring the military, especially in the case of Army modernization.

Building on the FY18 President's Budget, we believe this budget will continue to reverse the downward trend that has stifled Army modernization and serve as an important step towards expanding and maintaining overmatch. We will seek to employ these funds in the most efficient and effective manner by turning ideas into actions through continuous

experimentation and prototyping, reforming our acquisition processes, leveraging technology, and improving training. Our purpose is simple: ensure that future generations of American Soldiers remain the most lethal fighting force in the world.

THE URGENCY OF MODERNIZATION

The Army's focus on the demands of ongoing campaigns combined with constrained resources and an industrial age organizational model has slowed, deferred, and in some cases, halted the development of new capabilities. Meanwhile, our adversaries have, or are quickly attaining, a competitive advantage. Moreover, the character of war has changed, and the Army must adapt and innovate faster. The Army is engaged in a protracted struggle to out-innovate future competitors, and right now, we are not postured for success. If the Army does not modernize its force to expand and maintain overmatch, we face the potential of being out-matched in high-end conventional combat.

MODERNIZING THE FORCE

The Army Modernization Strategy has one focus: make Soldiers and units more lethal so they can fight and win our Nation's war. It is established upon a vision for the Future Army and the challenges of balancing near-, mid-, and far-term investments. To provide a comprehensive plan for modernization, the Army establishes and aligns modernization objectives and organizations to orient on potential military peers for the current, next, and future fights that span across and beyond the Future Years Defense Program. All of this must be done within a 21st Century system that provides for unity of effort and unity of command in support of the modernization process and allied interoperability from the outset.

As our draft strategy lays out, first and foremost, we must return to mastering the fundamentals of shoot, move, communicate, protect, and sustain better than any potential adversary. In the near-term, the Army will invest in capabilities that address critical gaps and improve lethality to expand and maintain overmatch against China and Russia. In the mid-term, the Army will develop, procure, and field next generation capabilities to fight and win in Multi-Domain Battle. In the far-term, we will build an

Army for a fundamentally different conflict environment – one that will require us to exercise mission command across dispersed and decentralized formations, leverage disruptive technologies at the small unit level, and operate with and against autonomous and artificial intelligence systems, all at an accelerated speed of war.

To accomplish these objectives, this year we plan to selectively upgrade the equipment we have and focus our Science and Technology and Research, Development, Test and Evaluation funding on the six Army Modernization Priorities. The six prioritized capability areas naturally align with the Army fundamentals of shoot, move, communicate, protect, and sustain.

Our first modernization priority is to restore the Army's Long Range Precision Fires (LRPF) capabilities in order to regain our dominance in range, lethality, and target acquisition.

- Within the FY19 budget the Army will expedite development of a long range precision missile, which will have a range of up to 499 kilometers, through competitive prototyping and flight demonstrations which will allow for fielding of an urgent material release variant three years prior to full material release.

The Army will also:

- Increase capacity to produce improved Army Tactical Missile System (ATACMS) missiles to extend service life until the new LRPF missile can be developed and fielded.
- Develop an Extended Range Guided Multiple Launch Rocket System that extends range and improves guidance systems to increase the lethality for specific targets at increased ranges.
- Focus LRPF Science and Technology critical technology efforts on such areas as propulsion for extended range missiles; extended range cannon artillery; enhanced guidance/navigation for weapons; advanced energetics; and advanced warheads for area effects munitions.

Our second modernization priority is Next Generation Combat Vehicles (NGCV). A next generation vehicle is needed to enhance Soldier protection, increase mobility, and make our forces more lethal.

- Army Combat Vehicle Prototyping focuses on the development of the next generation combat vehicles. The FY19 funding supports concept development, prototyping and demonstration of combat vehicles (both manned and unmanned) to assess future concepts and designs.

Separate from the NGCV effort the Army is making significant investments to improve the platforms and increase the production of Ground Systems. We will:

- Significantly increase production of M1 Abrams and M2 Bradley Fighting Vehicles over the Future Years Defense Program, which will enable the procurement of five ABCTs' worth of combat vehicles in the next five years; previously, the Army planned to fund the modernization of one BCT every 2.5 years
- Incrementally upgrade the Abrams, Bradley and Stryker platforms resulting in more lethal, survivable and mobile combat vehicles; by upgrading our individual vehicle capabilities, the Army ensures that our brigade combat teams will be equipped with the technology necessary to maintain near-term overmatch.
- Prototype Mobile Protected Firepower to provide protected, long-range, direct fire capabilities to the Infantry BCT to ensure freedom of maneuver and action in close contact with the enemy.
- Increase quantities of next generation ground vehicle capabilities – Armored Multipurpose Vehicles and the Joint Light Tactical Wheeled Vehicles.

Our third modernization priority is Future Vertical Lift (FVL) platforms – reconnaissance, attack, assault – that are survivable on the modern and future battlefield.

- The Joint Multi-Role demonstrator, the initial FVL effort, is focused on restoring vertical lift dominance with next generation agility, reach, protection, lethality, and

mission flexibility. Future systems should also benefit from improved power generation, autonomy, artificial intelligence, and manned-unmanned teaming.

The Army will also:

- Continue development of the Improved Turbine Engine in order to increase payload, range, fuel efficiency in our existing AH-64 and UH-60 fleets.
- Develop and field lightweight precision munitions (LPM) for light targets requiring precision as an alternative to Hellfire missiles, as well as begin to field the Joint Air-Ground Missile (JAGM).
- Sustain production of AH-64 Apache and UH-60 Blackhawks through multi-year contract execution, while developing the next generation of CH-47 Chinook helicopters.
- Develop and field the Advanced Threat Detection/Common Infrared Counter Measure (ATDS/CIRCM) and modernized radar warning receiver (MRWR) to improve our 'detect and defeat' capability.

Our fourth modernization priority is to modernize the Army Network. We must have a communications system that is intuitive, mobile, expeditionary, reliable and can be used to fight cohesively in contested cyber and electromagnetic environments.

The Army will:

- Accelerate and pure fleet the Joint Battle Command-Post (JBC-P) capability.
- Realign WIN-T Incr 2 funding to support Army's "Halt, Fix and Pivot" network strategy.
- Procure Handheld Manpack Small Form Fit (HMS) Manpack, 2-Channel leader Radio and Nett Warrior capability for four BCTs.
- Procure and Field COTS like unique line of sight and beyond line of sight rapid deployable communications capability to 3 Security Forces Assistance Brigades (SFABs).
- Equip Cyber protection teams with deployable kits and deployable tools to defend the network and operate in Cyber space.

Our fifth priority is to modernize and restore our Air and Missile Defense (AMD) systems to ensure our future combat formations are protected from modern and advanced air and missile delivered fires – including drones.

- Within this category, the Army's number one priority is to procure four battalions of the Interim Maneuver-SHORAD (IM-SHORAD) capability by FY22. IM-SHORAD adds a mounted capability but we also need to improve the dismounted capability and will start doing so in FY21.

We will also:

- Field Block 1 Stinger missiles that deliver improved performance against unmanned aerial systems and fill the SHORAD capability gap until the IM-SHORAD is fielded.
- Produce Patriot Missile Enhancement Segment missiles with improved performance against advanced threats and continue to pursue a significant upgrade effort for the Lower Tier AMD Sensor.
- Focus AMD Science and Technology on critical technology to include opportunities for technology insertions. Areas of Science and Technology focus include smaller and cheaper missiles; high energy lasers; advanced seekers; and advanced energetics and propulsion.

Finally, we must aggressively enhance Soldier lethality, a holistic series of capabilities that span all fundamentals including shooting, moving, communicating, protecting, and sustaining. Two areas to highlight include:

- Accelerating the Squad Designated Marksman Rifle to increase squad lethality at ranges from 300-600 meters and serve as a bridge to the Next Generation Squad Weapon (NGSW).
- Procuring an initial quantity Enhanced Night Vision Goggles-Binocular to provide dismounted Soldiers the immediate capability to operate in 0 percent illumination, such as in underground facilities.

The Army will also:

- Develop the NGSW to improve probability of hit and incapacitation as well as reduce weapon and ammo weight.
- Demonstrate the Squad Multipurpose Equipment Transport (SMET), which will aid a nine-man squad by carrying up to 1,000 pounds of equipment and supplies and generating 1KW-3KW of power for a 72-hour mission.
- Focus Soldier Lethality Science and Technology concept development and exploration into areas such as Fused Integrated Mobility Device/Heads Up; Hostile Fire Locator System; Integrated Head-borne System; Advanced Fire Control Technologies; and human-system interfaces that increase small unit standoff distances, enhance situational awareness to deny and surprise adversaries.

To implement this strategy, the Army is currently undertaking a series of acquisition reform efforts designed to promote unity of effort, unity of command, efficiency, cost effectiveness, and leader accountability. Part of this effort is the work of a three-star-level task force responsible for mapping out options to consolidate the modernization process under one command. To develop and deliver better solutions faster, the early integration of concept and testing will allow the Army to fail early and cheaply as we experiment, prototype and test, thus increasing the probability of success by learning from early failures. Critical to this effort is the establishment of Cross-Functional Teams (CFTs) for each of the identified modernization priorities. Each CFT will incorporate elements from acquisition, testing, resourcing, and capability development communities and directly report to Army senior leaders.

THE DEFENSE INDUSTRIAL BASE

The past trends of constrained resources in the Army's modernization account have led to significant challenges for the Defense Industrial Base (DIB). When developing our equipment modernization strategy, we have carefully assessed risk across all portfolios to ensure balanced development of new capabilities, incremental upgrades to existing systems, and protection of critical capabilities in the commercial and organic elements of the DIB.

The Army remains concerned about the preservation of key skills and capabilities in the engineering and manufacturing bases for our original equipment manufacturers and their key supplier bases. To assist our industry partners to address manufacturing and producibility risks, the Army supports efforts such as the Army Manufacturing Technology Program, Foreign Military Sales, and Direct Commercial Sales.

The Army continually assesses risk in the Industrial Base across all Army portfolios to identify fragile and critical sectors within the DIB, and facilitate risk mitigation strategies. The Army also continually assesses the health of the organic industrial base (OIB), including our depots, arsenals, ammunition plants, munitions centers, and Government-owned Contractor-operated plants. The Army maintains critical skill sets in our OIB and continues to modernize our OIB infrastructure, as needed, to support readiness.

IN CONCLUSION

We sincerely appreciate the opportunity to address the challenges the Army faces in modernizing its force. Building on the FY18 President's Budget Request, the FY19 request continues to reverse the downward trend in modernization funding. However, we must stress that a major increase in modernization this year will not, by itself, reverse the trend. We must have timely, predictable, sustained, and adequate funding across the Future Years Defense Program and beyond.

The budget request provides us the opportunity to build our force through key modernization efforts. As importantly, Army's senior leaders are committed to being good stewards of our Nation's resources while meeting the equipping and modernization needs of our Soldiers.

Mr. Chairman and distinguished Members of this Subcommittee, we sincerely appreciate your steadfast and strong support of the outstanding men and women in uniform, our Army Civilians, and their Families.