Agenda

• Army Modernization Defined
• Modernization Priorities
• Army Vision
• Thoughts on the Way Ahead
The U.S. Army's modernization strategy has one focus: make Soldiers and units more lethal to win the nation's wars, and come home safely. The modernization process will leverage commercial innovations, cutting-edge science and technology, prototyping and warfighter feedback.

– Army Stand-To, January 2018
Army Modernization Defined

Definition and Structure

The ability to sustain, improve, or replace combat systems in order to ensure formation based tactical overmatch and technological superiority in the current and future fight. To accomplish this, given current resource guidance, the U.S. Army will:

- **Continue to make incremental improvements** to existing combat systems to ensure the U.S. can fight and win in the near term (now to ~2025).

- **Focus our Science and Technology investments**, on a limited number of prioritized portfolios, to guarantee our Soldiers have formation based tactical overmatch and technological superiority in the mid to long term (~2025 to ~2050).

- **Begin prototyping a select number of next generation combat system technologies and vehicles**. Begin development as soon as the technologies are mature enough we can rapidly move from prototype to production.

- **Sustain** current combat support and combat service support equipment to extend useful life.

- **Continue to divest** less important capabilities to free up resources for higher priorities.

This is the construct guiding the Army’s modernization strategy

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Central Problem: How does the Army fight and win inside complex, contested environments against existential adversaries capable of high-end conventional warfare with sophisticated capabilities

Operational Problems: (1) Projecting power into a contested theater; (2) Fighting into/inside sophisticated A2/AD; (3) Fighting into/inside complex urban environment; (4) Projecting power into other domains and creating periods of domain control.

Current Capacity Shortfalls

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Shortfalls: Insufficient inventory/substrate to support modernization

Overarching Goal: An expeditionary Army designed for zero-light, with the combat power, readiness, responsiveness, posture, agility, versatility, depth, and endurance to overwhelm the challenges of A2/AD through relentless, joint and combined arms maneuvers to defeat emerging regional and global peer adversaries.

- Master operations in contested environments and degraded conditions
- Retain effectiveness against irregular and hybrid threats
- Project power into other domains
- Routinely and effectively integrate multinational forces

Overcoming this problem will require:

- Increasing lethality and survivability
- Improving situational awareness
- Enhancing command and control
- Expanding the power projection envelope
- Enhancing mobility

Excelling in these areas will require:

- Advanced sensor systems
- Advanced C4ISR
- Advanced integration of fires
- Advanced air defense systems
- Advanced maneuver forces

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Modernization Priorities for the United States Army

We have the most skilled, ethical, and combat-talented Army in our Nation's history. Our Army remains globally engaged in a complex, dynamic and increasingly uncertain world and we stand ready to fight and win our nation's wars.

The competitive advantage that the United States has long enjoyed, however, is ending. We are being challenged in every domain of warfare - land, maritime, air, cyber, and space - and the challenges are growing in scale and complexity. Our recent focus on fighting wars of insurgency and terrorism allowed us advantages to make improvements on those modernization efforts and erase our advantages enjoyed since World War II. Our Army must retain our overwhelming and competitive advantage against emerging threats, conventional, and irregular. We have waited too long already to instill our readiness and strengthen our formations and now must modernize our capabilities to increase our lethality against emerging regional and global near-peer adversaries.

This modernization strategy has one simple focus: make soldiers and units more lethal. To be successful, we must turn ideas into actions through continuous experimenting and prototyping, improving acquisition business processes, pursuing appropriate commercial-off-the-shelf options, and improving training. Additionally, our modernized capabilities must have interoperability with allies and partners.

The American people expect us to win, and we win on the offensive by mastering the fundamentals of shock, mass, maneuver, and sustainment better than any other Army. We must fix this with precision, we must lead the initiative, we must be ready to maneuver while protecting our forces, and we must plan, communicate, and think and act decisively, all of this backed up by world-class logistics, and led by world-class leaders.

Based on these fundamentals, our modernization priorities are:

1. A Long Range Precision Fires capability that restores US Army dominance in range, mass, and tempo.
2. Next Generation Combat Vehicle - a new family of armored, manned, and optionally manned vehicles - with the most modern firepower, protection, mobility, and power generation capabilities, to ensure our ground forces can fight and win against any foe.
3. Future Vertical Lift (FVL) platform - a fleet of light, fast, and capable, to revolutionize airpower.
4. Army Network with hardware, software, and infrastructure - sufficiently scalable and resilient - that can be used to fight coherently in any environment where the electromagnetic spectrum is denied or degraded.
5. Landpower capability, unlike other domains, is a function of capacity, systems, and the training required to employ them effectively. To implement the Army's Modernization Priorities, the Army will proceed with its equipment modernization plan along with associated changes in force structure, training, and doctrine required to realize the full lethality of these new systems.

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SUBJECT: Implementing the Army's Modernization Priorities

1. While readiness remains our top priority, the Army has made great improvements by investing in people, equipment, and systems. The Army has invested in training that allows it to maintain superiority over any potential threat. The Army is also focusing on modernizing its equipment and technologies to ensure that it remains ready to fight and win.

2. The Army's modernization priorities are:
   a. Long Range Precision Fires
   b. Next Generation Combat Vehicle
   c. Future Vertical Lift
   d. Network/C3
   e. Air and Missile Defense
   f. Soldier lethality

3. The Army is committed to implementing these modernization priorities to ensure that it remains ready to fight and win in any environment. The Army is working with industry, academia, and other stakeholders to develop new technologies and systems that will enable it to achieve these objectives.
The Army published its modernization strategy and priorities on Oct. 3, 2017. Eight Cross-Functional Teams (CFTs) were created to address the six modernization priorities, with two of the priorities, Army Network and Soldier Lethality being further divided into focus areas:

- Long-Range Precision Fires
- **Next Generation of Combat Vehicles**
- Future Vertical Lift Platforms
- **Army Network**
  - Network Command, Control, Communications and Intelligence
  - Assured Position Navigation and Timing
- Air and Missile Defense Capabilities
- **Soldier Lethality**
  - Soldier Lethality
  - Synthetic Training Environment

Army Directive 2017-33, published on Nov. 7, 2017, established the Army Futures Command Task Force, to explore all options to establish unity of command and unity of effort that consolidates the Army's modernization process under one roof.
Army Vision

• **Army Mission**: To deploy, fight, and win our Nation's wars by providing ready, prompt, and sustained land dominance by Army forces across the full spectrum of conflict as part of the Joint Force.

• **Army Vision**: The **Army of 2028** will be ready to deploy, fight, and win decisively against any adversary, anytime and anywhere, in a **joint, multi-domain, high-intensity conflict**, while simultaneously deterring others and maintaining its ability to conduct irregular warfare. The Army will do this through the employment of **modern manned and unmanned ground combat vehicles, aircraft, sustainment systems, and weapons**, coupled with robust combined arms formations and tactics based on a modern warfighting doctrine and centered on exceptional Leaders and Soldiers of unmatched lethality.

• **Objectives**:  
  – **Man**. Grow the Regular Army above 500,000 Soldiers. 
  – **Organize**. Ensure warfighting formations have sufficient infantry, armor, engineer, artillery, and air defense assets. 
  – **Train**. Focus training on **high-intensity conflict**, with emphasis on operating in **dense urban terrain, electronically degraded** environments, and under constant surveillance. 
  – **Equip**. Modernize the force by first **reforming the current acquisition system** and **unifying** the modernization enterprise under a single command to focus what Soldiers need when they need it, **experimenting** with and developing autonomous systems with **less logistical dependence**. 
  – **Lead**. Develop smart, thoughtful, and **innovative leaders** of character.
Thoughts on the Way Ahead

• **Innovation:**
  – Novel / disruptive technology
  – Use what you have better – *how do we do this?*

• **Increase Artificial Intelligence**
  – Power Commander’s Decision Making
  – Increase Soldier competency and capability

• **Increase Autonomy** across the CBRN Mission Portfolio
  – More than just unmanned or remote sensors
  – Automated decon using non-aqueous technologies
  – Must operate in a contested electro-magnetic environment

• **Reduce Warfighter Burden**
  – Technology and training overload for CBRN Soldiers
  – Sustainment and Logistics
  – Applique is better

Where do CBRN capabilities fit in the Army’s Modernization Priorities?